



Course Catalog 2008/2009



HACC

Founded
in 1964



CENTRAL PENNSYLVANIA'S COMMUNITY COLLEGE



Academic Programs at HACC

Program Name	Major Code	Page	Credential Earned	Prepares You For		Accreditation	HACC Locations Where Offered					Academic Division
				Career	Transfer		Gettysburg	Harrisburg	Lancaster	Lebanon	York	
Accounting	1460	42	AA	X		Association of Collegiate Business Schools and Programs		X	X	X	X	BHET
Accounting	1170	43	Certificate	X				X	X	X	X	BHET
Actuarial Science	4000	44	AS		X			X	X*			MSAH
Administrative Office Specialist	1921	45	AA	X		Association of Collegiate Business Schools and Programs		X	X*		X	BHET
Administrative Office Specialist	1371	46	Certificate	X				X	X*	X	X	BHET
Agribusiness and Management of Food Systems	1830	47	AA	X				X	X			BHET
Agribusiness and Management of Food Systems	1191	49	Certificate	X				X	X			BHET
Architectural Technology	4470	50	AAS	X				X				BHET
Architectural Technology	4170	51	Certificate	X				X				BHET
Architecture	4010	52	AA		X			X				BHET
Art and Design	2130	53	AA		X			X	X*			CASS
Auctioneering	1160	54	Certificate	X				X				BHET
Auctioneering	0100	55	Diploma	X				X				BHET
Automotive Technology	4480	56	AAS	X		National Automotive Technicians Education Foundation		X				BHET
Automotive Technology	4200	58	Certificate	X		National Automotive Technicians Education Foundation		X				BHET
Automotive Technology – GM ASEP	4570	59	AAS	X		National Automotive Technicians Education Foundation		X				BHET
Baking and Pastry Arts	1321	61	Certificate	X				X				BHET
Banking and Financial Services	1491	62	AA	X				X	X	X*		BHET
Banking and Financial Services	1251	63	Certificate	X				X	X	X*		BHET
Biology	3091	64	AA		X			X	X		X	MSAH
Biology Education	3101	65	AA		X			X	X		X	MSAH
Building Construction Technology	4510	66	AAS	X				X				BHET
Building Construction Technology	4250	67	Certificate	X				X				BHET
Business	1200	68	Certificate	X			X	X	X	X	X	BHET
Business Administration	1020	69	AA		X	Association of Collegiate Business Schools and Programs	X	X	X	X	X	BHET
Business Education	1100	70	AA		X	Association of Collegiate Business Schools and Programs	X	X	X*	X	X	BHET
Business Management – Accounting	1470	71	AA	X		Association of Collegiate Business Schools and Programs		X	X	X	X	BHET
Business Management – Computer Info Systems	1480	72	AA	X		Association of Collegiate Business Schools and Programs	X	X	X	X*	X	BHET
Business Management – General	1510	73	AA	X		Association of Collegiate Business Schools and Programs	X	X	X	X	X	BHET
Business Management – HRIM	1590	74	AA	X		Association of Collegiate Business Schools and Programs		X	X*			BHET

* One or more classes must be taken at Harrisburg Campus (or Lancaster Campus).

For the latest information visit www.hacc.edu.

Academic Programs at HACC

Program Name	Major Code	Page	Credential Earned	Prepares You For Career	Transfer	Accreditation	HACC Locations Where Offered					Academic Division
							Gettysburg	Harrisburg	Lancaster	Lebanon	York	
Business Studies	1500	75	AA	X		Association of Collegiate Business Schools and Programs	X	X	X	X	X	BHET
Cabinetry – Millwork	0510	76	Diploma	X			(Offered at Mill Creek Cabinetry)					BHET
Cardiology Technician	—	77	Noncredit	X			X	X				Noncredit
Cardiovascular Technology – Cardiac Sonography	3530	78	AS	X		Commission on Accreditation of Allied Health Education Programs		X*	X			MSAH
Cardiovascular Technology – Invasive Cardiovascular Technology	3510	79	AS	X		Commission on Accreditation of Allied Health Education Programs		X*	X			MSAH
Chemistry	3020	80	AA		X			X	X			MSAH
Child Care	5180	81	Certificate	X			X	X	X	X	X	CASS
Child Development Associate	0600	82	Diploma	X			X	X	X	X	X	CASS
Civil Technology	4720	83	AAS	X				X				BHET
Civil Technology	4220	84	Certificate	X				X				BHET
Civil Technology	0340	85	Diploma	X				X				BHET
Computer Information Security	1211	86	Certificate	X				X				BHET
Computer Information Systems	1792	87	AA	X		Association of Collegiate Business Schools and Programs		X	X*	X*	X*	BHET
Computer Information Systems	1312	89	Certificate	X			X*	X	X	X*	X	BHET
Computer Information Systems, Software Specialist	0220	90	Diploma	X				X	X	X*		BHET
Computer Networking Technology	4590	91	AAS	X				X				BHET
Computer Networking Technology	4230	92	Certificate	X				X				BHET
Computer Repair Technology	4620	93	AAS	X				X	X*	X*		BHET
Computer Repair Technology	4180	94	Certificate	X				X	X*			BHET
Construction Codes & Safety Science	4730	95	AAS	X				X				BHET
Construction Codes & Safety Science	4290	96	Certificate	X				X				BHET
Construction Codes & Safety Science	0570	97	Diploma	X				X				BHET
Construction Estimating	0520	98	Diploma	X				X				BHET
Construction Field Supervision	0530	99	Diploma	X				X				BHET
Construction Project Management	0540	100	Diploma	X				X				BHET
Contemporary Crafts Marketing	2760	101	AA	X				X				CASS
Corrections	6200	102	Certificate	X			X	X	X*		X	CASS
Court and Realtime Reporting	1840	103	AA	X			X*	X	X*	X*		BHET
Court and Realtime Reporting	1361	104	Certificate	X				X				BHET
Criminal Justice	6050	105	AA		X		X*	X	X*	X*	X*	CASS
Culinary Arts	1581	106	AA	X				X				BHET
Culinary Arts	1261	108	Certificate	X				X				BHET
Culinary Arts – Catering	0121	109	Diploma	X				X				BHET
Dental Assistant	3200	110	Certificate	X		Commission on Dental Accreditation of the American Dental Association		X				MSAH

* One or more classes must be taken at Harrisburg Campus (or Lancaster Campus).

Academic Programs at HACC

Program Name	Major Code	Page	Credential Earned	Prepares You For		Accreditation	HACC Locations Where Offered					Academic Division
				Career	Transfer		Gettysburg	Harrisburg	Lancaster	Lebanon	York	
Dental Hygiene	3490	111	AA	X		Commission on Dental Accreditation of the American Dental Association		X				MSAH
Diagnostic Medical Sonography	3540	112	AS	X		Commission on Accreditation of Allied Health Education Programs		X				MSAH
Dietary Manager	1611	113	AA	X		Dietary Managers Association: Association of Collegiate Business Schools and Programs		X				BHET
Dietary Manager	0140	115	Diploma	X				X	X*			BHET
Early Childhood Education	5500	116	AA	X			X	X	X	X	X	CASS
Electrical Occupations	0300	117	Diploma	X				X				BHET
Electrical Technology	4750	118	AAS	X				X				BHET
Electrical Technology	4370	119	Certificate	X				X				BHET
Electronic Engineering Technology	4580	120	AS	X				X				BHET
Electronic Technology	4310	121	Certificate	X				X				BHET
Elementary Education	5100	122	AA		X		X	X	X	X	X	CASS
Emergency Health Services Management	3500	123	AA	X				X				MSAH
EMT – Basic	—	124	Noncredit	X			(Variety of locations throughout the State.)					Noncredit
Engineering	4120	125	AS		X			X	X*			BHET
Entrepreneurial Leadership	1660	126	AA	X				X				BHET
Entrepreneurial Leadership	0270	127	Diploma	X				X				BHET
Entrepreneurship	1270	128	Certificate	X			X*	X		X*		BHET
Environmental Associate	3060	129	AS		X			X				MSAH
Environmental Science	3040	130	AA		X			X	X*			MSAH
Environmental Specialist	3570	131	AS	X				X				MSAH
Fine Arts	2120	132	AA		X			X				CASS
Fire Science Technology	6630	133	AA	X				X				BHET
Fire Science Technology	6260	134	Certificate	X				X				BHET
General Studies	7660	135	Associate	X	X		X	X	X	X	X	AA&EM
Geospatial Technology	4760	136	AS	X				X				BHET
Geospatial Technology	4410	138	Certificate	X				X				BHET
Gerontology	3300	139	Certificate	X				X*	X	X		MSAH
Gerontology	0231	140	Diploma	X				X*	X	X		MSAH
GM Express Maintenance Technician	0350	141	Diploma	X				X				BHET
Graphic Design	2840	142	AA	X				X				CASS
Graphic Design	2200	144	Certificate	X				X				CASS
Health Science	3590	145	AS	X				X	X*	X*	X	MSAH
Heating, Ventilation, & Air Conditioning	4780	147	AAS	X				X				BHET
Heating, Ventilation, & Air Conditioning	4280	148	Certificate	X				X				BHET
Heating, Ventilation, & Air Conditioning	0280	149	Diploma	X				X				BHET
Home and Building Remodeling	4790	150	AAS	X				X				BHET
Home and Building Remodeling	4430	151	Certificate	X				X				BHET

* One or more classes must be taken at Harrisburg Campus (or Lancaster Campus).

For the latest information visit www.hacc.edu.

Academic Programs at HACC

Program Name	Major Code	Page	Credential Earned	Prepares You For Career	Transfer	Accreditation	HACC Locations Where Offered					Academic Division	
							Gettysburg	Harrisburg	Lancaster	Lebanon	York		
Home and Building Remodeling	0290	152	Diploma	X				X				BHET	
Hospitality Management	1600	153	AA	X		Association of Collegiate Business Schools and Programs		X				BHET	
Hotel & Lodging Management	1741	154	AA	X		Association of Collegiate Business Schools and Programs		X				BHET	
Human Services	5550	155	AA	X			X*	X	X	X	X	CASS	
Human Services	5430	156	Certificate	X			X	X	X	X	X	CASS	
Humanities, Languages, and the Arts	2091	157	AA		X		X	X	X	X	X	CASS	
Humanities, Languages, and the Arts Education	2101	158	AA		X		X	X	X	X	X	CASS	
IEC Apprenticeship Training	4390	159	Certificate	X				X				BHET	
Industrial Maintenance Technology/ Mechatronics	4710	160	AAS	X				X				BHET	
Industrial Maintenance Technology/ Mechatronics	4260	161	Certificate	X				X				BHET	
Industrial Maintenance Technology/ Mechatronics	0460	162	Diploma	X				X				BHET	
International Studies	5030	163	AA		X			X	X		X	CASS	
Jewelry Repair	0610	164	Diploma	X				X				CASS	
Kinsley Carpentry Apprenticeship Training (Restricted)	4440	165	Certificate	X			(Offered at Kinsley Corporation)					X	BHET
Management	1350	166	Certificate	X			X	X	X	X	X	BHET	
Marketing, General Marketing	1640	167	AA	X		Association of Collegiate Business Schools and Programs		X	X	X*	X	BHET	
Marketing, Real Estate	1720	168	AA	X		Association of Collegiate Business Schools and Programs		X				BHET	
Marketing, Retailing	1730	169	AA	X		Association of Collegiate Business Schools and Programs		X		X*		BHET	
Marketing, Sales	0180	170	Diploma	X				X	X*			BHET	
Massage Therapy	—	171	Noncredit	X				X				Noncredit	
Mathematics	4070	172	AA		X			X	X			MSAH	
Mathematics – Computer Science	4030	173	AS		X			X	X			MSAH	
Mathematics Education	4150	174	AA		X			X	X*			MSAH	
Mechanical Engineering Technology	4700	175	AS	X				X				BHET	
Mechanical Technology	4350	176	Certificate	X				X				BHET	
Media Studies	2061	177	AA		X			X				CASS	
Medical Assisting	3210	178	Certificate	X		Commission on Accreditation of Allied Health Education Programs		X				MSAH	
Medical Assisting Ambulatory Care Technology	3520	179	AS	X		Commission on Accreditation of Allied Health Education Programs		X				MSAH	
Medical Coding Specialist	—	180	Noncredit	X			X*	X	X	X*		Noncredit	
Medical Insurance Billing Technician	—	181	Noncredit	X			X*	X	X	X*		Noncredit	

* One or more classes must be taken at Harrisburg Campus (or Lancaster Campus).

Academic Programs at HACC

Program Name	Major Code	Page	Credential Earned	Prepares You For		Accreditation	HACC Locations Where Offered					Academic Division
				Career	Transfer		Gettysburg	Harrisburg	Lancaster	Lebanon	York	
Medical Laboratory Technician/ Clinical Laboratory Technician	3580	182	AA	X		National Accrediting Agency for Clinical Laboratory Sciences		X				MSAH
Medical Transcription	—	183	Noncredit	X			X*	X	X	X*		Noncredit
Municipal Police Academy	—	184	Noncredit	X				X				Noncredit
Music and Marketing	0630	185	Diploma	X				X	X			BHET
Music Industry, The	1801	186	AA	X		Association of Collegiate Business Schools and Programs		X	X*			BHET
Music Product Sales	0620	187	Diploma	X				X				BHET
Music Technology and Marketing	0160	188	Diploma	X				X				BHET
Nanofabrication Manufacturing Technology	4690	189	AAS	X				X				BHET
Nuclear Medicine Technology	3630	190	AA	X		Commission on Accreditation of Allied Health Education Programs		X	X			MSAH
Nurse Aide		191	Noncredit	X			(Variety of locations throughout the State.)					Noncredit
Nursing	3680	192	AA	X		Pennsylvania State Board of Nursing: National League for Nursing Accrediting Commission	X	X	X		X	MSAH
Ornamental Horticulture	4810	193	AAS	X				X				BHET
Ornamental Horticulture	4450	194	Certificate	X				X				BHET
Paralegal Studies	5701	195	AA	X		Approved by the American Bar Association		X	X			CASS
Paralegal Studies	5301	196	Certificate	X		Approved by the American Bar Association		X	X			CASS
Paramedic – Emergency Medical Technician	3690	197	AA	X		Commission on Accreditation of Allied Health Education Programs		X				MSAH
Paramedic – Emergency Medical Technician	3330	199	Certificate	X		Commission on Accreditation of Allied Health Education Programs		X				MSAH
Personal Care Home/Assisted Living Administrator's Training	—	200	Noncredit	X				X				Noncredit
Pharmacy Technician	—	201	Noncredit	X				X	X			Noncredit
Phlebotomy Technician	0390	202	Diploma	X			X	X	X	X*	X	MSAH
Photography, Visual Arts	2140	203	AA		X			X				CASS
Physical Education – Exercise Science	3120	204	AA		X			X	X		X	MSAH
Physical Science	3070	205	AA		X			X	X			MSAH
Physical Science Education	3130	206	AA		X			X	X			MSAH
Police Science	6800	207	AA	X				X	X*	X*		CASS
Police Science	6380	208	Certificate	X				X	X*	X*		CASS
Practical Nursing	3270	209	Certificate	X		Pennsylvania State Board of Nursing: National League for Nursing Accrediting Commission	X	X	X	X*		MSAH

* One or more classes must be taken at Harrisburg Campus (or Lancaster Campus).

For the latest information visit www.hacc.edu.

Academic Programs at HACC

Program Name	Major Code	Page	Credential Earned	Prepares You For		Accreditation	HACC Locations Where Offered					Academic Division
				Career	Transfer		Gettysburg	Harrisburg	Lancaster	Lebanon	York	
Pre-Chiropractic	3140	210	AA		X			X	X			MSAH
Precision Metalworking Technology	4210	211	Certificate	X				X				BHET
Pre-Dietetic	3050	212	AA		X			X	X*			MSAH
Psychology	5150	213	AA		X		X*	X	X	X*	X	CASS
Radiologic Technology	3750	214	AA	X		Joint Review Committee on Education in Radiologic Technology		X				MSAH
Radiologic Technology – College Based	3760	215	AS	X					X			MSAH
Real Estate	0170	216	Diploma	X				X				BHET
Respiratory Therapist	3920	217	AS	X		Commission on Accreditation of Allied Health Education Programs		X				MSAH
Restaurant and Food Service Management	1621	219	AA	X		Association of Collegiate Business Schools and Programs		X				BHET
Restaurant and Food Service Management	1421	221	Certificate	X				X				BHET
Security Administration	6210	222	Certificate	X				X	X*			CASS
Senior Health Care, Workplace Assistant	0240	223	Diploma	X						X		MSAH
Social Sciences	5090	224	AA		X		X	X	X	X	X	CASS
Social Sciences Education	5140	225	AA		X		X	X	X		X	CASS
Social Services	5060	226	AA		X		X	X	X	X	X	CASS
Surgical Technology	3620	227	AS	X		Commission on Accreditation of Allied Health Education Programs		X				MSAH
Surgical Technology	3220	228	Certificate	X		Commission on Accreditation of Allied Health Education Programs		X				MSAH
Technology Studies	4680	229	AAS	X				X	X*			BHET
Technology Studies	4400	230	Certificate	X				X	X*			BHET
Theatre Arts – Performing Arts	2080	231	AA		X			X				CASS
Transmission and Distribution Technology	4770	232	AAS	X				X				BHET
Travel and Tourism	1900	233	AA	X		Association of Collegiate Business Schools and Programs		X				BHET
Travel and Tourism	1280	234	Certificate	X				X				BHET
Visual Arts – Photography	2820	235	AA	X				X				CASS
Visual Arts – Photography	2400	236	Certificate	X				X				CASS
Web Development and Design	1810	237	AA	X				X				BHET
Web Development and Design	1450	239	Certificate	X				X				BHET
Welding Technology	4161	240	Certificate	X				X		X*		BHET
Welding	0500	241	Diploma	X				X		X		BHET

* One or more classes must be taken at Harrisburg Campus (or Lancaster Campus).



Academic Programs Index	1-6
Table of Contents	7
Inquiries and College Mission	8
College Vision and History	9
College and Community Development	10-11
HACC Locations	
Gettysburg Campus	12
Harrisburg Campus	13-14
Lancaster Campus	15
Lebanon Campus	16
Virtual Campus	17
York Campus	18
Getting Started at HACC	19-21
Student Affairs	
Finances	22-26
Academic Support Services	26-27
Student Life	27-29
Academic Affairs	
Academic Planning	30-36
Academic Policies	36-38
College Policies	38-40
Academic Programs:	
Career, Transfer and Noncredit	41-241
Course Descriptions	242-308
College President and Board of Trustees	309
Delegate Body, Honorary D.P.S. Recipients	310
Personnel Listings	311-329
General Index	331-332
Apply for Admission	
Major Codes	333
Application Information	334
Application Form	335-336

Inquiries • College Mission and History

HACC, Central Pennsylvania's Community College

One HACC Drive
Harrisburg, PA 17110
(717) 780-2300
Toll-free: (800) ABC-HACC (222-4222)
TDD: (717) 780-3276

Gettysburg Campus

731 Old Harrisburg Road
Gettysburg, PA 17325
(717) 337-3855

Harrisburg Campus

One HACC Drive
Harrisburg, PA 17110
(717) 780-2300

Lancaster Campus

1641 Old Philadelphia Pike
Lancaster, PA 17602
(717) 293-5000

Lebanon Campus

735 Cumberland Street
Lebanon, PA 17042
(717) 270-4222

Virtual Campus

One HACC Drive
Harrisburg, PA 17110
(717) 780-2541

York Campus

2010 Pennsylvania Avenue
York, PA 17404
(717) 718-0328



Frequently called offices are listed below. All telephone numbers are within the (717) area code.

Adult Basic Education and Developmental Studies	780-2650
Business, Hospitality, Engineering, and Technology	780-2327
College and Community Development	780-2321
Communications, Arts, and Social Sciences	780-2420
Community Education Center	780-2587
Finance & College Resources	780-2360
International Education	780-2403
Library and Information Resources	780-2467
Mathematics, Science, and Allied Health	780-2310
President	780-2340
Public Relations	780-2447
Vice President	780-2348

Gettysburg Campus

Registration	337-3855 ext. 3010
Admissions	337-3855 ext. 3002
Advising and Counseling	337-3855 ext. 3001
Billing and Refunds	337-3855 ext. 3024
Financial Aid	337-3855 ext. 3030
Placement Testing	337-3855 ext. 3001
Student Records	337-3855 ext. 2966

Harrisburg Campus

Registration	780-2996
Admissions	780-3261
Advising and Counseling	780-2498
Billing and Refunds	780-2966
Financial Aid	780-2330
Placement Testing	780-1105
Student Records	780-6316

Lancaster Campus

Registration	358-2966
Admissions	358-2966
Advising and Counseling	358-2988
Billing and Refunds	358-2966
Financial Aid	358-2992
Placement Testing	358-2966
Student Records	358-2966

Lebanon Campus

Registration	270-6309
Admissions	270-6330
Advising and Counseling	270-4222
Billing and Refunds	270-6316
Financial Aid	270-6358
Placement Testing	270-4222
Student Records	270-6316

Virtual Campus

Visit us on the Web at www.hacc.edu/virtual
General Information (717) 780-2541
or e-mail virtual@hacc.edu
Admission, Registration,
Testing Information (717) 780-1122
Advising/Counseling (717) 780-2613
or e-mail rdkaras@hacc.edu

Virtual Campus inquiries related to Billing and Refunds, Financial Aid, Placement Testing, Student Records, please refer to the number listed for the physical campus nearest you.

York Campus

Registration	718-0328 ext. 3519
Admissions	718-0328 ext. 3518
Advising and Counseling	718-0328 ext. 3513
Billing and Refunds	718-0328 ext. 3519
Financial Aid	718-0328 ext. 3517
Placement Testing	718-0328 ext. 3550
Student Records	718-0328 ext. 3519

The statements in this catalog are not to be regarded as a contract between a student and the College. The College reserves the right to change course descriptions and academic requirements at any time within a student's enrollment. It will not be responsible for interruptions in a student's educational program due to circumstances beyond its control, such as inadequate enrollment in offered classes. A student planning to transfer is responsible for arranging a course of study acceptable to the transfer institution.

Harrisburg Area Community College does not discriminate in admission or employment on the basis of race, color, religion, political affiliation or belief, age, sex, national origin, ancestry, non-job-related disabilities, place of birth, General Education Development Certificate (GED), marital status, sexual orientation, or veteran status. Inquiries concerning affirmative action should be directed to the Office of Human Resources, Room 126, Whitaker Hall, Harrisburg Area Community College, One HACC Drive, Harrisburg, PA 17110. Telephone: (717) 780-2367. For information regarding services, activities and facilities that are accessible to and usable by persons with disabilities, contact Director, Office for Disability Services, Room 123, Whitaker Hall, telephone (717) 780-2614.

Mission

*In partnership with students,
educators, businesses and our diverse
communities, Harrisburg Area
Community College fosters excellence in
the educational, cultural, workforce
development and economic growth of
the College's service areas.*

Vision

Harrisburg Area Community College is an accessible, affordable, high quality, comprehensive community college. The multi-campus college serves as a premier educational and workforce development institution. The presence of quality instruction and cutting edge technology, business and industry collaboration, and a learning-centered environment provides students the necessary knowledge, skills and values to compete and excel in a global community.

HACC is nationally recognized as evidenced by:

- Students excelling in achieving their learning goals
- Increased enrollment and retention of disadvantaged students
- Optimum use of current technology in instruction and services
- A climate of personal attention, respect and inclusion
- High-quality faculty and staff
- Collaboration among staff, faculty, students and the community
- Leadership in identifying and responding to changing community needs
- Being a regional resource for cultural and artistic expression.

History

Established February 14, 1964, as the first community college in Pennsylvania, HACC welcomed its first class of 426 students on September 21 of the same year. In seeking to fulfill its mission of “providing educational and cultural opportunities to the community it serves,” HACC has become one of the largest undergraduate colleges in Pennsylvania, with nearly 20,000 students enrolling in credit programs and courses each semester.

When HACC opened in 1964, the College was housed in two leased buildings at the former Harrisburg Academy site on Front Street (now the site of Dixon University Center). In 1965, when Hershey Junior College closed, most of the school’s faculty and students joined HACC.

With the Hershey students, plus a larger than anticipated freshman class, enrollment soared to 1,314 in fall of 1965 and the College spread to two additional buildings.

Planning was already underway for a permanent campus for the fast-growing college. In March 1965, the City of Harrisburg sold the College a 157-acre tract in Wildwood Park for \$1.00. And on April 16, 1966, ground was broken for a \$3.5 million building project.

The year 1967 was a milestone in the College’s history. In April HACC became the

first Pennsylvania community college to be accredited by the Middle States Association of Colleges and Schools. In August, with the completion of the McCormick Library, Blocker Hall, and a student center (now Stabler Hall), the College moved to its new campus.

As enrollment continued to grow, the College added still more buildings: Cooper Student Center (1968), Whitaker Hall (1968), Evans Physical Education Center (1970), Rose Lehrman Arts Center (1975), and Overholt Bookstore (1977).

In the ‘80s, as technology began to revolutionize the workplace, HACC expanded its programming in the technologies. To accommodate the need for new laboratories in such areas as robotics, CAD, electronics and office information systems, the College broke ground for the state’s first community college technology center, Hall Technology Center, in 1984.

In 1986, HACC completed a new entrance road and added 55 acres to the Wildwood Campus. In 1987, the Helen Y. Swope Carillon/Clocktower was dedicated; and in 1988, the Public Safety Training Center opened at the northern end of the campus. In the Spring of 2000, the facility was renamed the Senator John J. Shumaker Public Safety Center, in honor of the Harrisburg legislator instrumental in its establishment.

Growth took a new direction in 1989 as HACC opened centers in Gettysburg and Lancaster. In May, 1990, the Lancaster Center became Lancaster Campus, and in August a new campus opened in Lebanon. Then, only three months after it opened, the Lebanon Campus and neighboring buildings were destroyed in a fire.

Efforts to rebuild the Lebanon Campus began immediately. At the same time, the College was also expanding facilities at Harrisburg Campus. North Hall, a new building at the Public Safety Training Center, was completed in 1991, and a year later HACC opened the new Lebanon Campus, Mumma Hall—home to the C. Ted Lick Wildwood Conference Center—and a College Services Center. In 1997, the Gettysburg Center moved to new expanded facilities at Old Harrisburg Road, Gettysburg; and acquired college campus status in 1999. A major expansion and renovation project, doubling the size of the Gettysburg Campus, was completed for Fall 2002. The newly opened health care learning center, located adjacent to the campus, now houses the expanded Nursing program.

In Spring of 2001, the College opened its Community Center for Technology and Arts in uptown Harrisburg, and Fall of 2001 marked the dedication of the newly-built Lancaster Campus on Old Philadelphia Pike in East

Lampeter Township. In Fall 2004, the Lancaster Campus opened its newly constructed East building, which doubled the size of the campus and provides much-needed classroom, laboratory, and office space.

Once again in 2003-2004, HACC saw record enrollments; reaching nearly 15,000 degree-seeking students at the four campuses and another 50,000 individuals in workforce development and community education courses.

In 2003, HACC opened a new location at Penn Center Harrisburg to accommodate the growth in a number of programs. HACC also began offering classes in York County. In Fall of 2005, HACC’s York Center opened at 2010 Pennsylvania Ave., and two years later, York was designated a campus by the State Department of Education. Today, the York Campus serves nearly 2,000 students.

In Fall of 2005, HACC opened the Select Medical Health Education Pavilion on the Harrisburg Campus—a building which houses the rapidly growing Health Careers programs. HACC also opened the Grace Milliman Pollock Childcare and Early Childhood Education and Childcare Center on the Harrisburg Campus.

In Fall 2007, HACC’s new Midtown site opened in the renovated 130,000-square-foot former Evangelical Press Building at Third and Reily streets in Harrisburg to house the college’s expanding technology and trade programs. Midtown 2 gives the college room to grow these programs while opening up additional classroom space at the campus across from the State Farm Show Complex. Adding to and modifying its original 16 programs in response to changes in society and the workplace, HACC now has nearly 200 associate degree, certificate and diploma programs. A growing number of Internet courses and study abroad opportunities provide alternatives to classroom instruction.

Today’s noncredit programming includes courses in personal enrichment and lifelong learning, while focusing on public safety training for volunteers and professionals and workforce and employee development training for business, industry, health care, and the human services.

Today, as Central Pennsylvania’s Community College, HACC has many strengths: well equipped laboratories and studios, modern, well maintained campuses, quality programs and services. HACC’s reputation reflects the quality and dedication of its faculty and staff and its commitment to meeting the needs of the communities and students it serves.



College and Community Development

The College and Community Development Division is the outreach arm of the college and includes the HACC Foundation, Alumni Affairs Office, Workforce and Economic Development Department, Senator John J. Shumaker Public Safety Center, the Institute for Entrepreneurial Development, Grants Development Office and the C. Ted Lick Wildwood Conference Center.

Workforce Development and Training

HACC's Workforce and Economic Development Department (WED) conducts a variety of industry-driven training programs designed to increase employee productivity and organizational efficiency. Some courses are offered to the directly to public and contract and customized training are offered to employers. WED's training gives working professionals a competitive edge in their careers and provides companies with an excellent training opportunity for their employees. Programs are provided at HACC or on-site at the organization's location. Most of the training programs enhance computer skills, manufacturing and technical skills or management and leadership skills. Services are available at the Gettysburg, Harrisburg, Lancaster, Lebanon and York campuses. For more information, call (717) 221-1327.

Computer Training provides customized and public subscription computer training in a comprehensive assortment of software packages, such as Windows, Word, Excel, Access, PowerPoint, MS Project, PhotoShop, and QuickBooks. Web page development classes are offered, as are programs such as Dreamweaver, Front Page, Flash and Fireworks. Training is available at the Gettysburg, Harrisburg, Lancaster, Lebanon, and York campuses, as well as Business Central in Carlisle. Corporate training can also be arranged at the business site and at the convenience of the employer. Information Technology Training is offered at HACC locations or at the business site. We are nationally recognized as a CompTIA training provider and a Microsoft IT Academy. Certification training is available for Linux+, CCNA, CISSP, CWNA, CWSP, MCP, MCSA, MCSE, CIW, A+ and more. For information, call (717) 221-1358.

Manufacturing and Technical Training are available in a variety of fields including AutoCAD, Solidworks, Microstation Essentials, GIS, and GPS basics, as well as masonry, electricity and electronics, welding, hydraulics-pneumatics, programmable logic controllers (PLC), home repairs, auto body restoration, precision measuring, print reading,

hydraulics, pneumatics, lean manufacturing and more. For information, call (717) 221-1337.

Professional Development and Management Training creates bottom-line results for stronger organizational performance. WED works with organizations to customize training for companies to reach their strategic direction. The Professional Development and Management Training department provides training for competency development for anyone from the plant floor through supervisors, managers, and all other professionals within an organization. WED also provides training in management, leadership, communications, team building, interpersonal skills, and certificate program through American Management Association (AMA). For more information, please call (717) 221-1331.

The Institute for Entrepreneurial Studies assists individuals in the planning and training required to develop and manage a successful business venture. Services available include courses, seminars, business counselors, networking opportunities and a development center. Special emphasis is given to rural and home-based business. Call (717) 221-1311 for more information.

HACC offers an ever-expanding variety of noncredit **healthcare training programs**. This includes comprehensive programs which prepare students to enter a healthcare career, as well as courses that provide continuing education for current healthcare professionals. Many of the entry-level programs prepare students to sit for professionally-recognized certification exams. And, completed coursework can often be converted into college credits for those students who continue their healthcare education in HACC's programs. Among those noncredit healthcare programs currently offered at HACC are: Certified Nurse Aide, Pharmacy Technician, Cardiology Technician, Medical Transcriptionist, Massage Therapy, and Medical Insurance Billing Technician, Personnel RN/LPN Refresher, For more information on noncredit healthcare programs, call (717) 221-1352.

Community Education Department

The Community Education Department provides a vocational and general interest courses for the public, educational tours, and special events. Types of courses include languages, a Horticulture Certificate Program, money management, culinary courses, art appreciation, photography, exercise, personal growth, and special events such as the Civil War Seminar and Older American Education Days. For more information, call (717) 780-2587.

Public Safety Training

HACC provides a wide variety of training programs for law enforcement, fire, rescue, hazardous materials, and emergency medical services personnel as well as response and safety training in business and industry environments. Most programs are provided throughout south central Pennsylvania at locations which are convenient to the students. For on-site instruction, HACC utilizes the Senator John J. Shumaker Public Safety Center, a 12-acre complex of training facilities located just north of the main Harrisburg Campus. Some public safety courses require criminal background checks or related prerequisites prior to enrollment. For general information on public safety programs, call toll free (800) 222-4222, ext. 2510, or (717) 780-2510. A more specific description of HACC public safety offerings follows.

HACC provides numerous **law enforcement training programs** which meet the needs of current law enforcement professionals, as well as those seeking to enter the law enforcement field. The Municipal Police Academy is one of a limited number of academies in Pennsylvania authorized to provide the Act 120 certification that is required for all municipal police officers. In addition to training officers who have already been hired by police departments, the Academy accepts "pre-service" cadets who seek Act 120 certification in order to better their chances of obtaining a municipal police position. Those who complete the police academy can also obtain college credit for their work when transferring into HACC's Criminal Justice or Police Science programs.

HACC is an authorized provider of Act 235 (lethal weapons) certification training under the authority of the Pennsylvania State Police. This certification is required for individuals who carry a firearm as part of their employment.

In addition, HACC makes valuable contributions to the law enforcement community by providing the following programs throughout south central Pennsylvania and elsewhere in the state: mandatory and elective continuing education training for municipal police officers, basic certification and annual continuing education for constables, and continuing education training for county probation and parole officers. Finally, HACC operates a nationally-recognized polygraph school that services the entire northeastern United States.

HACC provides **fire and rescue training and certification programs** throughout south central Pennsylvania and beyond. Most recipients of this training are volunteer fire/rescue personnel, working in cooperation with HACC to provide invaluable public services to their communities and the region. Fire/rescue

offerings include national certification programs under the National Professional Qualifications Standards Board, all elements of the Pennsylvania State Fire Academy curriculum, as well as numerous customized programs only available through HACC. In addition, HACC developed and runs the first nonproprietary full-time academy in the Commonwealth. Specifically designed for career fire service recruits, the 12-week program offers structured training in fire-fighting, emergency medical technician basic life support, hazardous materials, etc. Participants test for Fire Fighter I, Fire Fighter II, and EMT-Basic certifications at the completion of the program. Academy graduates may be awarded college credit applicable to HACC's degree program in Fire Science Technology.

HACC provides **Emergency Medical Services training** for the entire south central Pennsylvania region and beyond. Certification courses are offered at the First Responder, Emergency Medical Technician – Basic, Paramedic, and Pre-Hospital Registered Nurse level. All of these programs prepare students to sit for the State certification and National Registry exams. HACC also offers nationally-recognized emergency medical service certifications in such areas as Basic Trauma Life Support, Advanced Cardiac Life Support, Pediatric Advanced Life Support, Pediatric Education for Pre-Hospital Personnel. These, as well as other HACC programs, can also be used to fulfill continuing education requirements for EMS personnel. Finally, as an American Heart Association Community Training Center, HACC offers certifications in CPR, first aid, and AED.

HACC Foundation

The HACC Foundation is a private nonprofit educational trust established in 1985 by visionary leaders who believed in the value of investing for the future. Since its founding, the mission has remained to raise private and corporate revenues in support of HACC, its facilities, educational services, and scholarship support.

The HACC Foundation Endowment is comprised of nearly 200 individual restricted funds totaling over \$30 million in value, provide financial support to HACC.

The HACC Foundation Board of Directors represents accomplished corporate and community leaders who are committed to raising awareness and funds for HACC and its students.

HACC Foundation provides over \$2 million in annual support to the institution in fiscal support for student scholarship, facilities, cultural activities, and program support.

For the latest information visit www.hacc.edu.

Individuals, organizations, or corporations interested in learning more about gift opportunities at HACC are invited to contact the HACC Foundation:

Executive Director
HACC Foundation and Resource Development
One HACC Drive
Harrisburg, PA 17110-2999
Phone: (717) 780-2583
Fax: (717) 231-7670
Email: haccfdn@hacc.edu

Visit www.hacc.edu and click on "Alumni and Friends."

The HACC Foundation Directors

HACC Foundation Directors manage the Foundation endowments and guide the college's efforts to solicit and disburse funds for the improvement of its instructional programs, facilities, and educational services.

HACC Foundation Board of Directors, 2007-2008

Greg King, *Chairman*
James W. Evans, Esq., D.P.S., *Vice Chairman*
George A. Franklin, Jr., CPA, *Treasurer*
Nancy Rockey, M.Ed., *Secretary*
Edna V. Baehre, Ph.D., *HACC President*
Marion C. Alexander
Michael L. Bangs, Esq.
Daniel E. Beren, Esq.
Robert C. Buckingham, M.D.
Terry L. Burrows
Lauren Cacciamani
Ernest P. Davis
Frank J. Dixon, D.P.S.
Donald E. Enders, Jr.
Nancy J. George
Ronald L. Hankey, D.P.S.
Nicholas Hughes
Frank W. Jackson, M.D.
John J. Klobusicky, CFA
Robert T. Kramer, D.M.D., F.A.C.D.
Anne G. Leader
Holly M. Leggett
C. Ted Lick, D.P.S.
Howell C. Mette, Esq.
Kristen Olewine Milke
George R. Moffitt, Jr., M.D.
Henry W. Rhoads, Esq.
Rory G. Ritrievi
Donald E. Schell
Frank R. Sourbeer
John K. Stark
Daniel C. Witmer

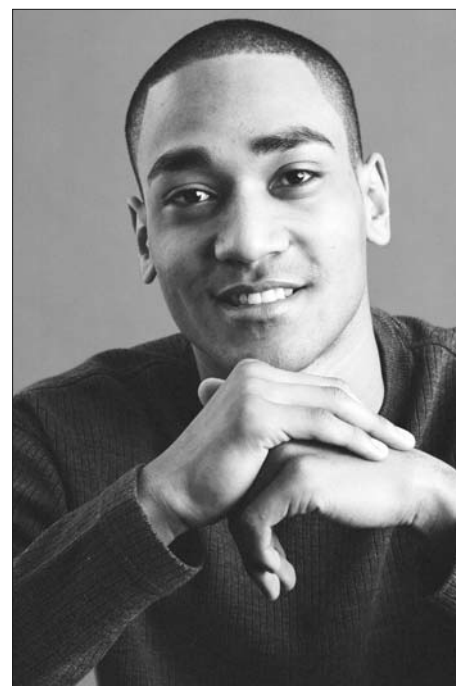
Office of Alumni Affairs

Former students of the college who have graduated from a degree, certificate, or diploma credit program, or have earned 30 credit hours, are members of the HACC Alumni Association. Alumni may use the College Career Services Center and Advising and Transfer Center. The Alumni Campus User Card is available (\$25 annual fee) and provides for use of the physical education facilities at the Harrisburg Campus and book checking privileges, including interlibrary loan access through the college libraries.

HACC alumni are offered a variety of benefits and services through the Association including tuition waiver for select noncredit classes, regional bus trips, international travel experiences, discounted tickets for programs at the Rose Lehrman Arts Center and much more. For information, call (717) 780-2474.

C. Ted Lick Wildwood Conference Center

The Conference Center is available to the public and provides for the conference needs both for HACC and external entities. Also the home to our Culinary program, the great food and exemplary customer service are the hallmark of our center. For information or booking, call (717) 780-3220.



The College

Gettysburg Campus

731 Old Harrisburg Road
Gettysburg, PA 17325
(717) 337-3855

The Gettysburg Campus is located in a former shopping mall at 731 Old Harrisburg Road, close to downtown Gettysburg. Established in 1989 as the Gettysburg Center of HACC, the school moved to its current location in 1997 and was approved as a regional campus of HACC in 1999. More than 1500 students are enrolled in credit courses at the Gettysburg campus. The campus also offers a comprehensive selection of noncredit courses and customized employee training programs for business and industry.

To keep pace with rapidly growing enrollments and programs, the Gettysburg campus has implemented a continuing series of renovation and expansion projects. The 50,000 square foot campus features a Library/Learning Resource Center, five computer labs, two biology labs, twenty-one classrooms, and a Student Commons with a Subway® restaurant and snack area. A full-service bookstore offers textbooks, school supplies and HACC apparel.

The health care learning center, sponsored by Gettysburg Hospital and located in the mall adjacent to the campus, houses HACC's nursing programs. A new environmentally friendly area at the rear of the campus, which was completed in 2007 with funding from the PA DEP and US EPA, incorporates native plants and flowers, picnic tables, and green space for studying and socializing.

In June of 2008, construction will begin on a major campus renovation scheduled for completion in January of 2009. The project will enable HACC to expand into former retail space adjacent to the campus, and will incorporate a new brick and glass façade and a tree-lined entrance drive. An innovative Learning Commons will combine library and academic support services, computer access, quiet study areas, and flexible seating spaces for collaborative group learning. The expansion plan includes new SMART classrooms, expanded wireless Internet access, and up-to-date instructional technology. Campus improvements will also include expanded food service options, a larger bookstore, and comfortable spaces for social gatherings. Construction will incorporate environmentally friendly materials, sustainable design and energy efficient systems.

HACC-Gettysburg Campus features small class sizes, individual attention from faculty, and an active Student Government Association. Student services available at the campus include placement testing, assistance with financial aid, academic advising and



counseling, disability services, and career and transfer planning. The Office for Academic Success offers free tutoring services, academic skills workshops and writing instruction.

The Gettysburg campus offers 28 associate degree, certificate and diploma programs. Available options include full- or part-time study, day or evening classes, and Internet courses. The campus also offers day and evening courses at two locations in Hanover. Academic programs that can be completed at the Gettysburg Campus can be found on pages 1-6. Additional programs can be completed through combined study at the Gettysburg Campus and Harrisburg Campus. Most of the general education and supporting courses for a wide variety of health career programs can be completed at the Gettysburg Campus. For more information, see the individual program descriptions in this catalog or call the HACC Gettysburg Campus at (717) 377-3855.





HACC Harrisburg Campus

One HACC Drive
Harrisburg, PA 17110
(717) 780-2300, or toll-free
1-800-ABC-HACC (222-4222)

McCormick Library (1967), named in appreciation for an early gift to the College from the Vance C. McCormick Fund and the Anne McCormick Estate, provides instructional support through a variety of resources and services. The first floor of the building houses the reference, periodicals, and circulation-service points, the technical services areas, the Archives and Special Collections, and the Bruce E. Cooper Paralegal Center. The circulating collection and current issues of periodicals are located on the second floor.

Clyde E. Blocker Hall (1967) houses administrative offices, Community Education Center, and the mainframe IBM computer supporting academic and administrative data processing. Blocker Hall also has classrooms, office and laboratory space for most of the programs offered by the Math, Science, and Allied Health Division and the Business, Engineering, and Technologies Division. The late Dr. Blocker, the founding President of HACC who served until retiring in 1974, was a nationally acclaimed educator, author

and lecturer. His leadership significantly influenced the growth of community colleges in America.

Stabler Hall (1967) was extensively renovated in spring 1992 to provide facilities for the College's Instructional Technology office, the Distance Learning office, and a compressed-video classroom. The building was renamed Stabler Hall to honor College benefactors Donald B. and Dorothy L. Stabler.

The Bruce E. Cooper Student Center (1968) houses the cafeteria, game room, student activities offices, and administrative offices frequently visited by students, including those for records, admissions, career placement, financial aid, counseling and advising, military and veterans affairs, and multicultural and minority student affairs.

The late Bruce E. Cooper, a Harrisburg attorney, was instrumental in the founding of the College and served for eighteen years as the first chairperson of the HACC Board of Trustees. He was named Trustee Emeritus in 1983.

Whitaker Hall (1968), formerly South Hall, houses the College's finance and college resources offices, including purchasing, safety and security, and human resources, as well as classrooms, faculty offices, and laboratories for the social sciences, and police science.

The building is also the site of the College Information Center, the Learning Center, and the Office of Disability Services. Whitaker Hall honors the late U.A. Whitaker, the founder of AMP, Incorporated.

The James W. Evans Physical Education Center (1970) is a teaching and general recreation facility that emphasizes life-time sports. It includes a swimming pool, a well-equipped fitness center, a gymnasium, a dance studio, and racquetball and squash courts. Nearby are lighted tennis courts, a golf putting green, and a playing field. Harrisburg attorney James W. Evans served as the first vice chairperson and second chairperson of the College's Board of Trustees. In 1990, he was named Trustee Emeritus.

The Rose Lehrman Arts Center (1974) houses offices and classrooms for the Division of Communication, Arts, and Social Sciences. It was named as a memorial to her mother by Trustee Emerita Lois Lehrman Grass, a benefactor of the College. One of the most modern and versatile performance facilities in the area, it contains a large 374 fixed-seat proscenium theatre, a black box theatre with movable seating, an exhibition gallery, a concert room, and an area for outdoor events.

The late Rose Lehrman was a community leader and benefactor of many community charities and services.

The Maurice C. Overholt Bookstore (1977) serves as a source for textbooks, supplies and college merchandise. Dean Overholt was HACC's first Dean of Students and Dean of Administration and served as Vice President of Administrative Services until his retirement in 1978. He was responsible for developing the campus master plan and a framework for the continuing financial stability of the College.

John N. Hall Technology Center (1985) houses classrooms and laboratories for technology programs, including architecture, industrial automation, drafting, photography, electronics, and office information. Many of the College's computer classrooms are located here. The building is named for College benefactor John N. Hall.

John N. Hall, a nationally recognized leader among motor truck and transportation company executives, established the annual John N. Hall Foundation Honors Scholarship program at HACC for 25 local high school graduates of academic and leadership distinction. Since 1981, over 1,300 semester scholarships totaling nearly \$1 million have been awarded. A second Hall Foundation scholarship benefiting minority students was established in 1990.

The Senator John J. Shumaker Public Safety Center (1988), located on 12 acres at the north end of the campus, features the most up-to-date facility in the area for training fire, police, and emergency medical personnel. The Center includes a burn building, a smoke building and a drill tower used to simulate a variety of physical conditions public-safety workers encounter on the job. A computer controlled flame system simulates various types of fires and a million-gallon holding pond supplies recapturable water. A special roadway and skid pad for practice driving of emergency vehicles and a pistol and shotgun training range complete the Center. North Hall (1991) is located at the Shumaker Public Safety Center. It houses classrooms, faculty offices, and training facilities and laboratories for the College's automotive programs, and public safety program. The offices for the noncredit Shumaker Public Safety Center, public safety, healthcare, and related training are located in North Hall.

Mumma Hall/C. Ted Lick Wildwood Conference Center (1992) is located adjacent to Hall Technology Center. Mumma Hall houses offices for the College's division of Workforce and Economic Development, as well as the Alumni and HACC Foundation offices.

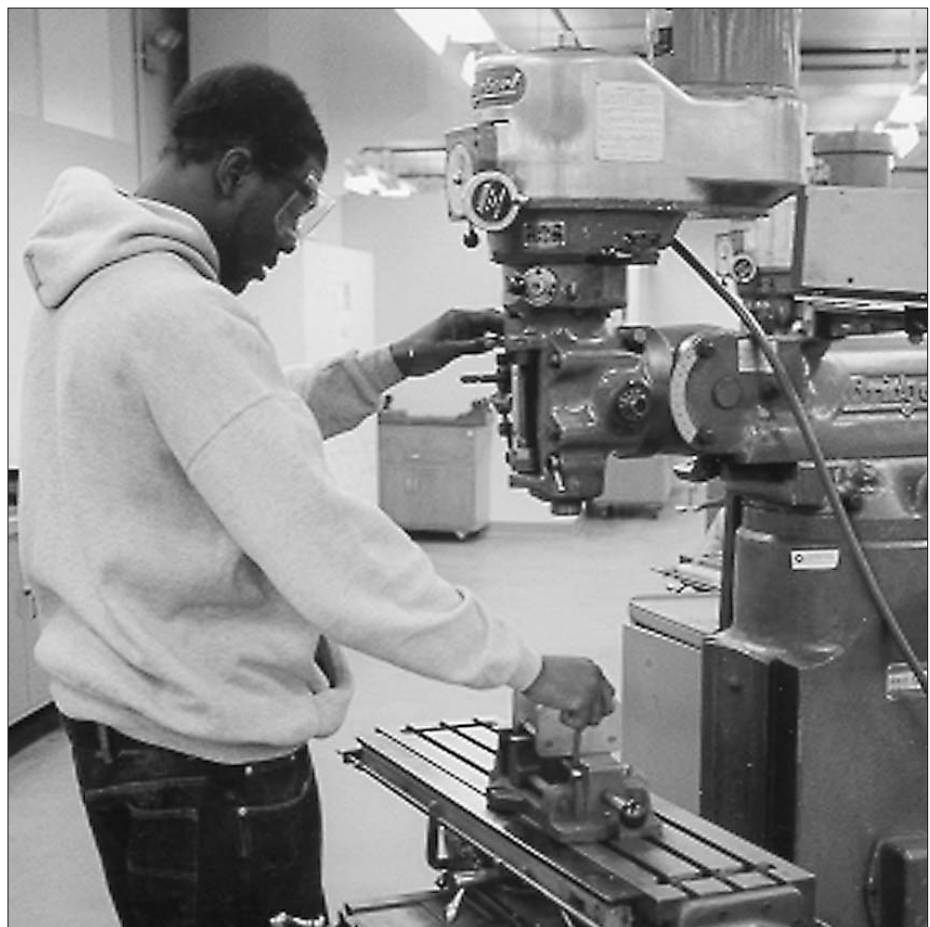
The building is named to honor Mrs. Kim Mumma, a Director Emerita of The HACC Foundation, and her husband, the late Robert M. Mumma, a charter member of the Foundation Board.

The Benjamin Olewine III Center for the Study of Culinary Arts and Food Service Management, also located in Mumma Hall, houses instructional laboratories and offices. The Center honors Mr. Olewine, a leader in Pennsylvania's food distribution industry, for his generosity to the College.

The C. Ted Lick Wildwood Conference Center is also part of Mumma Hall. Named in honor of Harrisburg businessman, HACC Foundation Board member, and HACC benefactor C. Ted Lick, the Conference Center provides facilities for noncredit seminars, teleconferences, and for training programs for business, industry, government, health and human services and other organizations.

The College Services Center (1992) houses the College's mail services, maintenance services, supplies, and horticultural services.

Campus Entrances. There are five entrances, each designated by a number and color, to the Harrisburg Campus. The main entrance (#1/gold) is the Mary Sachs Entrance. The entrance honors nationally recognized Harrisburg businesswoman and philanthropist,



the late Mary Sachs. Entrance two (burgundy) is the Alumni Entrance. The entrance honors the College's Alumni Association. Entrance three (silver) is the Silver Anniversary Entrance. Each brick honors one of those who contributed to the "Silver Idea" fund (designed to reach \$1 million at the College's one hundredth anniversary). Entrance four (green), the Wildwood Entrance, leads to parking areas for the C. Ted Lick Wildwood Conference Center in Mumma Hall. Entrance five (blue) is the Senator John J. Shumaker Public Safety Center Entrance.

The new Midtown Center which includes Midtown 1 (former Community Center for Technology and Arts), 1523 North Fourth Street, Harrisburg (2001) and Midtown 2 (former Evangelical Press Building), Third and Reily streets, provide classes for Harrisburg residents who may find difficulty in traveling to the College's Harrisburg Campus or have difficulty coordinating class times or bus schedules. In addition, the technical and trades programs offered at these locations provide training in high-demand career areas with diploma, certificate and associate degree paths offered. Business and manufacturing companies may also train their employees in areas of concentration such as machining, electrical, mechanical, pneumatics, and more.

The Adult Basic Education and Developmental Studies Division of HACC offers GED preparation classes at the Center with instruction in mathematics, reading, writing, science and social studies. Diagnostic pre- and post-tests are also provided to help target essential skills needed to achieve the GED. Local residents who are uncertain about choosing a career, or how to go about enrolling, paying tuition or applying for financial aid, can visit the Community Center and meet with staff to identify a plan that meets specific goals. Sessions are available on-site in career exploration to help individuals choose an area of study.

The **Penn Center** on Wiconisco Street opened in 2003 to accommodate the growth in a number of programs, and is headquarters for the Institute of Entrepreneurial Studies.

Select Medical Health Education Pavilion (2005), on the Harrisburg Campus, houses the rapidly growing Health Careers programs.

Grace M. Pollock Childcare and Early Childhood Education Center (also 2005) is a state-of-the art facility that doubled the number of children that can be cared for and provides extended hours to accommodate students who juggle classes, work and child care.





Lancaster Campus
 1641 Old Philadelphia Pike
 Lancaster, PA 17602
 (717) 293-5000

The Lancaster Campus was approved as a branch campus of HACC in May 1990. In the seventeen-year history of the campus, we have seen tremendous growth in enrollments, academic programs, faculty and staff. The Lancaster community has responded very positively by enrolling approximately 4,000 students each semester in college credit programs and approximately 3,000 students are enrolled in workforce and continuing education courses. Our transfer programs enable students to begin their college education locally and transfer to earn a baccalaureate degree. Our career programs enhance skills and knowledge for tomorrow's occupations, and our workforce education and training provides skills and training for residents of Lancaster County. Recently we have developed Concurrent Enrollment agreements with twelve public and one private school district.

This partnership allows over 500 high school students to earn college credits through HACC while still enrolled in high school classes.

The campus moved to its current location in August 2001 with the opening of the Main Building sitting on 60 acres of land. The 130,000 sq. ft. East Building was added in Fall 2004 with classrooms, science and allied health labs that offer state-of-the-art SMART classrooms with internet access throughout the building. These classrooms, and laboratories enhance the college's ability to provide access for more local residents seeking to continue their education at the Lancaster Campus.

The D&E Library provides on site help and comfortable space for study, research, and instruction seven days a week. Online access to academic information and virtual reference service off campus are provide 24/7 for HACC students. Individual and group study spaces and 125 computers are available for student and community use within the library.

The expansion enabled the Lancaster Campus to fulfill its mission to be an accessible, affordable, high quality comprehensive

community college and a premier education and workforce development institution in Lancaster County.

We are proud of the services we provide to our students including a learning center, financial aid, special needs, career, transfer and academic counseling, on site child care (open to the community), free parking, a transit stop on the campus and an on campus bookstore.

Day, evening, and weekend credit and noncredit courses are offered at our Old Philadelphia Pike campus. Evening credit courses are also offered at Warwick High School, Hempfield High School and Elizabethtown Middle School. Additional noncredit courses are conducted at various business locations. Programs offered by the Lancaster Campus can be found on pages 1-6—the programs are subject to change. For more information, please see the individual program descriptions in this catalog or call the Lancaster Campus at (717) 358-2966.

Please consider enrolling in one of over 80 programs at the Lancaster Campus and Share in Our Success.

The College

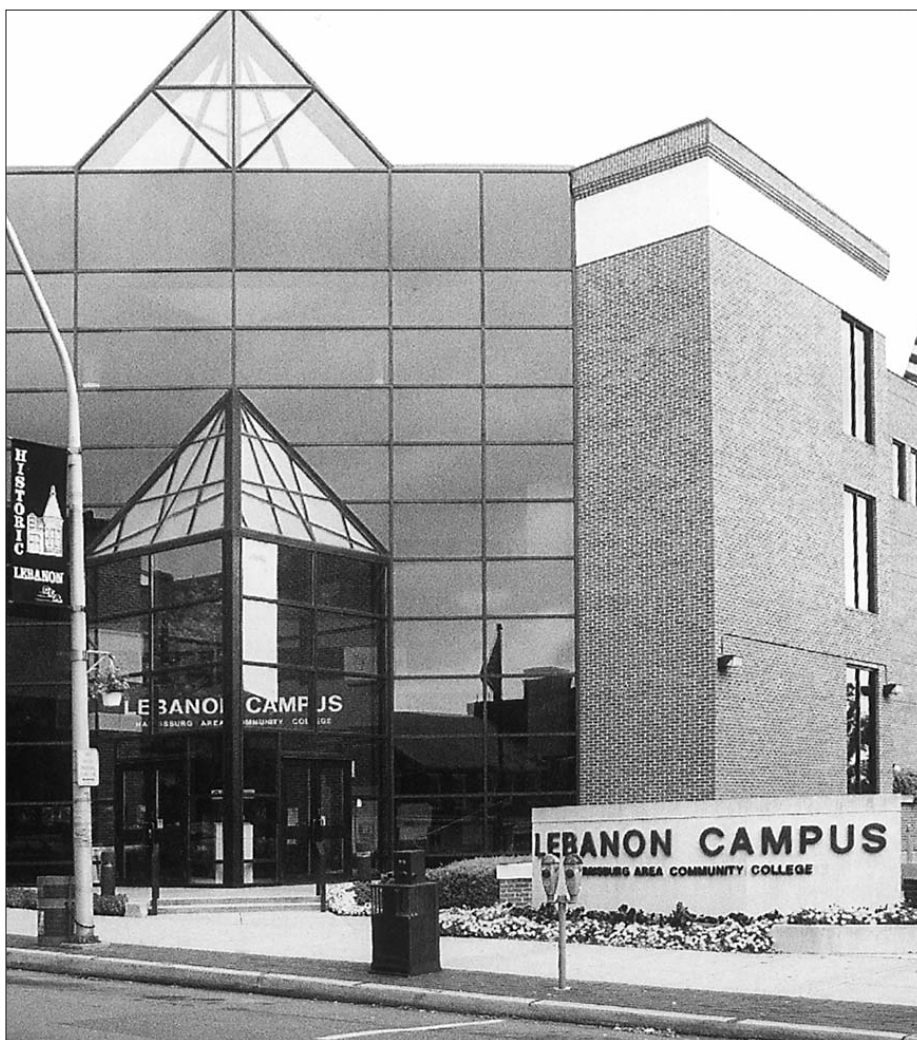
Lebanon Campus

735 Cumberland Street
Lebanon, PA 17042
(717) 270-4222

The Lebanon Campus opened in the newly renovated Frank J. Dixon Hall in Fall 1990, but in November of 1990, a fire destroyed both the campus and nearby businesses. The campus was rebuilt on its original site, and the new \$8-million building opened in January 1992.

Upon entering the Dixon building, one will find students enjoying a beverage or snack at the coffee kiosk, accessing wireless internet to complete a class project or socializing with friends. The campus houses computer and science laboratories and state-of-the-art SMART classrooms. Wireless internet connections are conveniently available throughout the entire building for student access. The on site Pushnik Family Library provides students access to over 12,000 volumes for research, study and personal enrichment. Study areas, group study rooms and computers are available for use. The Office for Academic Success provides free tutoring to all students, skills workshops, and placement testing services. In addition, students have access to the exceptional services offered by Academic Advising and Counseling, Career and Transfer Services, Financial Aid, Veteran's Affairs and Disability Services. A campus bookstore is conveniently located in the building, providing textbooks, supplies and logo wear items.

The Lebanon Campus offers 44 Associate degree, certificate and diploma programs, as well as credit and noncredit courses. Students can choose from day, evening or weekend classes. In addition, a variety of developmental courses are offered to develop math and language skills. General education courses are offered for both Associate degree seeking students and transfer students who wish to pursue a baccalaureate degree. Programs offered at the Lebanon Campus can be found on pages 1-6. Many of HACC's other programs appearing on that list may be started at the Lebanon Campus. For more information please contact the Lebanon Campus at (717) 270-4222.



Virtual Campus

One HACC Drive, Stabler Hall 107
 Harrisburg, PA 17110
 (717) 780-2541
www.hacc.edu/virtual

The Virtual Campus came into existence in July of 2005, as an extension of the college's successful distance learning program. We currently offer over 150 different courses in a wide variety of subject areas. In addition, we offer academic programs and provide online student support services, including advising, and access to an online student community and student government.

Busy adults who are challenged with distance, personal, or professional time constraints, find that HACC's Virtual Campus courses offer them a convenient way to achieve their educational goals. They may take courses in order to gain job skills, earn a HACC degree, or transfer credits to another college or university. High school students who meet certain admissions criteria take courses to fulfill high school graduation requirements while earning college credits. Students from other colleges take transfer courses that fit their busy schedules and save them tuition dollars. Students should check with their educational advisors before taking a course to ensure the credits will apply to the degree they are seeking.

Successful Virtual Campus students are self-directed, motivated learners who login at the start of the course, actively participate, and complete assignments and assessments by the due dates. Good reading, writing, and study skills are also important. Virtual Campus courses are academically the same as on-campus courses. The major difference is the flexibility provided by the delivery mode.

Online courses, also referred to as Web, Internet or e-learning courses, can be accessed anywhere at any time using a computer with a connection to the Internet. Students should have experience accessing and navigating the Internet. They should also have basic computer skills, including the ability to create and manage word processing files and file folders, and send and receive emails, including those with attachments. Communication with the instructor and classmates takes place through discussion boards, chats, and email. Special hardware or software may be required. Web resources and multimedia materials may be used in addition to the textbook or other print materials. The Virtual Campus web site has a self-assessment tool to help students determine if their learning style is a fit for online learning. Students can also explore online course tools prior to taking a course.

Virtual Campus courses follow the same admission and registration procedures as



on-campus courses and follow the standard HACC fall, spring, and summer semester schedules. Courses are available in 6-week, 8-week, late start, and full-term sessions. Students should login on the first day of class to begin their course work. Visits to one of HACC's campuses for orientation sessions, proctored exams, or labs may be required.

Many online services are available to help our students succeed, including: admission, registration, advising information, tutoring, career planning, and library resources. Students are also encouraged to use the services and resources provided at any of HACC's physical campuses. Students may participate in the Virtual Campus online student community through online discussion, clubs, organizations, and student government activities.

HACC's Technology Studies certificate program, as well as Associate degrees in Business Administration, Business

Management (Computer Information Systems concentration), Business Studies, General Studies, Physical Education – Exercise Science, Social Sciences, and Social Sciences Education, and Certificates in Business and Management, may be completed through Virtual Campus. In addition, Virtual Campus courses can complement on-campus studies, giving students additional opportunities to pursue their educational goals.

For more information, please see the individual course and program descriptions listed in this catalog. You can also visit the Virtual Campus web site at www.hacc.edu/VirtualCampus; call the Virtual Campus office at (717) 780-2451 or 1-800-222-4222, extension 2541; or e-mail virtual@hacc.edu

Courses and programs offered by the Virtual Campus are subject to change.

The College



York Campus

2010 Pennsylvania Avenue
York, PA 17404
(717) 718-0328

The York Campus, the fastest-growing and third-largest location in the network of regional campuses and community centers, is located less than ¼-mile north of Route 30 and within a mile of Interstate 83. York County's post-secondary students have joined students nationwide by turning to their community college in ever-growing numbers, with enrollment at the York Campus nearing 1,900 students. That growth has resulted in the need for three expansions in facilities since August 2005 when HACC moved to its current location behind the Crossroads/Old Navy shopping center. The campus has grown to 112,000 square feet, with the college beginning to formulate plans for further expansion to accommodate additional growth. In addition, the York facility was recognized by the State Department of Education as a full-fledged campus in October 2007, less than five years after the first classes were offered at several off-site locations.

Students enrolled in any of the 22 associate degree, certificate and diploma programs at the York Campus will find services and



benefits found at HACC's other campuses, including a library, allied health and science labs, computer lab, general purpose classrooms, Office for Academic Success and an on-site bookstore. Flexible day, evening and Saturday class schedules offer options in student scheduling. Evening classes also are offered at Dallastown High School.

York County students will find more options with additional day classes offered at the Hanover Hospital Health and Education Center and evening classes offered at South Western High School.

HACC offers nearly 200 programs of study, with students able to take general education and many required courses at the York Campus. Most of the general education and science courses for health career programs can be completed at the York Campus.



For admissions instructions, refer to the Application for Admission located at the back of this catalog, or online at www.hacc.edu, Admissions. Once a student is admitted to the college, a letter of acceptance is sent. The letter includes the student's assigned HACCid as well as information on the next steps of the enrollment process, such as scheduling placement testing and advising.

Placement Testing

Students required to take tests will be notified by the Admissions Office. All new degree-seeking and new full-time students, as well as any students who wish to enroll in English or mathematics classes (and certain other courses as designated by the course prerequisites) are required to participate in the college's Testing and Placement Program. These tests measure knowledge of reading, writing, and mathematics. The placement tests are not an entrance examination; the testing program's sole purpose is to help students succeed.

Students who submit satisfactory college transcripts or the equivalent are exempt from the tests. Students who have taken the American College Test (ACT) or Scholastic Aptitude Test (PSAT or SAT) may submit those scores for possible exemption from one or more of the HACC tests. Students who are not native speakers of English must complete the English as a Second Language assessment unless they submit minimum TOEFL scores of 550 (written), 213 (computerized), 79 (internet-based). More information is available online at www.hacc.edu, Academics, Courses and Programs, English as a Second Language.

Students with disabilities may make special testing arrangements. Once placement tests have been completed, the student should meet with an advisor to interpret the scores.

Meeting with an Advisor

Advising is an important part of the educational experience. The student and advisor can discuss program objectives and the student's goals to develop an educational plan that fits the student's needs. The advisor can monitor the student's progress as well as keep the student informed of changes in the program, transfer requirements and the current job market. Students who choose to register without seeking advice or register in classes not recommended by their advisor assume full responsibility for their actions.

Students should refer to the Academic Programs pages of this catalog, or online at www.hacc.edu, Academic Programs, for information on the suggested sequence of

courses for the program they are pursuing and planning suggestions for those students who plan to transfer to another college after completing their education at HACC. The Credit Class Schedule, published twice yearly, lists the courses that will be offered in particular terms. Class schedules are also available online at www.hacc.edu, Credit Courses.

Registration

Registration includes the selection of classes, the entry of the class selection into the computer, and the payment of tuition and fees. Registration generally begins several months prior to the start of classes and ends during the first week of classes. Early registration is encouraged, and full payment is not required until the tuition due date. Registration, dates, times, deadlines, and details about registration methods can be found in the Credit Course Schedule or online at www.hacc.edu, Student Services, Registrar.

Tuition and fees must be paid in order to complete the registration process. Students who fail to pay the tuition and fees or make payment arrangements by the payment deadline risk being dropped from classes. Tuition rate details can be found at www.hacc.edu, Student Services, Tuition and Fees. Students with a prior financial obligation will be unable to register until the account is settled.

Students seeking tuition sponsorship from one of the local school districts must present a current Certificate of Residence with the payment of tuition and fees.

Purchasing Books

Textbooks are available before the beginning of the term in the campus bookstores, as well as online at www.hacc.edu. (Textbook availability dates may be listed in the Credit Class Schedule.) It is recommended that students purchase books before the term begins.

Policies Governing Courses

Developmental Courses

HACC offers several courses designed for students who need assistance in sharpening their skills for college-level work. Students who would benefit from developmental courses are identified through the HACC Testing and Placement Program.

Students required to enroll in English or reading courses may not enroll in 100 or 200-level courses (except for Human Development 103) until they have successfully completed ENGL 002.

Occasionally, students believe that the tests have not properly indicated the course level at which they should begin. If this belief can be supported by evidence, such as previous

grades or other test scores, a student may ask for reconsideration. The request should be directed to a college counselor for evaluation.

English as a Second Language

HACC offers semi-intensive instruction in English for those adults who speak other languages. The primary goal is to help students learn the language skills crucial for succeeding in college.

During the fall and spring terms, English as a Second Language (ESL) is offered in concentrated eight-week sequences or in a less intensive sixteen-week schedule, depending on the campus location. For further information on HACC's ESL Program, refer to the Academic Planning section of this catalog, or online at www.hacc.edu, Academics, Courses and Programs, English as a Second Language.

Independent Study

There are opportunities for students to engage in independent study to complement the traditional educational program. This permits a student to conduct special study or pursue an academic interest. Qualified students may take a maximum of two independent study courses, but only one may be scheduled in any given term. A special fee beyond tuition will be charged. See the Tuition and Fees Schedule.

Students interested in applying for independent study should consult a faculty advisor; preparation for the study must be completed prior to the opening of the term in which the independent study will be completed. When several students desire to pursue the same study, an Independent Study Seminar may be arranged. Students should be aware that transfer schools may not accept independent study credits.

Audits

Students eligible to enroll in courses for credit may also audit courses. Students may change from credit to audit in a course during the first three weeks of a term or the equivalent in a shorter term. Students auditing courses pay the regular course tuition charge and are expected to attend all lectures and laboratory classes but are not required to take examinations. Students who do not meet the instructor's attendance requirements may be dropped from the class. The audit grade does not reflect mastery of material covered in a course and no credit is awarded. Financial aid cannot pay for an audited course.

Academic Load

In order to be considered "full time" in a fall or spring term, a student must be enrolled in courses totaling at least 12 credit hours. During a summer term, the normal load should not exceed one credit hour for each week of classes. A student who wishes to schedule

Getting Started at HACC

more than 18 credit hours during a fall or spring term must secure permission from a college administrator.

Many students have regular employment or family responsibilities while pursuing their studies, and frequently they underestimate the time needed for adequate performance in courses. The college recommends that students plan weekly study time of at least two hours for each hour of class. It is unwise to plan work and study totaling more than about sixty hours a week.

Class Attendance

Students are expected to attend all classes and are responsible for the timely completion of all required class work. Instructors will present an outline of class work and an attendance policy on the first day of class. (Students who miss the first day of class are responsible for requesting this information.) Students who never attend and who do not officially withdraw are responsible for fifty percent of the tuition charges.

An instructor's attendance policy must be approved by a college administrator and may be developed with consideration of factors such as the following: some courses require the presence and participation of the student in order to meet course objectives; some programs are accredited by agencies that mandate specific attendance requirements; some examinations and class projects are difficult or impossible to reschedule for an individual student.

Students should be careful to observe the attendance policies of their instructors since these policies may sometimes affect either grades or continued status in the class. In the case of absence from the first two class hours of a term, a student may be withdrawn and allowed to enter the class only if space is available. (Instructors must withdraw students who have missed all of the first three weeks of a regular term or the equivalent of a shorter term.)

The college is sometimes required to make attendance reports to outside agencies concerning students who are receiving veterans' benefits, social security payments, and various other federal, state, and financial aid.

Adding Classes

Prior to the beginning of a term, a student may add a class for which appropriate prerequisites, if any, have been completed providing that the class has seats remaining and is not a restricted class. Generally students may add a class through the full refund period. Entrance to a class that is closed or full requires the approval of the Instructor or designee. Students seeking entrance to restricted classes such as Nursing, Allied

Health, Graphic Design etc., must obtain the appropriate approvals and signatures.

Dropping Classes

Prior to the start of a term and through the full refund period, a student may drop a class with no penalty. From the end of the full refund period through the end of the one-half refund period, a student may drop a class without penalty except for the loss of the published percentage of tuition and all fees. Students should officially withdraw even if they choose not to attend classes to ensure they incur no financial obligation or receive a failing grade for the course(s).

Students who drop courses after the refund period through the midpoint of the course will receive a grade, usually a W, but sometimes F. After the midpoint of a course, a student may receive a grade of W or F for a dropped course. The prudent student will contact the instructor and get a signed withdrawal (DAW) form stating the grade to be assigned. The grade will be based on the instructor's assessment of the student's progress to date. No credit is granted for a W or F grade. Details about assigning grades are in the Policies section of this catalog.

Students receiving financial aid, veterans' benefits, other state or federal benefits or who are covered under parental insurance policies should determine the effects of dropping classes on the benefits or coverage of policies. Most insurance companies require full-time attendance to maintain student coverage.

Final Exams

A final examination period is scheduled at the conclusion of each term. Instructors and Division administrators determine the length of time, type, and content for final examinations. The schedule allows examinations up to two hours in length.

Request for Graduation

At registration for the last term of a program, a student must complete an Application for Graduation. A student is not automatically certified and without applying will not receive a credential. Applications are available in the registration areas of each campus. Applications are also available at www.hacc.edu, Student Services, Registrar, Graduation. To apply online go to HACCWeb, Student Services, Student Records, Apply to Graduate.

Accreditation

The college is accredited by the Commission on Higher Education of the

Middle States Association of Colleges and Schools. The Commission granted initial accreditation in April, 1967, and reaffirmation in 1977, 1987, and 1996. The Pennsylvania Department of Education has authorized the college to award the Associate degree, with specific programs receiving national accreditation.

The following programs have earned special accreditation.

Automotive Technology: National Automotive Technicians Education Foundation (NATEF)

Automotive Technology – GM ASEP: National Automotive Technicians Education Foundation (NATEF)

Business Programs: Association of Collegiate Business Schools and Programs

Cardiovascular Technology: Cardiac Sonography: Commission on Accreditation of Allied Health Programs (CAAHEP)**

Cardiovascular Technology: Invasive Cardiovascular Technology: Commission on Accreditation of Allied Health Programs (CAAHEP)**

Dental Hygiene: Commission on Dental Accreditation of the American Dental Association

Dental Assistant: Commission on Dental Accreditation of the American Dental Association

Diagnostic Medical Sonography (Ultrasound Technology): Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography**

Dietary Manager: Association of Collegiate Business Schools and Programs; Dietary Manager's Association

Medical Assisting (Certificate and Associate Degree): Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon recommendation of the American Association of Medical Assistants**

Medical Laboratory Technology: National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

Nuclear Medical Technology: Commission on Accreditation of Allied Health Education Programs (CAAHEP)**

Paralegal Studies: approved by the American Bar Association

Paramedic – Emergency Medical Technician: Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services

Professions** Practical Nursing: Pennsylvania State Board of Nursing; National League for Nursing Accrediting Commission*

Registered Nursing: Pennsylvania State Board of Nursing; National League for Nursing Accrediting Commission*

Radiologic Technology: Joint Review Committee on Education in Radiologic Technology (or its successor Agency)**

Respiratory Therapist: Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon recommendation of the Committee on Accreditation of Respiratory Care**

Surgical Technology: Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon recommendation of the Accreditation Review Committee on Education in Surgical Technology**

Letters of Accreditation are filed in the Office of the President and may be inspected on request.

* National League for Nursing Accrediting Commission, 61 Broadway, 33rd Floor
New York, New York, 10006
phone (212) 363-5555

** Commission on Accreditation of Allied Education Programs, 1361 Park Street
Clearwater, FL 33756
phone (727) 210-2350

*** The Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive, Suite 2850
Chicago, Illinois 60606-3182
phone (312) 704-5300



Finances

The college strives to maintain its position as the lowest-cost institution of higher education in the area as the tuition and fee schedules below indicate. However, as educational expenses rise, prospective and present students should investigate the possibility of financial aid. Each year, students at the college receive well in excess of \$48 million in aid. There are many aid programs sponsored by government agencies, the college itself, and private groups.

Tuition and Fees

Tuition and fees vary depending on the residence of the student. Twenty-two local school districts are sponsors of the college. Students who live within one of these districts must present a Certificate of Residence when paying tuition. Students who live outside one of the sponsoring districts will be required to pay out-of-district tuition and a capital outlay fee. The list of sponsoring school districts and

contacts is available online at www.hacc.edu, Student Services, Registrar, School District Sponsorship. Tuition and fees are subject to change, and are available online at www.hacc.edu, Student Services, Tuition and Fees.

“Laboratory” and Special Fees

Many programs and courses require additional fees. These are stated in the Credit Course Schedule, in course descriptions in this catalog, and in other informational materials.

TUITION RATES – ALL HACC CAMPUSES (Subject to change effective July 1, 2008)

Tuition Rates Per Credit Hour	Summer I	Summer II/Fall 2008
Resident of a sponsoring district	\$83.00	\$92.50
Other Pennsylvania residents	\$166.00	\$171.00
Out-of-State residents	\$249.00	\$256.50
Capital Outlay fee (students from non-sponsoring Pennsylvania districts)	\$5.00	\$5.00
Capital Outlay fee (students from out-of-state)	\$10.00	\$10.00
Technology fee	\$10.00	\$10.00
Student Activity fee	\$2.00	\$2.00
Institutional fee	\$5.00	\$5.00

NOTE

Tuition and fees information listed here for Summer II/Fall 2008 is

PENDING APPROVAL,

HACC BOARD OF TRUSTEES,

and is subject to change.

IN-STATE SPONSORING DISTRICT TUITION AND FEES

Credits	Tuition (Summer I)	Tuition (Summer II/Fall)	Activity Fee	Technology Fee	Institutional Fee	Total (Summer I)	Total (Summer II/Fall)
1	\$83.00	\$92.50	\$2.00	\$10.00	\$5.00	\$100.00	\$109.50
3	\$249.00	\$227.50	\$6.00	\$30.00	\$15.00	\$300.00	\$328.50
6	\$498.00	\$555.00	\$12.00	\$60.00	\$30.00	\$600.00	\$657.00
9	\$747.00	\$832.50	\$18.00	\$90.00	\$45.00	\$900.00	\$985.50
12	\$996.00	\$1,110.00	\$24.00	\$120.00	\$60.00	\$1,200.00	\$1,314.00

To calculate tuition for credits not listed, multiply \$100.00 (Summer I) / \$109.50 (Summer II/Fall) by the total number of credits.

IN-STATE NON-SPONSORING DISTRICT TUITION AND FEES

Credits	Tuition (Summer I)	Tuition (Summer II/Fall)	Activity Fee	Capital Fee	Technology Fee	Institutional Fee	Total (Summer I)	Total (Summer II/Fall)
1	\$166.00	\$171.00	\$2.00	\$5.00	\$10.00	\$5.00	\$188.00	\$193.00
3	\$498.00	\$513.00	\$6.00	\$15.00	\$30.00	\$15.00	\$564.00	\$579.00
6	\$996.00	\$1,026.00	\$12.00	\$30.00	\$60.00	\$30.00	\$1,128.00	\$1,158.00
9	\$1,494.00	\$1,539.00	\$18.00	\$45.00	\$90.00	\$45.00	\$1,692.00	\$1,737.00
12	\$1,992.00	\$2,052.00	\$24.00	\$60.00	\$120.00	\$60.00	\$2,256.00	\$2,316.00

To calculate tuition for credits not listed, multiply \$188.00 (Summer I) / \$193.00 (Summer II/Fall) by the total number of credits.

OUT-OF-STATE TUITION AND FEES

Credits	Tuition (Summer I)	Tuition (Summer II/Fall)	Activity Fee	Capital Fee	Technology Fee	Institutional Fee	Total (Summer I)	Total (Summer II/Fall)
1	\$249.00	\$256.50	\$2.00	\$10.00	\$10.00	\$5.00	\$276.00	\$283.50
3	\$747.00	\$769.50	\$6.00	\$30.00	\$30.00	\$15.00	\$828.00	\$850.50
6	\$1,494.00	\$1,539.00	\$12.00	\$60.00	\$60.00	\$30.00	\$1,656.00	\$1,701.00
9	\$2,241.00	\$2,308.50	\$18.00	\$90.00	\$90.00	\$45.00	\$2,484.00	\$2,551.50
12	\$2,988.00	\$3,078.00	\$24.00	\$120.00	\$120.00	\$60.00	\$3,312.00	\$3,402.00

To calculate tuition for credits not listed, multiply \$276.00 (Summer I) / \$283.50 (Summer II/Fall) by the total number of credits.

They often are labeled “laboratory” fees, and they cover special costs in certain courses that include such items as insurance, equipment and materials, software use, special testing, and transportation for field trips.

Residence Requirements for Tuition Subsidy

Students are considered Pennsylvania residents if they have lived in the state for more than one year. Exceptions apply to citizens of foreign countries depending upon Visa status.

Students who wish to claim subsidy from one of the 22 sponsoring school districts of the college must obtain a Certificate of Residence and present it when paying tuition. The college itself does not determine residency in one of the districts. The student’s address as of July 1 determines the district responsible for issuing a Certificate, and each district sets its own requirements for residency. A Certificate of Residence is valid from July 1 to June 30, and a new Certificate must be obtained yearly.

Students who wish sponsorship at another Pennsylvania community college

Students who live in school districts that sponsor HACC may pursue associate degrees at other Pennsylvania community colleges (with sponsorship only in curricula not offered by HACC) by making application to the Board of Trustees. HACC will provide tuition assistance to cover the sponsoring district’s share of the tuition, but will not assist in payment of any fees or other costs to the other community college. Some school districts may refuse to sponsor students at other colleges; therefore, students should check with their school districts concerning this matter. A list of sponsoring school districts is available online at www.hacc.edu, Student Services, Registrar, School District Sponsorship. Depending upon the sponsoring district, the amount of support may not exceed the amount the district pays to HACC in support of students attending HACC. Interested students must complete an Application for Approval to Attend a Non-Sponsored Pennsylvania Community College, available from the Dean of Enrollment Services. Students seeking sponsorship must submit to the Dean of Enrollment Services a current, valid Certificate of Residence from their school district. Only after the Board of Trustees approves each application submitted by the Dean of Enrollment Services will the student be assured of sponsorship at another community college in Pennsylvania.

Time and Method of Payment

A student is expected to pay their account in full for the term as of the published due date or enroll in HACC’s tuition payment plan. The due dates are available on the Schedule/Bill,

Invoice, or at www.hacc.edu, Student Services, Registrar, Registration Dates.

The college accepts payment by credit card (MasterCard or VISA), by check, or by cash. Credit card or check payment may be made online via HACCWeb. A \$20 fine is charged for returned checks. To claim bad checks, the college will accept only cash, a money order, or a certified check.

The college is participating in a tuition payment plan designed for students who prefer to pay tuition over a period of time rather than all at one time. Additional information is available by calling (717) 780-1919 or 1-800-ABC-HACC, ext. 1919.

The college may refuse to issue grades or transcripts and deny registration or readmission to students who owe money to the college or who have failed to return college books or equipment.

Refunds

Students who choose to withdraw from courses according to published deadlines may receive refunds. Refunds will be made only if the student signs a Drop/Add/Withdrawal (DAW) form. Refunds are calculated as follows: full refund of all tuition charges and special section fees up to the end of the first week of classes (or the equivalent for shorter terms), refund of one half of tuition charges up to the third week of classes (or the equivalent). Refund dates are published on the reverse side of the Schedule/Bill and online at www.hacc.edu, Student Services, Registrar, Refund Info. No refunds will be made after the third week (or equivalent). Students required to withdraw for disciplinary reasons will not receive refunds. The application fee is not refundable. Students who withdraw prior to the completion of 60% of the term and are receiving federal grants or loans, such as a Federal Pell Grant and Stafford Loan, will have their financial aid recalculated and prorated.

Financial Aid Services

Many students benefit from a variety of financial aid programs at HACC. The financial aid process can be divided into five main areas:

1. Applying for Financial Aid
2. Determining Aid Eligibility
3. Awarding Financial Aid
4. Disbursing Financial Aid
5. Financial Aid Programs

In addition to information provided here and on the HACC website at www.hacc.edu, the Financial Aid staff at each campus provides assistance to students throughout the year. Students may contact the Office of Financial Aid Services at their campus:

Harrisburg (717) 780-2330

Gettysburg (717) 337-3855
 Lancaster (717) 358-2992
 Lebanon (717) 270-6358
 York (717) 718-0328

Applying for Financial Aid

To begin the financial aid process the student must complete a Free Application for Federal Student Aid (FAFSA). The recommended filing date is March 15 before the academic year begins. Students can complete the FAFSA at any point during the academic year, however, students who apply by the March 15th priority deadline will receive maximum consideration for aid eligibility. Additionally, students who apply for aid close to the beginning of a term or after the term has started are responsible for payment of charges until financial aid eligibility is officially calculated and an official award letter is generated.

All students are encouraged to file the FAFSA online at www.fafsa.ed.gov. Students (and parents, if applicable) should apply for a PIN at www.pin.ed.gov before completing the online application. HACC’s Title IV school code is 003273.

Other applications may be necessary and will be noted with information on the individual aid program.

Verification – Some students are selected by the government for a process called “verification.” If this occurs, the student will be notified in writing to provide supplementary financial documentation to the Office of Financial Aid Services so that it may be compared to the aid application(s) for accuracy.

Consumer Information and Financial Aid – HACC, as permitted by federal regulation, now uses electronic means to disseminate required student consumer and “Right-To-Know” Act information. Anyone signing or processing financial aid forms, seeking financial aid information or assistance, or seeking consumer information at HACC must read, understand, and comply with the requirements disclosed which are available 24 hours a day on the financial aid web page at: www.hacc.edu/finaid. La información está también disponible en español.

Determining Aid Eligibility

Federal student aid programs are based on the principle that students (and their parent/stepparent or spouse, if applicable) are considered to be the primary source of financial support for postsecondary education. Financial aid is intended to supplement, not replace, family resources.

Formula for determining financial need:

$$\begin{aligned} &\text{Cost of Attendance} \\ &- \text{Expected Family Contribution} \\ &= \text{Financial Need} \end{aligned}$$

Every college must estimate the educational expenses a student will incur during an academic year. This is called the “Cost of Attendance.” These expenses include direct costs (tuition and fees) and related expenses (living, transportation, allowances for books, and other miscellaneous expenses).

The “Expected Family Contribution,” also called the “EFC,” is calculated using the information the student listed on the FAFSA. The FAFSA measures the family’s financial strength to determine eligibility for financial aid.

“Financial Need” is simply the difference between the college’s “Cost of Attendance” and the student’s “Expected Family Contribution.” If there is a remaining figure, the student is considered to have financial need. When there is no remaining need the student may still be eligible for a Federal Unsubsidized Stafford Loan. Also, while some scholarships are awarded on the basis of merit alone, most aid programs require students to demonstrate their need for funding.

Special Circumstances – If the student’s family has unusual circumstances such as loss of employment, divorce, separation, or death of a parent or spouse, that significantly reduces income, the student should contact the Office of Financial Aid Services at the campus they will attend.

The “Cost of Attendance” figures below are used for determining a student’s financial need. They may not represent the actual educational expenses. The chart below uses estimated costs for two semesters for the 2007-08 academic year:

Commuter Expenses	Full-Time	Part-Time
Tuition and Fees	\$4,888	\$3,008
Living Expenses	3,031	3,031
Books and Supplies	1,560	960
Misc. Expenses	1,600	1,600
Transportation	2,018	1,241
Total	\$13,097	\$9,840
Off-Campus Expenses	Full-Time	Part-Time
Tuition and Fees	\$4,888	\$3,008
Living Expenses	8,000	8,000
Books and Supplies	1,560	960
Misc. Expenses	1,600	1,600
Transportation	2,018	1,241
Total	\$18,066	\$14,809

Definitions – “Commuters” are students who reside with their parents. “Off-Campus” students are those who live away from their parents in their own apartment or home.

Certificate of Residency – Students who reside in one of the 22 sponsoring school districts in Dauphin, Cumberland, or Perry counties may be eligible for a lower tuition

rate. Students residing in these 22 school districts need to contact their school district office to see how to obtain a certificate of Residency. A new Certificate of Residency is needed each July 1.

Non-Pennsylvania residents – attending full time will pay approximately \$7,293 for tuition and fees and approximately \$4,488 for part-time.

Additional Eligibility Criteria

Additional eligibility criteria may apply depending on the aid program. A student pursuing an associate degree, certificate, or diploma may apply for financial aid. Some certificate and diploma programs are not eligible for certain types of financial aid.

No aid is awarded for audited courses, credit by examination, or generally repeating a course for which the student received a “Y” grade. Some financial aid may be used to pay for developmental or preparatory courses at the college. There are some restrictions on specific courses and the number that can be taken at one time. Except for Pell grants, at least 6 credits of enrollment are required for most state and federal aid programs. The PHEAA state grants require enrollment in an associate degree program. Students need to be taking courses that apply to their program of study.

To be eligible for all federal and state aid programs, students must have a high school diploma or GED and be seeking a diploma, certificate, or associate degree in an approved HACC program. Students who do not have a high school diploma or GED must earn passing scores on an approved “Ability-To-Benefit” test.

Satisfactory Academic Progress

Regulations require the Office of Financial Aid Services to ensure that all students receiving aid are making satisfactory academic progress. Aid includes scholarships, grants, loans and employment programs. Students who fail to maintain satisfactory academic progress will lose their financial aid eligibility. Progress must be maintained in four ways:

1. Students must complete at least 75% of ALL credits they attempt. TIP: Students must avoid withdrawing from or failing courses. If a student receives grades of F, I, or W they do not count toward the 75% completion rate. Additionally, PHEAA State Grant recipients must ensure that they complete at least six credits toward their degree for each part-time grant and twelve credits toward their degree for each full-time grant they receive.
2. Students must earn an acceptable cumulative Grade Point Average (GPA): TIP: Students must watch their grades closely! Academic advisors can help.

Minimum Cumulative required at HACC	Credit Hours Earned
1.00	Up to 12
1.20	13-24
1.40	25-36
1.60	37-48
1.80	49-60
2.00	61 or greater

3. Students must finish their academic program within 150% of the published length of the program. For example, a student in a 61 credit hour Associates program full-time, should be able to earn the degree in three years taking no more than 92 credits. TIP: Students should make sure they are taking courses that apply to their degree or certificate. Taking courses not required for the program of study may deplete aid eligibility before the program is completed.
4. Students must earn passing grades in their classes. Students who receive all “F” grades or a combination of all “F” and “W” grades for a term will have their aid eligibility recalculated at the end of that term. When this occurs, students may owe money on their account even if the term is over. TIP: Students need to earn passing grades. If any student stops attending all of their classes during the term, they must officially withdraw by immediately contacting the HACC Registration Office.

After at least two terms and at attempting at least 12 credits, students will be reviewed for academic progress at the end of the Spring Term. For shorter academic programs, a review is required half-way through the program. Students not making progress due to an extenuating circumstance may appeal to the Appeals Committee.

Additional information on Financial Aid Satisfactory Academic Progress is available in HACC’s Administrative Procedure #513.

Awarding Financial Aid

Once the student has completed the application process and the Financial Aid Services Office has calculated eligibility for various financial aid programs, an award letter will be produced and sent to the student. The award letter will list the type(s) and amount(s) of aid for which the student is eligible. This is called the “financial aid package.” The student has the option of accepting or rejecting any awards.

For students who apply on time, the aid will generally be awarded for a full academic year. The awards are divided between the terms for which the student plans to enroll.

Adjusted Aid Awards – Student eligibility for financial aid is based on the enrollment status listed in the award letter.

The Office of Financial Aid Services reserves the right to modify financial aid awards at any time during the award year. Awards may be adjusted based on the situations listed below.

- Failure to maintain Satisfactory Academic Progress.
- Any change in status (including grade level, program of study or credit hours attempted).
- Receipt of additional funding not listed on the award letter such as the PHEAA State Grant, private scholarships, vocational rehabilitation assistance, veteran benefits, Pennsylvania EAP, tuition waivers, employee tuition assistance, etc.
- Previously submitted inaccurate, incomplete or conflicting information.

Students are encouraged to regularly review their latest information provided on the HACC Student Services web pages and “HACCWeb for Students.”

Disbursing Financial Aid

The financial aid listed on the award letter should appear on the student’s schedule bill (student account statement). Refund dates for dropping courses are available on the web at www.hacc.edu. If the student does not have enough financial aid to pay the charges, it is the student’s responsibility to pay the difference by the tuition due date or they will be dropped from enrollment in their classes.

HACC’s monthly Payment Plan is available to assist students with paying the bill. For more information, contact the Student Accounts Office at the campus where the student will attend.

Payment of Financial Aid – Payment of financial aid awards is generally disbursed to a student’s account 30 days after the student’s first day of class each term. Aid must first pay charges on the student’s account.

Refunds – Students whose financial aid award is greater than their charges will receive a refund within approximately 14 days from the date their award is disbursed to their account. Therefore, allowing for the 30 day delay, refunds are available to students by the 6th week of the term. This refund is to be used for other educationally related expenses. Refund checks cannot be picked up in person.

Withdrawing From HACC – Students are encouraged to meet with their instructors and academic advisors, utilize tutorial services, and speak with the Financial Aid Staff before withdrawing from HACC. This is important because withdrawal may affect the student’s eligibility for financial aid and could result in the student having to repay all or a portion of their financial aid.

If the student officially or unofficially withdraws from HACC prior to completing 60% of

the term, the aid received (or a calculated portion of the aid) will be returned to its source.

Financial Aid Programs

Grants and Scholarships – are free monies that are not repaid. Excluding the Federal Pell Grant, an enrollment status of six (6) or more credits is required.

- The Federal Pell Grant and Federal Supplemental Educational Opportunity Grant (SEOG) – awarded to undergraduate students with need.
- The Federal Academic Competitiveness Grant (ACG) – awarded to students who recently graduated from an officially certified rigorous high school program who meet other program eligibility programs.
- PHEAA State Grant – limited to Pennsylvania residents who have resided in the state for one (1) year without attending college AND are pursuing an Associate Degree. This award is not determined by HACC but is determined by the PHEAA State Grant Agency.
- Scholarships – are offered through the institution or non-institutional organizations. They can be based on merit, financial need, or other criteria. Students should check www.hacc.edu for more information.

Federal Work-Study (FWS) – provides jobs to students with financial need allowing them to earn money to help pay for educational expenses. Jobs may be available on campus and at approved off-campus locations. An enrollment status of six (6) or more credits is required. Students are eligible to earn the listed amount and are paid on a bi-weekly basis based on the number of hours worked. This money is earned and is not deducted from the student’s bill.

Loan Programs – Loans are borrowed money that must be repaid with interest. For Federal Stafford loans, repayment does not begin until after a 6 month grace period after the student graduates, withdraws, or drops below six (6) credits (the grace period for Federal Perkins loans is 9 months. An enrollment status of six (6) or more credits is required for student loans. If students drop below six (6) credits or terminate enrollment, they may not be eligible to receive a student loan disbursement. HACC automatically awards loans to students who indicate they are interested in loans on their FAFSA. HACC will award loans up to a student’s maximum eligibility. HACC strongly encourages students to borrow wisely and to reduce or cancel their loans with HACC if they do not need to borrow the maximum amount listed on their award letter.

- Perkins Loan – has a fixed rate of 5%. Students will be notified when they need to sign the Promissory Note.
- Nursing Loan – has a fixed rate of 5%. Students will be notified when they need to sign the Promissory Note.
- Federal Stafford Loans – are either subsidized or unsubsidized. Both have a fixed interest rate of 6.8%. A SUBSIDIZED loan is awarded on the basis of financial need. Students will not be charged any interest before beginning repayment or during authorized periods of deferment. The Federal Government “subsidizes” the interest during these periods. An UNSUBSIDIZED loan is NOT awarded on the basis of need. Students will be charged interest from the time the loan is disbursed until it is paid in full. The student has the option of paying or not paying the interest and principle while in school. The maximum loan amount is determined by the number of earned credits. Freshmen with earned credits from 0 to 24.9 may borrow up to \$3,500. Sophomores with earned credits equal to or greater than 25 may borrow up to \$4,500.

Independent students – may be eligible for up to an additional \$4,000 in unsubsidized Federal Stafford loan funds.

First-time borrowers – are required to complete a loan entrance counseling session. To fulfill this requirement, go to www.aessuccess.org.

Once the student completes Entrance Counseling, American Education Services (AES/PHEAA) will mail a Stafford Loan Master Promissory Note (MPN) for the student to complete. Students may go to www.aessuccess.org and use their federal PIN to sign and complete the MPN.

- PLUS LOAN – Parents may also borrow to pay educational expenses for a dependent undergraduate student. To apply for a PLUS loan, go to www.aessuccess.org and click on the PLUS Loan link. The annual limit is equal to the student’s cost of attendance minus any other financial aid received by the student. The loan has a fixed interest rate of 8.5%. Students whose parents are denied a PLUS loan may be eligible to borrow up to \$4,000 through the Unsubsidized Federal Stafford Loan program.
- Alternative Loans – are loans that require credit approval by a lender. The interest rates and terms of the loans vary. Alternative loans may pay up to the difference between the total cost of attendance minus all other financial aid. Students interested in alternative loans should visit

www.citizensbank.com/pf/studentloans/hacc
or www.campusdoor.com.

Charging Books – Students who have financial aid in excess of their tuition and fee charges can charge their books at the bookstore as long as the bookstore charges do not exceed the amount of the aid refund.

General Scholarships/Awards

Many HACC scholarships require submission of the Free Application for Federal Student Aid (FAFSA). Additional forms are necessary for some scholarships. For a comprehensive list of scholarships with requirements and deadlines, please visit the Financial Aid section of HACC's website:

www.hacc.edu.

Veterans' Benefits

The Military and Veterans' Affairs Office on the Harrisburg Campus is located on the second floor of the Cooper Student Center, C204B [telephone (717) 780-2331]. This office provides information about G. I. Bill benefits for veterans, eligible dependents of veterans, members of the National Guard and Selected Reserves, and Active duty servicepersons. This office certifies enrollment to the Department of Veterans Affairs and the Pennsylvania Department of Military and Veterans Affairs. Military and Veterans' Affairs Offices located at each branch campus provide veterans education benefit information and assists students in applying for benefits. Information about the VA work-study program and tutorial assistance is also available. Students should refer to the Military and Veterans' Affairs page at www.hacc.edu, Student Services, Veterans Affairs. Information and current benefit rates can be found at www.gibill.va.gov. The major benefit programs are:

Montgomery G. I. Bill – Chapters 30, 32, and 34

Montgomery G. I. Bill – Selected Reserves – Chapter 1606, 1607

Survivors & Dependents Education Assistance Program – Chapter 35

Vocational Rehabilitation – Chapter 31

PA National Guard Education Assistance Program

Federal Tuition Assistance

Notes

Application: Veterans must complete an initial application for benefits. A Veterans Benefits Request Form must be completed each semester to continue to receive benefits.

Advance pay: Veterans may request an Advance Pay if they are new students or have a 30-day break between terms. Advance Pay must be applied to the student's account when received.

Disabled veterans: Veterans with service-connected disabilities should contact a VA Vocational Rehabilitation Counselor at 1-800-827-1000.

Eligibility: Most programs offered for credit by HACC are approved for VA Education Benefits. Noncredit programs approved are the Police Academy, the Fire Academy, and Massage Therapy. Additional noncredit programs are pending approval. Contact the MVAO for additional information. HACC is also a fully accredited Servicemembers Opportunity College and a ConAP member.

Financial Aid: Veterans are encouraged to apply for financial aid by submitting a Free Application for Federal Student Aid (FAFSA). Veterans must report their estimated VA benefit and the number of months they expect to receive that benefit on the FAFSA. The Military and Veterans' Affairs Office will assist students in calculating their benefit estimate.

Guard members: Education Assistance Program (EAP), Federal Tuition Assistance, and Loan Repayment Program are available. Students should contact their unit of assignment on these additional programs.

Satisfactory Progress: Veterans should be aware of the requirements for satisfactory academic progress mandated by the Department of Veterans Affairs in accordance with College academic policy described in this catalog. The VA will be notified when a student is not making satisfactory progress.

Selected Reserves: Federal Tuition Assistance and other benefits may be available. Students should contact their unit of assignment on these additional programs.

Summer terms: Summer benefit rates will vary for each summer term. A Training Time Equivalency Table can be found on the MVAO web page. The Military and Veterans' Affairs Office will assist students in calculating their benefit estimate.

VA Work-Study Allowance Program: Veterans attending 7 or more and receiving G. I. Bill benefits may apply for VA Work-Study to work in the Military and Veterans' Affairs Offices on the HACC campuses. For more information on this program call (717) 780-2364/2331.

Veterans Benefits Request Form: This form must be completed each term a veteran registers for classes in order for the college to certify attendance to the Department of Veterans Affairs. Failure to complete this form will result in an interruption of benefits.

Academic Support Services

The Office for Academic Success

The Office for Academic Success at each of

the campuses serves students by providing guided support opportunities that contribute to and enhance the total college experience.

Five major areas are sponsored by the Office for Academic Success.

- The Learning Center
- The Test Center
- Supplemental Instruction
- Carl D. Perkins Vocational & Technical education
- Act 101 (Harrisburg Campus Only)

The Learning Center

The Learning Center provides free tutorial assistance and workshops in academic skills development on a walk-in, scheduled, or referral basis. The center is staffed with professional and peer tutors who assist students seeking to improve their skills in reading, writing, accounting, math computation, problem solving, science, computer literacy, speech and academic success. Tutorial sessions may be arranged for students who require assistance in other subjects. All inquiries regarding these and other services should be directed to the Office for Academic Success at your location.

The Harrisburg Campus Learning Center is located chiefly in Whitaker Hall and includes an accounting center (B122), writing center (W122), mathematics center (W121), ESL center (W115), and speech center (A114). The Lancaster Learning Center is located in Main room 232, the Lebanon Learning Center is located in room D220, and the Gettysburg Learning Center is located in room 130 and the York Learning Center is located in room 104. Hours for the centers are posted the beginning of each term.

The Test Center

The Test Center provides a variety of services that promote academic success, personal growth, and career development. Its mission is to provide a secure, comprehensive environment for testing candidates while maintaining integrity within a system of support for faculty and professional organizations. Exams offered by the Testing Center may include:

- Academic Placement Testing
- Academic Make-Up Exams
- CLEP Exams
- ACT Testing
- Praxis Information
- MOS Information
- Community agency tests

For additional information regarding Test Center services, contact the Office for Academic Success at your location.

Supplemental Instruction

The Supplemental Instruction (SI) model of

student academic assistance helps students in historically difficult classes master course content while they develop and integrate learning and study strategies.

Supplemental Instruction:

- is facilitated by a trained SI leader
- delivers services to students beginning on the first day of class
- integrates study skills with content
- delivers services in geographic area of academic departments
- encourages peer collaborative learning
- focuses on high risk courses rather than high risk students

Carl D. Perkins Vocational and Technical Education

Students enrolled in career programs who need assistance to successfully complete their programs may have access to support services through the Perkins Act. These federally-funded projects help sponsor eligible students with resources such as enhanced supplemental instruction in select career courses, tutoring, and counseling and academic advising, special testing accommodations for students with disabilities, and consultations on effective compensatory learning strategies.

The ACT 101 Program (Harrisburg Campus only)

The ACT 101 Program is a state-funded program designed to serve highly motivated students who meet specific economic and academic need criteria and show the potential to succeed in college work with adequate support. This student-oriented program provides counseling and tutorial services, information on financial assistance, cultural enrichment, academic monitoring and in-services opportunities.

Office for Disability Services

In admission to its programs, courses, and facilities, the college will not discriminate against a qualified student with a disability. However, admission to a particular program may require students to meet technical standards required by the program. With this exception, the college will make academic adjustments and accommodations that are reasonable and appropriate.

The college will assist in compensating for deficits related to a disability by providing academic accommodations to students with documented disabilities. Documentation of a disability by a licensed professional should be submitted to the Office for Disability Services. Students with disabilities may receive auxiliary aids, such as tape recorders and texts on tape; any such aids will normally be permitted in classrooms.

Each HACC campus/center provides physical accommodations according to ADA guidelines. Electric doors are installed throughout all campuses providing access for students with mobility impairments. Parking spaces for individuals with disabilities are identified at all campuses.

Accommodations or special arrangements for students with disabilities may be made by contacting the Office for Disability Services, Whitaker Hall, Room 123-F, phone (717) 780-2614, or by contacting counselors at the other campuses. Students may also refer online to www.hacc.edu, Admissions, Disability Services.

For information on Library and Information Resources, please refer to the Academic Affairs section of this catalog.

Advising and Transfer Center

The college provides advising and resources for students planning to transfer. The earlier a student decides to transfer, the more likely a suitable HACC program can be arranged with the help of a counselor or a faculty advisor. HACC has formed articulation agreements with many colleges and universities that assure admission with junior standing providing an approved program of study is followed, the required GPA is maintained, and an associate degree is earned. A list of these colleges/universities is located on the HACC website.

There are many other transfer options available for students. Transfer representatives from many colleges and universities visit the HACC Campuses each semester. This and other important information can be found online at www.hacc.edu, Student Services, Transfer Services.

Career Services

Many career-related services and events are offered by Career Services at HACC. Students may meet with a Career Services professional for career advisement, assessment or exploration. Students may also receive assistance in preparing their resumes, cover letters or in locating employment. Many printed career development resources are available, including occupational information, resume and cover letter development and career information related to specific majors. Students may utilize an on-line career guidance and assessment program at no cost. In addition, Career Services offers nationally recognized personality and interest assessments at a minimal cost to assist students in their career decision making.

Students interested in locating an internship, student worker position, part-time or full-time

employment can find posted positions on HACC's free job posting website for students and employers at www.collegecentral.com/hacc. A variety of career events are offered throughout the year to assist students in their job preparation and search efforts. Students are encouraged to visit Career Center's web page to learn more about these events and other career services at www.hacc.edu, Student Services, Career Services.

Student Life

Students who participate in college activities usually are more satisfied with their college experience. They feel more a part of the college, and they enjoy meeting other students and developing their leadership abilities. The information that follows refers to activities at the Harrisburg Campus. Activities are also organized at the Gettysburg, Lancaster, Lebanon and York campuses. Counselors are available to provide details.

HACC offers a variety of activities, and they can consume as much or as little time as a student prefers. Bulletin boards and college newspapers are good sources of information.

The college provides an Associate Dean of Student Life, faculty advisors, and funds collected as activity fees to support student groups. Students will find clubs based on shared interests in recreational activities, intramural sports, academic curricula, particular careers, ethnic identity, religion, and even age. Students may access Student Life information online at www.hacc.edu, Future Students, or Current Students, Student Life. Helping students develop a fuller appreciation of human diversity.

Office of Multicultural Affairs/ International Education

HACC is committed to diversity—promoting a wide range of ideas, and working to foster mutual respect among people of every race, ethnicity, economic class, religious preference, gender, physical ability, sexual orientation, and age. We believe that meaningful interaction with others from different backgrounds is one of the best ways to build understanding and to prepare students for the diverse world into which they will graduate, work, and live.

The Office of Multicultural Affairs/ International Education works in partnership with various offices to help recruit, retain and ensure that our students of color have a positive educational experience at HACC. Besides planning activities to help promote diversity within the college community, the Office of Multicultural Affairs/International Education also strives to address concerns or

Student Affairs

challenges students of color may be facing and directs them to the appropriate support services for help.

Office of Multicultural Affairs/International Education strives to provide a supportive atmosphere for students of diverse cultural backgrounds by sponsoring activities that increases awareness and builds mutual respect and understanding.

Multicultural celebrations at HACC present an opportunity to enjoy the richness that a variety of cultures, ethnicities, and backgrounds bring to the community. These special events include distinguished speakers, panel discussions, cultural dances, ethnic food festivals, arts and crafts and poetry readings. For more information on multicultural affairs and activities, contact the Director, Office of Multicultural Affairs/International Education at (717) 780-3276, visit the office of Student Life at your campus, or online at www.hacc.edu, Student Services, Multicultural Affairs.

Information regarding International Education may be found in the Academic Affairs section of this catalog.

Athletics at HACC

The college sponsors a program of intercollegiate athletics including the Hawks (men's basketball, volleyball, soccer, golf) the Lady Hawks (women's volleyball, basketball.), and the college's co-ed tennis team; and all of its athletic facilities are available for all students to enjoy. Intramural sports include dodge ball, flag football, three-on-three basketball, four-on-four volleyball, and Ultimate Frisbee. Credit courses are available in choir, theatre, band, and physical education. More information can be found online at www.hacc.edu, Student Life.

Student Government and Publications

Among HACC's well established activities are student government and publications. Student Government Association (SGA) senators are chosen through general elections in which all students are eligible to participate as candidates and electors. The Student Senate prepares a budget that allocates funds to student organizations and represents student views on current issues to the faculty and administration. Student representatives serve on the College Disciplinary Committee, which judges cases of alleged violations of the Statement of Individual Rights, a policy governing acceptable conduct of members of the college community. Students also sit on the panel that hears student appeals of grades and other academic decisions. Further information about the Student Government Association at

HACC may be obtained by visiting the Student Life office at your campus.

There are several student publications for those interested in writing, editing and publishing. As a resource for students, the Student Handbook is issued each fall and includes information about college resources, student activities, and school regulations. The Fourth Estate, a student newspaper, is published bi-weekly; and students assume responsibility for gathering news and expressing opinion. Newspapers at the Gettysburg and Lancaster campuses are published through a student-counselor partnership. At the Lebanon Campus, The Phoenix student newspaper, and an annual literary journal are published. The Wildwood Journal is also an annual literary magazine which includes the writing of HACC students as well as the writing of winners of a national competition sponsored by the Alumni Association. The Lancaster Campus also publishes a literary journal entitled, Voices, the Gettysburg Campus literary anthology is entitled, Graffiti and Glass. More information about student publications may be obtained by contacting the Student Life office of your campus.

Honor Societies

Phi Theta Kappa International Honor Society

HACC is home to the Alpha Nu Omega chapter of Phi Theta Kappa, the national honor fraternity serving two-year colleges. Since its founding in 1918, Phi Theta Kappa has sought to recognize and encourage scholarship among associate degree students. To achieve this purpose, the fraternity has developed opportunities for leadership and service as well as provided an intellectual climate for continued academic excellence. HACC's chapter has received national recognition for the excellence and integrity of its programs.

Membership in Phi Theta Kappa is extended by invitation. To be considered, a student must be enrolled in classes, have completed at least twelve hours of course work leading to an associate degree, have a grade point average of at least 3.5, have established a record of academic excellence as judged by the faculty, be of good moral character, and possess recognized qualities of citizenship.

Kappa Beta Delta National Honor Society

Kappa Beta Delta, established by the Association of Collegiate Business Schools and Programs through the Federation of Business Honor Societies, is comprised of associate degree-seeking students of business, management, administration, and other business programs who have accumulated 15 or more college-level credits with a cumulative

grade point average of 3.0 or higher. HACC was the first community college to establish a Kappa Beta Delta Chapter.

Mu Alpha Theta National Mathematics Honor Society

Mu Alpha Theta, a National Mathematics Honor Society, is dedicated to inspiring interest and scholarship in two-year college students for the subject of mathematics. Members are recommended by mathematics faculty, have completed College Algebra, and have at least a 3.0 GPA overall and in mathematics. The HACC Chapter was established in 2000.

HACC Alumni Association

Former students of the college who have graduated from a degree, certificate, or diploma credit program, or have earned 30 credit hours, are members of the HACC Alumni Association. Alumni may use the College Career Services Center and Advising and Transfer Center, and they have access to the college libraries.

The Alumni Campus User Card is available (\$25 annually or \$100 lifetime membership) and provides for use of the physical education facilities at the Harrisburg Campus and book checking privileges, including interlibrary loan access through the college libraries. In addition, a college cardholder can purchase tickets at discounted prices for programs sponsored by the Rose Lehrman Arts Center. More information about the HACC Alumni Association may be found online at www.hacc.edu, Alumni and Friends, Alumni Association.

Information about the Alumni Affairs Office at HACC may be found in the College and Community Development section of this catalog.

Child Play Centers

Many HACC students are also parents, and for their convenience the Grace Milliman Pollock Childcare and Early Childhood Education Center houses the Child Play Center for preschool children on the Harrisburg Campus. The program at the center is a Reggio and Project inspired curriculum with Early Childhood Education activities at the core of the program. Children are eligible for acceptance into the center if they are between 6 weeks and 6 years of age. Elementary school children (up to nine years of age) may be accepted during summer terms and on an emergency basis if space is available. Parents must take application to the center. Registration and hourly fees are billed directly to the parent's HACC account. Applications are accepted on a first-come, first-served basis until enrollment limits are

reached. The center office is in room 118 of the Pollock Center. Applications and specific information can be found at www.hacc.edu or by calling (717) 780-2581.

The Learning Ladder childcare facility at the Lancaster Campus provides care for infants, toddlers, and preschoolers, ranging in age from six weeks to four years old. Specific information is available by calling Learning Ladder at (717) 399-4090.

Cultural Programming

A leading southcentral Pennsylvania center for the fine and performing arts, the Rose Lehrman Arts Center is home to the College's Performing Artist Series, an annual season of live theatre, music, dance, and family events. The center's facilities include the Auditorium Theatre, the Studio Theatre, a Gallery, the Rose Garden, box office, and concession.

Programming showcases international, national, and regional talent. Events are often supplemented by artists' residencies and free workshop/performances conducted for students and the community. **HACC Theatreworks**, an on-campus theatre

ensemble, produces diverse theatre offerings. **Theatre for Young People**, a specialty theatre group, annually produces and tours children's theatre. Auditions for plays are open to all students and the community. The center supports a successful theatre outreach program that brings thousands of young people to the campus to experience and learn about live theatre. A faculty-led student choral group presents annual winter and spring concerts; and faculty and students often combine talents in special recitals and music programs. The **Gallery** in the Rose Lehrman Arts Center features the work of guest artists from across the country as well as student honors shows.

Student tickets are available at a substantial discount for most cultural events. Information and season brochures and flyers may be obtained by phoning the Rose Lehrman Arts Center Box Office at (717) 231-ROSE (7673).

Health

Students who become ill or need emergency treatment may be taken to nearby medical facilities for treatment. The college neither assumes financial responsibility for medical

treatment of students, nor assists with additional medical services. Students who need routine medication or medical assistance must provide for their own care, as the college may not serve such medical needs.

A student insurance plan is available through the college. Coverage information is available in the Student Activities Office, Cooper Student Center Room 106, and from counselors at the Lancaster, Lebanon, and Gettysburg campuses, and the York Campus.

Housing

HACC has no dormitories and does not recommend, approve, or supervise housing for students. Any agreements concerning rent or conditions of occupancy are made between the student and/or parents and the landlord. The college does not participate in any housing arrangements or assume responsibility for any housing contracts.



Academic Affairs

The college awards Associate in Arts (AA), Associate in Science (AS), and Associate in Applied Science (AAS) degrees, Certificates of Proficiency, and Diplomas. Program descriptions specify the courses to be taken and the credential awarded upon successful completion.

Most programs are offered at the Harrisburg Campus, and many are available at the campuses in Gettysburg, Lancaster, Lebanon and York, as well as through HACC's Virtual Campus. Program descriptions give information about availability. Most programs include several courses that may be taken at all campuses and off-campus sites.

Academic Planning

Program Requirements

General Education Core Component

The General Education Core provides the foundation for a common body of essential knowledge and skills, taught and reinforced through courses selected in the knowledge and core abilities. The core knowledge areas are written communication, speech communication, humanities and arts, social and behavioral sciences, mathematics, natural and physical science, diversity and physical education and wellness. Core abilities integrate with content areas to provide students with the skills they need to be successful in a complex and changing world and to provide a foundation for life-long learning. Core abilities are information literacy and computer literacy.

All academic and financial obligations to the college must be satisfied and all course requirements of the program must be met.

Diploma

Diploma programs offer concentrated study of technical job skills. They are usually chosen by students who need to acquire a specific technical skill as quickly as possible and require the equivalent of two or more terms for completion. A diploma is awarded to students who complete an approved Program of Study of at least 16 credits and a Cumulative and Program grade point average of at least a 2.0. A Diploma must include coursework totaling at least 9 credits earned at the college.

Certificate

Certificate programs require two or more terms for completion, and all of the required courses focus on an occupational skill. A certificate program is suitable for a student with a specifically defined occupational goal. A certificate is awarded to students who complete an approved Program of Study of at least 30 credits and a Cumulative and Program grade point average of at least a 2.0. A Certificate

General Education Core • Effective Fall 2008 for all new students*

(D) – Course also meets Diversity Course Requirements**

Humanities and Arts

Core A Electives

Art

- 181 Art Through the Ages I (D)
- 182 Art Through the Ages II (D)
- 188 Art in the Diverse US (D)

English (Literature courses)

- 201 Major English Writers I
- 202 Major English Writers II
- 203 Major American Writers I
- 204 Major American Writers II
- 205 World Literature I (D)
- 206 World Literature II (D)
- 207 Introduction to Literature
- 217 African American Literature (D)

Foreign Language

- 101 Arabic: Elementary Arabic I
- 102 Arabic: Elementary Arabic II
- 101 French: Elementary French I
- 102 French: Elementary French II
- 201 French: Intermediate French I (D)
- 202 French: Intermediate French II (D)
- 101 German: Elementary German I
- 102 German: Elementary German II
- 201 German: Intermediate German I (D)
- 202 German: Intermediate German II (D)
- 101 Spanish: Elementary Spanish I
- 102 Spanish: Elementary Spanish II
- 201 Spanish: Intermediate Spanish I (D)
- 202 Spanish: Intermediate Spanish II (D)

Humanities

- 101 Modern Culture and the Arts
- 115 Architecture: Aesthetics and
- 201 World Mythology

Music

- 102 Introduction to Music
- 104 Introduction to World Music

Philosophy

- 101 Introduction to Philosophy
- 102 Logic
- 200 Comparative Religion (D)
- 225 Ethics: Belief and Action

Theatre

- 101 Introduction to Theatre

Social & Behavioral Science

Core B Electives

Anthropology

- 101 Introduction to Anthropology
- 201 Social Anthropology (D)
- 205 Cultures of the World (D)

Economics

- 201 Principles of Economics I: Macro
- 202 Principles of Economics II: Micro

Geography

- 201 World Geography (D)
- 230 Introduction to Human Geography (D)

Government & Politics

- 201 The National Political System
- 202 The Politics of States and Cities

History

- 101 World History I (D)
- 102 World History II (D)
- 103 US History I
- 104 US History II
- 107 The US Since 1918
- 201 Western Civilization I
- 202 Western Civilization II

Psychology

- 101 General Psychology
- 202 Psychology of Adjustment
- 213 Abnormal Psychology
- 221 Social Psychology

Sociology

- 201 Introduction to Sociology (D)
- 202 Social Problems (D)
- 203 Marriage and Family (D)

Mathematics, Natural & Physical Science

Core C Electives

Astronomy

- 103 Introduction to Planetary Astronomy
- 104 Introduction to Stellar Astronomy

Biology

- 101 General Biology I
- 103 Environmental Science
- 108 Introduction to Biological Science
- 111 Introduction to Human Biology
- 221 Microbiology

Biotechnology

- 101 Overview of Biotechnology

Chemistry

- 100 Principles of Chemistry
- 101 General Inorganic Chemistry I
- 113 Chemistry for the Nonscientist

Environmental Science

- 201 Introduction to Environmental Science

Geology

- 101 Physical Geology
- 102 Historical Geology
- 201 Environmental Geology

Mathematics

- 100 College Math for Business
- 103 College Algebra
- 104 Trigonometry
- 110 Applied Calculus for Business
- 111 Principles of Mathematics
- 119 Pre-Calculus
- 121 Calculus I
- 122 Calculus II
- 202 Introduction to Statistics

Meteorology

- 101 Weather and Climate

(continued next page)

General Education Core (continued) • Effective Fall 2008 for all new students*

(D) – Course also meets Diversity Course Requirements**

Mathematics, Natural & Physical Science Core C Electives (continued)

Physical Science

- 113 Introduction to Physical Science I
- 114 Introduction to Physical Science II

Physics

- 201 General Physics I
- 211 Physics for Engineers and Scientists I

Diversity Courses (D)

Anthropology

- 201 Social Anthropology
- 205 Cultures of the World
- 210 North American Indian Cultures

Architecture

- 121 History of Architecture I
- 293 Understanding England's History Through Its Architecture
- 295 Understanding Italy's History Through Its Art and Architecture
- 297 Understanding Greece's Art History and Mythology Through Its Architecture

Art

- 181 Art Through the Ages I
- 182 Art Through the Ages II
- 188 Art in the Diverse US

Business

- 230 Introduction to International Business

Criminal Justice

- 240 Ethics and Diverse Cultures

English

- 205 World Literature I
- 206 World Literature II
- 217 African American Literature
- 265 Women Writers
- 269 Native American Literature

French

- 201 Intermediate French I
- 202 Intermediate French II

Geography

- 201 World Geography
- 230 Introduction to Human Geography

German

- 201 Intermediate German I
- 202 Intermediate German II

Government and Politics

- 205 International Relations
- 208 Comparative Politics

History

- 101 World History I
- 102 World History II
- 110 America in Vietnam
- 205 Black History

Hotel, Restaurant & Institutional Management

- 151 Culinary Fundamentals II

Humanities

- 113 Cross Culture Studies
- 114 Chinese Arts and Culture
- 116 Introduction to Lesbian and Gay Studies
- 216 China Study Tour
- 228 Humanities in London and Paris
- 229 Italian Art, Architecture and History

Human Services

- 206 Human Development in a Social Environment

Nursing

- 103 Nursing Process in Family Health
- 103A Nursing Process in Family Health I
- 103B Nursing Process in Family Health II
- 205 Nursing Process in Common Health Problems I
- 205A Nursing Process in Common Health Problems IA
- 205B Nursing Process in Common Health Problems IB

Philosophy

- 200 Comparative Religion

Sociology

- 201 Introduction to Sociology
- 202 Social Problems
- 203 Marriage and Family
- 205 Race and Cultural Relations

Spanish

- 201 Intermediate Spanish I
- 202 Intermediate Spanish II

Travel and Tourism

- 125 Destination Geography

Theatre

- 224 Theatre for Social and Culture Awareness

Physical Education and Wellness Courses (W)

Only the Physical Education courses listed below will meet the (W) requirement.

- 119 Tennis/Physical Fitness
- 131 Aquatics I – Beginning
- 132 Aquatics II
- 135 Fitness and Dance Variations
- 137 Dance/Slimnastics
- 138 Basic Fitness I
- 139 Beginning Self-Defense
- 141 Cardio Kickboxing and Resistance Training
- 142 Aerobic Fitness I
- 143 Aerobic Fitness II
- 165 Fitness for Life
- 166 Fitness Walking and Resistance Training
- 169 Water Exercise I
- 178 Yoga I
- 179 Power Yoga
- 180 Introduction to Pilates

must include coursework totaling at least 15 credits earned at the college.

AA, AS, or AAS Degree

The college awards a degree to a student who completes an approved Program of Study of at least 61 credits and a Cumulative and Program grade point average is at least a 2.0. Coursework for a degree must include at least 16 credits earned under HACC faculty instruction and at least six of those credits must be in a student's area of concentration.

Career Degrees

Career Degrees are designed for a student who wishes to enter the workforce upon completion of the associate degree and does not wish to transfer to a 4-year institution. The minimum of 61 credits in an approved Program of Study will include a minimum of 22 credits in General Education Core courses beyond the courses specified for a concentration in the area of study that gave the program its name. Six credits in the area of concentration must be taken at HACC.

Transfer Degrees

Transfer degrees are designed to facilitate transfer to a 4-year institution upon completion of the associate degree. The minimum of 61 credits in an approved Program of Study will include a minimum of 31 credits of General Education Core courses beyond the courses specified for a concentration in the area of study that gave the program its name.

Associate Degree – General Education Core Requirements

Transfer Programs

- 6 credits – Written Communication
- 3 credits – Speech Communication
- 3 credits – Core A
- 6 credits – Core B
- 9 credits – Core C
 - 3 credits – Math
 - 3 credits – Science
 - 3 credits – Math or Science
- 3 credits – General Education Transfer Elective
- 1 credit – Physical Education and Wellness

Career Programs

- 6 credits – Written Communication
- 3 credits – Speech Communication
- 3 credits – Core A
- 3 credits – Core B
- 3 credits – Core C
- 3 credits – Free Elective
- 1 credit – Physical Education and Wellness

Elective Requirements

Electives should be chosen with the help of your Advisor for the purpose of meeting career, transfer, or employment objectives.

There are a few limitations on courses that may be used to meet degree requirements. **No course numbered below the 100 level (e.g. Math 020, 051, English 051 and others) or**

* Also applies to current students who change their major, effective Fall 2008.

** All new students must complete a Diversity (D) course as part of their degree requirements. This requirement must be selected from the list that appears on page 31.

Academic Affairs

courses numbered above 200 level may be used on an AA or AS degree. An AAS degree program may specify certain other courses.

No more than three credit hours of Physical Education and/or Military Science may be used to meet Associate Degree requirements. No more than three credit hours of cooperative work experience may be used unless a program specifies otherwise.

Subsequent Degrees

For each degree after the first, a student must satisfy the requirements of the new Program of Study, including all current general degree requirements, and must complete courses at the college totaling at least 15 additional hours of credit. Consultation with a college advisor is essential.

Special Application Requirements

Additional documents and procedures are required for students seeking admission into certain programs. Certain programs may require the student to submit to Act 33 and/or Act 34 Pennsylvania State Police Criminal Background Checks prior to enrollment, prior to the start of a clinical experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in programs which require these checks. If the student has any questions regarding this, he or she should contact the dean of the appropriate academic division.

Credit Courses at HACC

Students earn credits for successful completion of courses under faculty instruction at the college, including independent study.

Credit by Examination

The college allows and encourages students who have completed advanced classes in high school or who have previous training or experience in an academic area to take examinations in those areas (see College Administrative Procedure 665). HACC allows up to 30 credits to be awarded by examination. Upon successful completion of an examination and proper notification to the Records Office, the student will be awarded credit, which may be used to meet program requirements. Information on accepted exams and required scores is available for review in the Records Office, Cooper Student Center, Room 226 on Harrisburg Campus, phone (717)780-2688.

• **The Advanced Placement (AP) Program**, administered by the College Entrance Examination Board, is designed for high school students who wish to demonstrate readiness for courses more advanced than those most frequently studied in the freshman year. These are national examinations which are designed to measure the

competence of the student. The specific tests accepted and the scores necessary to receive credit have been determined by HACC faculty, and are reviewed and updated periodically as necessary.

• **College Level Examination Program (CLEP)** Students who wish to earn credit for courses because of previous training or experience may complete examinations offered in the College Level Examination Program. The specific tests accepted and the scores necessary to receive credit have been determined by HACC faculty, and are reviewed and updated periodically as necessary. Students seeking to earn credit for English Composition I (ENGL 101) must

take the English Composition Exam with Essay or the Freshman College Composition with Essay.

• Placement Examination Program (PEP)

The Placement Examination Program of the American College Testing Program administers nationally the New York Excelsior Examinations. At the present time, the examinations in educational psychology, physical geology, anatomy and physiology, microbiology, and the basic nurses' examinations are accepted by the college for the awarding of credit.

• **HACC Credit by Examination** – Credit by an examination, similar to a comprehensive final examination, is available for many of

General Education Transfer Electives

(D) – Course also meets Diversity Course Requirements

Anthropology 101, 201 (D), 205 (D), 210 (D), 212, 220
Arabic 101, 102
Art 105, 107, 111, 121, 131, 151, 181 (D), 182 (D), 183, 184, 185, 187, 188 (D)
Astronomy 103, 104
Biology 101, 102, 103, 108, 111, 121, 122, 130, 212, 221
Biotechnology 101
Chemistry 100, 101, 102, 113, 200, 203, 204
Computer Information Systems 105, 110
Computer Science 113, 135, 161
Criminal Justice 101, 108, 211
Economics 201, 202
Education 101, 240
English 104, 106, 107, 108, 201, 202, 203, 204, 205 (D), 206 (D), 207, 246, 247, 265 (D), 267, 269 (D), 278, 279
Environmental Science 201
French 101, 102, 201 (D), 202 (D)
Geography 101, 201 (D), 230 (D)
Geology 101, 102, 201
German 101, 102, 201 (D), 202 (D)
Government and Politics 201, 202, 205 (D), 208 (D)
Health 101
History 101 (D), 102 (D), 103, 104, 107, 110 (D), 111, 120, 161, 201, 202, 205 (D), 210, 218, 219, 220, 221
Humanities 101, 113 (D), 114 (D), 115, 201
Mathematics 103, 104, 110, 111, 113, 114, 119, 121, 122, 125, 202, 210, 220, 221, 222
Media Studies 101
Meteorology 101
Music 102, 104, 119, 120
Philosophy 101, 102, 200 (D), 215, 225

Physical Education (all except 156)
Physical Science 113, 114
Physics 201, 202, 211, 212, 215
Psychology 101, 201, 202, 209, 211, 212, 213, 215, 216, 221, 232
Sociology 201 (D), 202 (D), 203 (D), 205 (D), 211, 226
Spanish 101, 102, 201 (D), 202 (D)
Speech 102, 104, 201
Theatre 101, 110

Humanities, Languages, and the Arts/Communication and the Arts Electives

Art
English
Foreign Languages
Humanities
Media Studies
Music
Philosophy
Speech
Theatre

Social Science Electives

Anthropology
Economics
Geography
Government & Politics
History
Human Services
Psychology
Sociology
Social Science

Other Program Electives

Electives vary by major. See your advisor for a complete list of approved courses.

Transfer Electives

Courses numbered in the 100's and 200's. But check with your transfer institution to see what courses they would recommend.

Free Electives

Courses numbered in the 100's and 200's.

the courses offered by the college. These examinations may be taken by students who have reason to believe that they can pass examinations of this nature because of previous training or experience. Examinations offered under this program are scored on a pass/fail basis. A student who wishes to earn credit by examination should contact the Dean of the Division that offers the course. A fee is required.

HACC Credit for Life Experience, Experiential Learning and Certification

Students may request credit for knowledge, experience or skills gained outside the normal educational structure. In such cases, the student should contact the Dean of the appropriate division. The student will be required to be currently enrolled at the college and to submit credentials or a portfolio for evaluation. Upon assessment of the credentials and/or portfolio, the division Dean may recommend awarding credit.

The college also awards credit for certain certifications from professional bodies, agencies, and institutions. Please contact the Records Office for information. The college may also award credit for training completed in the military, industry or other noncollegiate setting that has been evaluated by the American Council of Education (ACE) or the National Program on Noncollegiate Sponsored Instruction (PONSI). Credit will be granted only when the training is directly relevant to the student's program of study. Credit from the military is awarded on a limited basis. To request an evaluation of noncollegiate training contact the Records office or the Military and Veterans Affairs office. Students must be currently enrolled at the college and may not request credit for a course they have previously received a grade for (including Y, W or F).

Credit by Transfer

Students admitted to HACC and seeking to earn a degree, certificate or diploma and who are currently taking or have completed one or more courses may request to have transcripts from other schools officially evaluated for transfer of credits (see Administrative Procedure 652).

Transcripts from foreign educational institutions must be sent by the student to a recognized national credential evaluation service for possible transfer of credit to HACC. Forms are available in the Admissions or Records Office for World Education Services, Inc., the service normally used by HACC.

Developmental courses do not transfer.

When taking course work at another college with the intent to transfer this course work to HACC, a HACC student is advised to submit a prior authorization for transfer of credit. This

confirms for the student how the course will transfer to HACC. This form is available in the Records Office. Generally, credit is awarded only for coursework in which the student received credit with a letter grade of A, B, or C, except for Physical Education credit, which will transfer if a grade of P or S was received, where P or S grades are considered the equivalent of a C or above.

Students wishing to apply for transfer credit must submit an official transcript from the originating institution. In some instances it may be necessary to provide course descriptions or syllabi. The official transcript and any supporting documentation should be sent directly to the HACC Records Office. An official transcript is one that is officially authorized by the Records official at the institution and sent directly to the HACC Admissions or Records Office.

Questions regarding transfer of credit requirements should be directed to the Records Office, phone (717) 780-2688 or email at record@hacc.edu.

Articulation of Courses with Area High Schools/Career and Technical Education Centers

Many secondary school students may have earned college credit through "articulated" coursework taken at an area high school or vocational-technical school.

When it is determined that work comparable to that in a college course is taught at the secondary level, HACC enters into an articulation partnership with the secondary school. These articulation agreements enable a student to earn college credit while at the secondary level if students meet a designated performance standard.

Students must enter a program at HACC within two academic years of completing high school in order to be awarded articulated credit.

Articulation agreements are in effect at many area secondary schools. Since additional agreements are being negotiated, a student should check with a guidance counselor at his or her secondary school.

Dual Enrollment for High School Students

Through the College in the High School Program, high school students are able to enroll in approved HACC courses offered at their high school. College in the High School courses are HACC courses taught by qualified high school teachers and match the curriculum and assessment standards that are followed for on-campus courses. Students taking CHS courses may qualify for both high school credit and college credit.

Students must apply for the program and meet any prerequisite requirements for enrollment. Courses and their requirements may

vary from school to school, so students should consult with their high school counselors.

Developmental Education Courses and Services

New students often require preparatory courses for college level work. This need is most commonly identified by the college's Testing and Placement Program, which measures reading, writing and mathematical knowledge. HACC's Developmental Education Services include diagnostic assessment and placement services as well as advising, academic monitoring, tutoring and other support services.

Adult Basic Education and Developmental Studies

The Adult Basic Education and Developmental Studies Division provides services to developmental students such as academic monitoring, developmental courses (zero-level) in reading, writing and mathematics, more intensive academic counseling/advising and other support services. ABEDS counselors and advisors work with students enrolled in ENGL 001 and ENGL 002 to promote understanding of the implications for academic success of choices about course loads and balancing school, work and family responsibilities. In addition, counselors will refer students to other college offices such as the Office for Student Success, Office for Disabilities Services, tutoring and Career Services as needed. They will also refer students to outside agencies to receive needed services that the college does not provide.

GED® Testing

HACC's Adult Basic Education and Developmental Studies Division at the Harrisburg Campus administers the General Educational Development (GED®) test on a regular basis. Those who achieve a satisfactory score on the test will receive a Commonwealth Secondary School Diploma. This diploma, issued by the Department of Education and regarded as the equivalent of an earned high school diploma, certifies that the recipient meets the high school graduation requirements set by the State Board of Education. The Commonwealth Secondary School Diploma is also issued to applicants who successfully complete 30 semester hours of college level work.

To be eligible to take the GED test, a Pennsylvania resident must be 18 years of age or older and must not be enrolled in an approved or licensed secondary school.

Persons 16 to 18 years of age may take the GED test at the written request of an employer who requires a high school equivalency

diploma; a college, technical/trade school or university official who requires GED test scores for admission to their institutions; a recruiting officer of the armed forces who requires a high school equivalency diploma for enlistment; or a director of a state institution for residents, patients or inmates who is requiring testing for persons prior to their release or discharge from the institution. It should be noted that the Commonwealth Secondary School Diploma is issued only to persons 18 years of age or older. GED tests are scheduled on-campus regularly. An admission ticket and photo ID are required. The test consists of five parts and costs \$12.00 per part. Call (717) 780-2619 for GED test information and registration.

Academic Monitoring

HACC's academic monitoring system is an early-alert method. This method is used to identify students who are enrolled in developmental courses, who are, or may be in danger of academic failure and to suggest avenues of assistance available—from tutorial services to academic advising and personal counseling.

The division counselor, with the help of the instructors of developmental courses throughout the college, identifies students with marginal or unsatisfactory performance at the end of the fourth week of classes. The counselor sends letters to students expressing concern about their academic performance and requesting that students personally contact the counselor to set up an appointment. During this appointment, needs are assessed and personal attention is given to all areas of adjustment.

Human Development

Courses are designed to help students realize personal and career goals based on their values, needs, skills, and interests. The classes are limited in size so that greater attention may be directed to individual students, and classes are designed so that a great deal of interaction among class members is encouraged. Credit from these courses will count as elective credits toward the Associate degree.

English as a Second Language

The college offers concentrated instruction in English for adult speakers of other languages. The primary objective is to help students gain the language skills they need to achieve their vocational, personal, and academic goals. After placement testing, a student enters one of four sequential courses based upon his or her ability in English. Students whose English has not reached the advanced beginning level are referred to a noncredit community-based program.

The English as a Second Language Program

presents the sound system, structure, and vocabulary of American English in culturally relevant contexts focusing on listening, speaking, reading and writing skills.

ENGL 026 is the advanced beginning level in which students will primarily practice listening and speaking skills.

ENGL 027 follows ENGL 026 as a low intermediate level in which students will encounter increasing amounts of listening and speaking reinforcement through related reading and writing activities.

ENGL 028 follows ENGL 027 as a high intermediate level in which students will study more complex grammatical structures in speaking, reading, and writing.

ENGL 029 follows ENGL 028 as an advanced level in which students will study more difficult sentence constructions and will practice more writing.

The courses are designed to include group and individual practice in learning situations that progress from very controlled activities to much less structured ones. At all levels the emphasis is on the student's achieving accuracy as well as fluency.

The semi-intensive program gives students 15 academic hours a week of English language instruction and works on eight-week cycles, enabling students to complete two levels per semester. This semi-intensive program is offered during the day each Fall and Spring. A less intensive 16-week program is offered during the evenings each semester.

ESL students will be screened prior to class assignment and registration to determine second language needs and appropriate placement. College regulations mandate ESL coursework prior to any college work in writing or speech. In addition, reading courses may be scheduled only after an ESL student completes ENGL 027 with a grade of C or higher.

ESL services vary from campus to campus; further information is available from counselors and from the Communications, Arts, and Social Sciences Division.

For other Academic Support Services, please refer to the Student Affairs section of this catalog.

The Honors Program

The Honors Program is a series of classes designed for bright, self-motivated students who actively wish to expand their intellectual horizons, challenge their abilities, and develop their originality in an environment that nurtures the whole student academically, socially, emotionally and intellectually.

Harrisburg Area Community College's Honors Program offers an integrated, coherent alternative to a major portion of the College's general education curriculum.

In Honors courses, the intellectual atmosphere is intense, supportive and cordial, emphasizing each student's power of reasoning, creative inquiry, and communication.

Honors courses are small, and enrollment is limited, usually to no more than 15 students. They are often conducted as seminars and tutorials where students do independent research. Additionally they are intense, with depth and rigor of instruction stressed. Honors courses are also student centered, making individuals responsible for the pace and direction of their studies. Finally they are discussion based, interdisciplinary, linking developments in arts, humanities, sciences and technologies to focus on contemporary social and intellectual questions, and diverse, exploring multiple points of view.

The full Honors Program is only available on the Harrisburg campus, but limited Honors classes are offered on all campuses.

Application Process

Students should submit the single page application, available online, from any HACC Admissions office, from advisors, in the brochure, on bulletin boards, or from the Director, along with any required support materials to the Admissions Office at their primary campus.

All pertinent transcripts and test scores will be independently verified by the Admissions Office. A letter of acceptance will be sent to all qualifying Honors students from the Executive Director of Enrollment Services. Students may apply to the Honors Program at any time, as there is a policy of rolling admissions. Qualified new students may sign up for a single course if they complete the formal application process within the opening weeks of the term.

Interested and motivated students who nearly qualify under the above criteria may, with the instructor's permission, take one individual Honors class. If the student is successful, receives an A or B in the class, and is enthusiastic about continuing, that student may apply for full admission to the Honors Program.

Program Requirements and Courses

Honors courses are identified in the Schedule of Classes. Honors classes are offered on a convenient schedule each fall and spring semester at the Harrisburg, Lancaster and Gettysburg campuses.

The total number of college credits to earn an Associate degree—61 credits—is the same as for non-Honors students. The critical difference is in the depth and content of the **four** required Honors courses. Honors Core courses are offered every fall and spring semester. All Honors students must complete

the **Honors Seminar**, a broad interdisciplinary course with rotating topics, offered every spring semester which includes a substantial original project.

Honors courses include:

- Honors English Composition (English 101, English 102)
- Honors Speech
- Honors Core A (Humanities, Philosophy, Literature)
- Honors Core B (Economics, History, Psychology, Sociology)
- Honors Core C (Biology, Geology, Mathematics)
- Honors electives and general education requirements (Business, CIS)
- Honors Seminar (an interdisciplinary course with a major project, taken only after at least one other Honors course has been completed)

Honors Program Requirements

(Total Credits in Honors = 12)

General Education Requirement

English 101 Honors English Composition I
 English 102 Honors English Composition II
 Speech 101 Honors Effective Speaking

Core A Electives

Humanities 101 Honors Modern Culture and the Arts
 Humanities 201 Honors World Mythology
 Philosophy 200 Honors Comparative Religion
 Philosophy 215 Honors Philosophy of Science
 Philosophy 225 Honors Ethics: Belief and Action

Core B Electives

Economics 201 Honors Principles of Economics I: Macro
 History 101 Honors World History I
 Psychology 101 Honors Introduction to Psychology
 Psychology 213 Honors Abnormal Psychology
 Sociology 201 Honors Introduction to Sociology

Core C Electives

Biology 103 Honors Environmental Biology
 Geology 101 Honors Physical Geology
 Math 111 Honors Principles of Mathematics

General Education Electives

Business 209 Honors Legal Environment of Business
 Computer Information Science 105 Honors Introduction to Microcomputer Software

Honors Program Director:

Yvonne Milspaw, Ph.D.,
 Professor, English and Humanities
yjmilspa@hacc.edu

Honors Program Counselor: Harrisburg

Emily Boardman, M.S.,
 Instructor, Counseling
ejboardm@hacc.edu

Honors Program Coordinator: Lancaster

Lori Corradino, M.A.,
 Learning Center Coordinator
lgcorrad@hacc.edu

Faculty Contacts:

Seth Martin, M.A.,
 Instructor of English
sdmartin@hacc.edu
 Kimberly Hall, M.A.,
 Instructor of English
kshall@hacc.edu

Honors Program Coordinator: Gettysburg

Cristal Renzo, M.A.,
 Instructor of English
clrenzo@hacc.edu

Requirement: Honors Seminar

Varying topics, offered every spring semester. To be taken only after other Honors courses have been completed.

Recommended sequence for full-time students. Part-time students can complete the program by taking one or more courses each semester.

1st Fall Semester	1st Spring Semester
English 101	English 102
Core Elective	Honors Seminar
2nd Fall Semester	2nd Spring Semester
Core Elective	Core Elective
Speech	General Elective

Military Science

In cooperation with the U.S. Army Reserve Officers Training Corps (ROTC) at Dickinson College, the HACC Communications, Arts, and Social Sciences Division offers courses in military science open to men and women. Further information is available by phoning (717) 245-1221.

The ROTC program prepares a young man or woman for a commission in the U.S. Army, the Army Reserve, or the National Guard. The program, which consists of instruction and practical exercises in the history and dynamics of military training, is geared to provide enrolled cadets with an understanding of interpersonal relations, group interactions, and techniques of resource management considered necessary in leadership preparation. While the course emphasis is weighted with theory and techniques useful for the military manager or leader, the analytical training

received is readily transferable to areas of public service and private enterprise.

Military Service Obligation: Enrollment in the basic military science courses (MSCI 101, 102, 201, 202) does not impose any service obligation. Entry into advanced courses occurs in the junior year at a transfer institution and involves a service obligation upon successful completion of the advanced course and subsequent graduation. Active duty may be for as little as three months or up to four years. The extent of service obligation should be investigated by the student with a member of the Military Science Department at the transfer institution.

Advanced Placement: Students with previous ROTC/JROTC/Military training are encouraged to contact the ROTC representative to seek advanced placement in the ROTC program based on experience.

International Education • Study Abroad

International Experiences

At HACC, we welcome over 200 international students from more than 50 countries around the world. This rich, diverse community helps us create a global perspective for our students. International Student Services within the Office of Multicultural Affairs/International Education exists to address the needs of international students at HACC, whether it is culture shock, academic issues, finding a campus job, housing, or issues dealing with their visas.

Study Abroad Tours

Study Abroad Tours are an excellent way for students and community members to experience other cultures first hand. By sponsoring structured, faculty-led tours, our students have the opportunity to visit countries such as China, England, France, Spain, Italy, Greece and Egypt. These tours are an unparalleled learning experience for our students to immerse themselves in another culture's language, history, architecture, music and art. Study Abroad Tours afford students an excellent opportunity to learn more about themselves and the people and cultures that make up our country and the world.

For more information, contact the Office of Multicultural Affairs/International Education at (717) 780-1101 to speak with the International Student Coordinator, or (717) 780-3276 to speak with the Director. Students may also contact the Multicultural Affairs coordinator of the HACC campus where they attend classes, or online at www.hacc.edu, Student Services, Multicultural Affairs.

Library and Information Resources

The McCormick Library at Harrisburg,

Academic Affairs

the Lancaster Campus D&E Library, the Pushnik Family Library on the Lebanon Campus, the Gettysburg Campus Library, and the York Campus Library provide resources and services that enhance the student's course of study.

Students are encouraged to take advantage of on-site expertise by qualified library faculty and staff who will assist them in completing classroom assignments requiring library research and/or finding information on any topic. With a valid student ID, HACC students may access the Library's online services and resources from remote locations at any time via the web-based catalog and have the full benefits of the entire library system.

Services available online include access to the student's personal library account, and interlibrary loan. The libraries also participate in the online reference service, AskHere PA, enabling students to get assistance 24 hours a day, 7 days a week. Online resources include full-text periodical and newspaper articles, research guide on various subjects, art images, and more. In addition, selected reference materials available online include encyclopedias and dictionaries, business information, resources on current events and controversial topics, literature and criticism, and more.

Each of the campus libraries also maintains a collection of books covering subjects taught in the courses at HACC. An interlibrary loan delivery system allows HACC students to request books from any campus library or from other libraries in the country. Books are delivered to the student's home campus for pick-up at the library circulation desk. Selected popular titles, such as best sellers, are provided in the Leisure Reading Collections at each campus.

Check the web site (<http://lib2.hacc.edu>) for current hours of operation for each campus library. HACC tuition entitles the student to the use of library resources and services, so stop by our campus libraries and check them out.

Academic Policies

Board of Trustees policies and administrative procedures may be examined by any member of the college community. A file of Administrative Procedures is available in any college office. The statements of policy in this section are summaries, not the full policies, procedures, and guidelines that the college will follow.

Students have a right to formally appeal decisions affecting their academic status, including final (but not other) grades, if they believe they can show that a decision was unfair. The first step for appeal is discussion

with the person who made the decision. If resolution is not achieved, a formal appeal may be started following the procedures outlined in Administrative Procedure 663. These steps must be taken within thirty days of the decision.

Academic Achievement Policies

Grading System

Midterm and final grades are available to students on-line through HACC's secure site called HACCWeb. Students access HACCWeb from the home page of HACC's web site, www.hacc.edu. Midterm grades are issued in the fall and spring terms for courses meeting 13 or more weeks. Midterm grades are not issued during the summer terms. Final grades are available online at the conclusion of each term.

The following grading system is used:

Letter Grade	Grade Definition	Points Per Credit
A	Superior	4.00
B	Good	3.00
C	Average	2.00
D	Passing	1.00
YD	Work in Progress, Converted to a D	1.00
F	Failure	0.00
IF	Incomplete Work, Not Completed	0.00
YF	Work in Progress, Not Repeated	0.00
W	Withdrawal	0.00
I	Incomplete	0.00
Y	Work in Progress	0.00
S	Audit (no credit)	0.00
CR/DR/FR	Academic Renewal	0.00

Following are more detailed explanations of W, I, and Y grades.

The W (withdrawal) grade should not be construed as prejudicial to a student's record, although excessive use of the W may jeopardize academic standing and financial aid or veterans' benefits. (Refer to the definition of Satisfactory Academic Progress.)

Following are guidelines: During the tuition refund period, no grade is to be recorded if a student withdraws. A W grade will be granted by the instructor upon request of the student from the end of the refund period until the midpoint of the course as defined in the college calendar. The student must be attending class in a manner consistent with the instructor's attendance policy, have completed the required graded material, and have not been dishonest in completing the work in order to be eligible for the W grade. From the midpoint of the course through the conclusion

of the course, which is the last class period, the student will receive a grade of W or F, depending upon the instructor's assessment of the student's performance, which may take into account extenuating circumstances. Students must be aware of their instructors' policies concerning withdrawal. Some instructors will require withdrawal (with a W or F) after excessive absence; other instructors will allow withdrawal only upon request of the student.

The I (incomplete) grade shows that coursework is incomplete and must be completed within eight weeks of the ensuing fall or spring term. On the recommendation of the instructor and subject to the Division administrator's approval, the eight-week period may be extended. An incomplete grade is computed as an F in the student's cumulative grade point average when not completed within the allotted period.

The Y (work in progress) grade is restricted to 0-level courses, unless otherwise approved by an academic division and the VP of Academic Affairs and Enrollment Services. The Y is assigned only after consultation with the student, who agrees to the following conditions:

- The Y grade may be granted when, in the judgment of the instructor, the student has shown sufficient progress but needs more time to complete the course objectives.
- The student will be given the option of accepting the D or F grade.
- At the time the grade is agreed upon, the student must complete the Y grade form provided by the instructor.
- The student must re-enroll in the course no later than the next regular term in which the course is offered.
- The student may not receive a Y grade twice in the same course.
- If a student is already registered for the next term, the student must sign a Drop/Add Form to re-enroll in the course for which a Y grade is given.
- If the student has not completed the course by the end of the next regular term in which the course is offered, the Y grade will be counted as an F grade in computing the student's cumulative grade point average.

Course Repeat Limitations

Students may repeat a course for which they have received a D, F, I, Y, or W grade. Students usually may not repeat a course for which they have received a grade of C or higher unless the student or course meets the criteria contained in College Administrative Procedure 668. In all repeats, the last grade received for the course will be the grade employed to calculate the grade point average (except I, Y, and W grades); however, all grades will be recorded

on the student's transcript. If a course is no longer offered, a student may request permission to substitute another course.

Unless more strictly limited in a special or selective admissions program, the number of repeats will be limited to two.

(Complete information is found in Administrative Procedures 667 and 668.)

Satisfactory Academic Progress

The college has established standards for overall academic achievement, for progress toward a degree, and for advancement from one course to the next in a sequence. Students should be aware of the several meanings of "Satisfactory Academic Progress." Failure to progress according to standards will result in probation or suspension. Students placed on probation or suspension will be notified of their status and the conditions for continuation. Beyond the information given here, there is a special definition of satisfactory progress for students receiving financial aid; this definition is explained in the Financial Aid section of this catalog and in Administrative Procedure #513.

- A 2.0 Grade Point Average must be maintained.
- Students who have attempted more than 30 credit hours of coursework may not have received a W (withdrawal) grade for more than half of the credit hours they have attempted.
- While credit is given for grades of D or higher in all courses, some courses must be completed with a grade of C or higher in order to advance to the next course in a sequence. These courses include several in accounting, computer science, computer applications, English, mathematics, nursing and others. The course descriptions in this catalog identify the courses with this requirement.
- Certain programs with special accreditation have standards for progress that are more stringent than the general college standards. These include the programs in: Environmental Studies (Environmental Associate, Environmental Specialist), Nursing, and other programs within Health Careers (for specific programs and their standards, refer online to www.hacc.edu, Quick Links, Health Careers).

For these programs, all courses labeled Allied Health, Biology, Chemistry, Dental Hygiene, Emergency Medical Services, Mathematics, Medical Laboratory Technology, Nursing, or Respiratory Care must be passed with at least a C. Work in the clinical laboratory portions of courses must be graded "satisfactory." (The Nuclear Medicine Technology program requires a 2.3 average in science and mathematics courses.)

Preparatory courses that may be required also must be passed with at least a C.

"Nursing" courses may be repeated once if the nursing faculty grants permission. Dental Hygiene courses may be repeated once on a space available basis if the dental hygiene faculty grants permission. Students whose midterm grades fall below the minimum required must schedule a conference with an advisor.

For the most current academic criteria on Health Careers programs, refer online to www.hacc.edu, Quick Links, Health Careers.

Honors/Dean's List

Each term the college publishes a Dean's List naming students who have achieved the academic distinction of at least a 3.25 grade point average. Full-time students on the Dean's List have completed 12 or more college level credit hours in a term. Part-time students are eligible for the Dean's List issued in August if they have not been full-time in either the fall or spring terms and have completed a minimum of 12 college level credits during the year (beginning fall and ending second summer term). The Dean's List is distributed for publication to area news media. Students on the Dean's List will receive a Certificate of Commendation.

Students with a cumulative Grade Point Average (GPA) of 3.25 or better will graduate with academic honors. The honor is recorded on the student's transcript, using the following definitions:

Highest Honors	3.75 or higher GPA
High Honors	3.50-3.74 GPA
Honors	3.25-3.49 GPA

Probation

Students who fail to earn a 2.00 cumulative Grade Point Average at completion of an academic semester or summer session are placed on academic probation. While on academic probation, a student may schedule no more than 12 credits per semester unless otherwise recommended by the administrator of a division or a faculty advisor. Students are removed from academic probation only when the cumulative Grade Point Average reaches 2.00 or above. Students on academic probation are required to enter an alternate PIN when registering online. The alternate PIN is available from the student's advisor/counselor. It is the student's responsibility to consult with their advisor/counselor to devise a plan for removing academic deficiencies.

Academic Suspension

Academic suspension may occur when students fail to maintain a Grade Point Average (GPA) consistent with the following table. Students failing to maintain appropriate Grade

Point Averages at the completion of a full term or summer term, and students who receive the grade of W in 50% percent or more credits after 30 credit hours attempted will be suspended for a period of no less than one fall or spring term, after which an application for reinstatement may be submitted. Students who believe that extenuating circumstances affected their academic performance and wish to appeal the minimum fall or spring term suspension period must provide documentation to support their application for reinstatement. Full-time students will not be suspended at the end of the first term of attendance, and part-time students will not be suspended before the completion of 12 credit hours. A student may be placed on academic suspension without first having been on academic probation.

Minimum Required Cumulative GPA	Cumulative GPA Credit Hours
1.00	12
1.20	13-24
1.40	25-36
1.60	37-48
1.80	49-60
2.00	61 and above

Students placed on academic suspension are notified by letter and the standing is listed as a part of the students' final grades. Reinstatement Applications are available from the Office of the Dean of Retention Services, Harrisburg Campus, Cooper 217A, (717) 780-2533. Applications must be submitted at least two weeks before the term begins. The Reinstatement Committee reviews applications and makes decisions to approve or deny reinstatement and assigns stipulations, including, but not limited to, credit restrictions and course recommendations. Students who are denied readmission may appeal in writing to the Vice President of Academic Affairs & Enrollment Management within five days of receipt of their notification letter. The decision of the Vice President of Academic Affairs and Enrollment Management is final.

Change of Curriculum

Students wishing to change a program of study must complete and sign a Change of Program/Advisor Form. The change is not official unless the student secures the signature of the advisor in the new program. The completed form must be deposited in the Records or Registration Office at the campus where the student attends class. Program changes made after the audit date for each term will become effective for the first day of the subsequent term.

Academic Renewal

The Academic Renewal process allows students to continue their academic careers without being penalized for past academic performance. The sole purpose is to allow a student to improve his/her grade point average. While courses and grades are never deleted from a student's record, an Academic Renewal allows certain courses to be excluded from the GPA calculation.

An Academic Renewal may be requested when a student has not attended HACC for at least five consecutive years (Complete Academic Renewal) or when a student changes majors (Curriculum-Based Academic Renewal).

- Complete Academic Renewal – Students who have not completed any credit classes at HACC for at least five consecutive years, and who upon their return complete 12 credits at HACC (100 or higher level courses) with a grade of “C” or higher in each course, may request to begin anew the accumulation of their grade point average. When a Complete Academic Renewal is granted all courses with grades of “C” or higher taken prior to the student's return to HACC will remain in the calculation of the GPA. All courses with grades of “D” or “F” taken prior to the student's return will be removed from calculation in the GPA and may not be used to fulfill graduation requirements.
- Curriculum-Based Academic Renewal – All technical courses taken in the original curriculum are deleted from computation in the GPA. Excluded from the renewal process are courses that satisfy English writing requirements of the new major; courses that meet current core requirements; and courses numbered below 100.

An Academic Renewal may be granted only once. Once an Academic Renewal has been processed, the courses excluded may not be re-entered into the GPA calculation and may not be used to fulfill requirements for any HACC program.

Students attempting to complete a second or subsequent degree may not have courses needed to fulfill graduation requirements in a previously completed curriculum deleted from inclusion in the GPA.

Students who wish to find out more about the Academic Renewal process should contact the Records Office at (717) 780-2688, or via e-mail, Records@hacc.edu.

Withdrawal from College

Students who will no longer be attending classes or who have not attended any classes in which they are currently registered, regardless of whether tuition is paid, must formally withdraw from the College. Students may withdraw online via HACC Web (during the

full refund period only) or by submitting a request to be withdrawn letter or a Withdrawal (DAW) Form to the Registration Office. The effective date is the date written notification of intent to withdraw is received by the college. A withdrawal notice received after the refund period must include the instructor's signature and a grade as determined by the instructor.

A student who registers for class, pays tuition and fees, then never attends and fails to withdraw officially, forfeits one-half tuition and receives no grades. All fees are nonrefundable.

If you are receiving federal financial aid, e.g., Stafford Loan or Pell Grant, and drop/withdrawal, your financial aid may be adjusted. You are liable for the debt incurred and your eligibility for future financial aid could be affected. Please contact the Financial Aid Office at the campus where you attend for more details.

Students who are covered by their parent's health insurance typically need to be enrolled full-time (12 or more credits) to maintain coverage. Instruction or detail about dropping, adding, or withdrawing from courses may be found online at www.hacc.edu. Go to Student Services, Registrar, Drop/Add/Withdrawal. Refund dates for specific courses are listed on the student's computerized schedule or online at www.hacc.edu, Student Services, Registration, Refunds.

Refund dates are listed on the student's computerized schedule or online at www.hacc.edu, Student Services, Registrar, Refund Info.

Transcript Requests

Students may request a transcript of their permanent academic records by appearing in person at the Records\Registration Office of any of the HACC campuses or centers, or by writing directly to the Records Office, 217 Cooper Student Center, Harrisburg Area Community College, One HACC Drive, Harrisburg, PA 17110. Transcript requests may also be made online at www.hacc.edu, or through HACCWeb. All official transcript requests require a fee of \$3. Official transcripts will be mailed directly from the Records Office to the designated recipient. It is recommended that only unofficial copies of transcripts be hand delivered. Twenty-four hours are needed to process a request for a transcript. Unofficial transcripts may be printed directly through HACCWeb.

College Policies

College Disciplinary Policy (AP 592)

Statement of Individual Rights of All Members of the College Community, Visitors, and Guests.

The rights of all members of the college community, students, faculty, administrators, visitors, and guests, shall remain inviolable:

1. To do the following without physical interference:
 - a. To learn, teach, study, and search for truth.
 - b. To exercise freely opinions individually or in groups and to exercise constitutional rights to free assembly.
 - c. To move freely about the campus and in campus buildings.
2. To be treated at all times with the courtesy and respect due all human beings, regardless of ethnic origin, cultural background, sex, creed, or ideology.

Interference with these individual rights shall be considered a serious offense against the fundamental principles upon which the college was founded and upon which it must operate to continue to perform its most important function, creating an atmosphere conducive to the search for truth and decent regard for the rights of all human beings.

Statement of Practices Constituting Unacceptable Conduct

The college's conduct code is designed to protect the rights and privileges of all individuals, recognizing that it is necessary to establish some restrictions on conduct in order to protect the rights of both individuals and the group.

The following list constitutes practices and conduct which are unacceptable for any member of the college community, students, faculty, administrators, visitors, and guests:

1. Physical obstruction of or interference with:
 - a. College activities.
 - b. Any person participating in such activities.
 - c. Any person going to or from such activities.
2. Hateful graffiti and other offensive expressions of prejudice and ignorance will not be tolerated. Persons found to be in violation of college policy will be disciplined to the fullest.
3. Physical abuse of or detention of any person on college-owned or controlled property, or at any college-sponsored or supervised function, including the detention of any person by the actual threat of serious bodily harm or the destruction of property, or conduct that unreasonably endangers the health or safety of any person.
4. Theft of or damage to college-owned property or that of any person lawfully on the campus.
5. Entry to or upon, or use of college grounds, buildings, or facilities, when such entry or use constitutes a violation of college rules and regulations.
6. Use, possession, or distribution of narcotics or dangerous drugs or alcoholic beverages on

college-owned or controlled property, or at any off-campus college-sponsored or supervised activities except as authorized by law.

7. Use or possession of firearms, explosives, dangerous chemicals, or other items commonly used primarily for the purpose of inflicting harm on human beings or causing damage to property, on college-owned or controlled property, except to the extent that permission to possess the same is granted by the person or persons duly authorized for this purpose.
8. Refusal to comply with the reasonable directions of authorized college officials or law enforcement officers, acting in the performance of their duties, when because of the existence of an emergency, failure to comply with such directions results in an unreasonable risk of serious bodily injury to any person or of damage to property or willful violation of any duly published rule or regulation of the college after notice that continued violation thereof will result in disciplinary action.
9. Willful and persistent conduct, by noise or other action, which unreasonably interferes with any lawful activity on college-owned or controlled property. In the enforcement of this regulation, care shall be exercised to avoid inhibiting the right of free speech guaranteed in the Statement of Individual Rights.

A complete copy of the college's student disciplinary regulation and procedures may be obtained from the Dean of Student Affairs, in the Cooper Student Center on the Harrisburg Campus, or from a counselor at the Gettysburg, Lancaster, Lebanon and York campuses. The regulation is also printed in the Student Handbook.

Dismissal

The college reserves the right to dismiss a student whose conduct proves unsatisfactory. Students found to have violated behavior regulations established by the college may be dismissed. The yearly Student Handbook contains detailed information about college regulations governing student behavior and about the College Disciplinary Policy. The college may require that any student submit evidence of satisfactory physical or mental health, certified by a licensed medical practitioner.

To qualify for honorable dismissal, students must settle all outstanding obligations to the college and account for all college property that may have been issued to them. Students satisfying these requirements are then eligible to receive a copy of their college transcripts. Students who do not qualify for honorable dismissal will not be recommended by HACC to another institution.

Family Educational Rights and Privacy Act (FERPA)

What is FERPA?

The Family Educational Rights and Privacy Act of 1974 helps protect the privacy of student education records. The Act provides for the right to inspect and review education records, the right to seek to amend those records and to limit disclosure of information from the records. The intent of the legislation is to protect the rights of students and to ensure the privacy and accuracy of education records. The Act applies to all institutions that are recipients of federal aid administered by the Secretary of Education.

What rights does FERPA afford students with respect to their education records?

STUDENTS HAVE THE RIGHT TO INSPECT AND REVIEW THEIR EDUCATIONAL RECORDS.

A student seeking to review their records should contact the Records/Admissions Office at any campus and ask for a Records Review Request form.

HACC must comply with the request to review the records within 45 days of receiving the request.

Students may request copies of their records which will be reproduced at a cost of \$0.10 per page, the cost to be borne by the student. However, the college may refuse to duplicate records in situations where the student has outstanding financial or other obligations to the college.

STUDENTS HAVE THE RIGHT TO SEEK TO AMEND THEIR EDUCATIONAL RECORDS.

Students may ask HACC personnel to amend a record if they believe it is inaccurate or misleading. They should write to the Director of Records, clearly identifying the part of the record they want changed, and specifying why it is inaccurate or misleading.

If the decision is not to amend the record as requested by the student, HACC staff will notify the student of the decision and advise the student of the right to a hearing regarding the request for amendment. If the student requests a hearing, the Director of Records or designee shall gather the records which are being challenged and appoint a committee of one faculty member, one administrator, and a member of the Student Services staff to hold a hearing with the student to review and discuss the information in question. The following conditions must be met:

The hearing must take place within 45 days of the written request of the student at a time which is convenient for both the student and the other parties involved.

Minutes shall be recorded from the hearing.

"Due process" shall be the guideline used for the conduct of the meeting.

If the records cannot be mutually agreed upon, the student has the right to submit information for the file to explain more adequately the information in question.

STUDENTS HAVE THE RIGHT TO LIMIT DISCLOSURE OF INFORMATION FROM THEIR EDUCATIONAL RECORDS.

With certain exceptions (described below), HACC may not release personally identifiable information unless the student has given prior consent in writing. A student may contact the Records/Admissions Office at any campus for Consent to Release Information forms.

There are exceptions to non-disclosure. FERPA allows the release of "directory information" without the student's consent. Directory information is defined as that information which would not generally be considered harmful or an invasion of privacy if disclosed. Although HACC does not promote the widespread release of directory information, it is not a violation of FERPA to disclose this information. Designated directory information at HACC includes:

- Student name, address, telephone listing
- E-mail address
- Date of birth
- Major field of study at HACC
- Participation in officially recognized activities and sports
- Dates of attendance at HACC
- Degrees and awards received
- Photograph
- Educational institution most recently attended
- Full or part-time enrollment status
- Academic level (i.e. Freshman or Sophomore)

Students have the right to refuse to permit the release of directory information, by making a request in writing. Contact the Records/Admissions Office at any campus for information.

Students should be aware that requesting non-disclosure may have negative consequences. (For instance HACC personnel will not be able to confirm the student's degree to a prospective employer; their names will not be listed in the graduation program.) A request for non-disclosure will remain in effect unless revoked with a written request from the student.

HACC personnel may provide non-directory information to school officials with legitimate educational interest. A school official is defined as:

- a person employed by HACC in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel);
- a person or company with whom HACC has contacted as its agent to provide a service

instead of using HACC employees or officials (such as attorney, National Student Clearinghouse, auditor, or collection agent);

- a person serving on the Board of Trustees;
- a student serving on an official committee, such as disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for HACC.

HACC personnel may disclose education records without consent to officials at another school in which a student seeks or intends to enroll.

There are certain other situations where non-directory information may be released without consent. These situations include: to parents of dependent students, as defined by the Internal Revenue Code; to accrediting organizations; to federal, state, and local authorities involving an audit or evaluation of compliance with educational programs; to organizations conducting studies for or on behalf of educational institutions; to respond to a subpoena or court order; in connection with financial aid; in health or safety emergencies; to release the results of a disciplinary hearing to an alleged victim of a crime of violence.

STUDENTS HAVE THE RIGHT TO FILE A COMPLAINT CONCERNING ALLEGED FAILURES BY THE COLLEGE TO COMPLY WITH FERPA.

Complaints alleging FERPA violations may be made with the U.S. Department of Education. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C. 20202-5920

College Computer Use, Security, and Internet Access Policy

The purpose of this policy is to acknowledge restrictions the college places on the use of college owned computer hardware, copyrighted software that is licensed to the college, the security of student, staff, and faculty records, and Internet access.

Use of college computers and/or software is an agreement by the user to comply with all provisions of this policy. Violation of any provision of this policy could result in disciplinary action.

Policy

A. Computer Security – Computer security is critically important to the college. Each person at HACC who gains access to the computer system, including students and student workers, should do so under that individual's unique user id and password. Use of another person's user id and password is prohibited by state statute and by college policy. User ids and passwords should not be loaned to another person even on a temporary basis. Any compromise of security is a serious matter, and college employees and students are responsible for all actions performed under their user ids and passwords.

B. Family Education Rights and Privacy Act Provisions – Employees at HACC who have a legitimate educational purpose may have access to education records which contain personally identifiable information, the disclosure of which is prohibited by the Family Education Rights and Privacy Act of 1974. Disclosure of this information to any unauthorized person (including a parent or a spouse) is contrary to college policy.

C. Copyrights – It is the policy of the college to honor the copyrights of all software packages used by or licensed to the college and to recognize the intellectual property rights of the owner. All software run on computers owned or controlled by the college must be purchased and used in accordance with college policies and procedures.

Restrictions under this policy include:

1. Unlicensed copies of software shall not be used on equipment owned or controlled by the college.
2. The terms of all software licenses shall be honored. College computer resources shall not be used to violate the terms of any licensed software product.
 - a. It is a violation of college policy for college employees or students to make copies of software owned by or licensed to the college without written authorization from the respective department responsible for maintaining said license.

b. Copyrighted computer software not owned by or licensed to the college shall not be copied by college employees or students using equipment owned or controlled by the college.

c. It is a violation of college policy for college employees or students to copy software for distribution among members of a class without written permission of the author or publisher.

d. Business Records – Any and all records generated by the college, including but not limited to personnel records, payroll records, business and other related records are considered to be confidential. Willful or intentional unauthorized disclosure of such information violates college policy.

e. Internet – Access to the Internet is provided to college employees and students for the purposes of education, administration, and research only. Use of the Internet, including email, to create, display, or transmit language and/or materials which violate local, state, or federal laws or regulations is strictly prohibited. Such use includes, but is not limited to, the violation of applicable laws regarding copyright and trademark infringement, fraud, forgery, harassment, discrimination, obscenity, libel or slander. The Board of Trustees policy, "Statement of Individual Rights of all Members of the College Community, Visitors and Guests" and the "Statement of Practices Constituting Unacceptable Conduct" are incorporated by reference in this policy.

f. System Tampering – It is a violation of college policy to intentionally disrupt the performance of the college's computer system or the college network; introduce computer viruses; read, execute, modify or delete any file belonging to someone else without permission; or damage or remove without permission from Computer Services any hardware that supports the college's computer system or college network.





Academic Programs: Career, Transfer, and Noncredit



Accounting

Associate in Arts Degree – 1460

Business, Hospitality, Engineering, and Technology Division

Students are prepared with the specialty skills and knowledge to gain employment as trainees in auditing, cost accounting, and general accounting. The Accounting AA degree program is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete programs are available at the Harrisburg, Lancaster, Lebanon and York Campuses. Several courses in the degree program and all of the certificate courses are also available at the Gettysburg Campus and other sites.

Career Opportunities

Graduates of this program find employment in accounting firms, banks, private industry, and government service.

Competency Profile

This curriculum is designed to prepare students to:

- Perform all functions of accounting for a single proprietorship
- Compute and record transactions unique to partnerships and corporations
- Analyze financial statements, recognize potential problems and suggest appropriate solutions
- Implement an effective system of internal controls
- Recognize and design records necessary for special needs
- Show proficiency in operating a microcomputer-based accounting system and analyzing accounting problems using a computerized spreadsheet
- Access the Internet, manage E-mail operations, and operate Websites
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 66)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	BUSI 201 Business Law I	3
ENGL 102 English Composition II or		ACCT 200 Principles of Accounting II	4	CIS 105 Introduction to	
ENGL 104 Report and Technical Writing or		ACCT 201 Intermediate Accounting I	4	Software for Business	3
ENGL 106 Written Business Communication	3	ACCT 202 Intermediate Accounting II	4	CIS 108 Intro to PowerPoint	1
SPCH 101 Effective Speaking	3	ACCT 215 Microcomputer Accounting	3	FIN 201 Principles of Finance	3
Core A Elective	3	Program Specific Electives*	6	Management Elective	3
Core B Elective	3		25	MKTG 201 Principles of Mktg.	
Core C Elective	3			or MKTG 216 Retail Merch.	
Free Elective	3			or MKTG 217 Retail Mgmt	3
Physical Education & Wellness	1			MATH 103 College Algebra**	3
	22				19

*Select two of the following:
ACCT 203, ACCT 204; ACCT 205; ACCT 207

** May be replaced with MATH 104, 110, 119, 121, 122, 125 or 202

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Fall Semester	Spring Semester
ACCT 101 4	ACCT 200 4	ACCT 215 3	ACCT 202 4
CIS 105 3	ENGL 102, 104, 3	ACCT 201 4	BUSI 201 3
ENGL 101 3	or 106	FIN 201 3	Management
MATH 103	SPCH 101 3	MKTG 201, 216,	Elective 3
or higher	Core B Elective 3	or 217	Program Specific
Core A Elective 3	Core C Elective 3	Program Specific	Elective 3
PE & W 1		Elective 3	Free Elective 3
CIS 108 1			

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students are prepared with the specialty skills and knowledge to gain employment as trainees in auditing, cost accounting, and general accounting. The Accounting AA degree program is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete programs are available at the Harrisburg, Lancaster, Lebanon and York Campuses. Several courses in the degree program and all of the certificate courses are also available at the Gettysburg Campus and other sites.

Career Opportunities

Graduates of this program find employment in accounting firms, banks, private industry, and government service.

Competency Profile

This curriculum is designed to prepare students to:

- Perform all functions of accounting for a single proprietorship
- Compute and record transactions unique to partnerships and corporations
- Analyze financial statements, recognize potential problems and suggest appropriate solutions
- Implement an effective system of internal controls
- Recognize and design records necessary for special needs
- Show proficiency in operating a microcomputer-based accounting system and analyzing accounting problems using a computerized spreadsheet
- Access the Internet, manage E-mail operations, and operate Websites
- Write and speak effectively

PROGRAM REQUIREMENTS (TOTAL CREDITS = 38)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	CIS 105 Introduction to Software	
ENGL 104 Report and Technical Writing or		ACCT 200 Principles of Accounting II	4	for Business	3
ENGL 106 Written Business Communication	3	ACCT 201 Intermediate Accounting I	4	CIS 108 Introduction to PowerPoint	1
SPCH 101 Effective Speaking	<u>3</u>	ACCT 215 Microcomputer Accounting		FIN 201 Principles of Finance	<u>3</u>
	9	Application	3		7
		Program Specific Electives*	<u>7</u>		
			22		

*Select two of the following;
ACCT 202; ACCT 203; ACCT 204

Actuarial Science

Associate in Science Degree – 4000

Mathematics, Science, and Allied Health Division

Proficiency in calculus is essential, and computer competency is also important for an actuarial science major. Since the requirements of four-year institutions vary widely, it is essential to choose an intended transfer college as soon as possible and carefully follow the program described in that college's catalog. The requirements of the Society of Actuaries must also be considered. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution. Insurance companies, consulting firms, corporations, and government agencies employ graduates who earn the baccalaureate degree.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education		Major	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4
ENGL 102 English Composition II or		CPS 115 Visual Basic or	
ENGL 106 Written Business Comm.	3	CPS 141 Pascal Programming or	
SPCH 101 Effective Speaking or		CPS 151 FORTRAN Programming	3
SPCH 104 Interpersonal Communication	3	ECON 202 Micro Economics	3
Core A Elective	3	MATH 125 Discrete Mathematics	3
Core B Elective	3	MATH 141 Mathematics Seminar	2
Core B ECON 201 Macro Economics	3	MATH 202 Introduction to Statistics	3
Core C Elective Science	3	MATH 203 Mathematical Statistics	4
Core C MATH 121 Calculus I	4	MATH 221 Calculus III	4
Core C MATH 122 Calculus II	4	MATH 242 Actuarial Science Seminar	1
General Education Transfer Elective*	3	Program Elective**	3
Physical Education & Wellness	<u>1</u>		<u>30</u>
	33		

*Suggested Transfer Elective:

ACCT 201; BUSI 202; CPS 135, 141, 151, 161, 162, 235; ECON 201, 202; ENGR 213; MGMT 209; MATH 210

**Choose 3 credits from the following courses:

ACCT 200, 201; CPS 115, 116, 141, 151; BUSI 201, 202; MATH 220, 222

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ECON 201 (Core B)	3	ECON 202	3	ACCT 101	4	CPS 115/141/151	3
ENGL 101	3	ENGL 102 or 106	3	MATH 242	1	MATH 125	3
MATH 121 (Core C)	4	MATH 122 (Core C)	4	MATH 203	4	Core B Elective	3
SPCH 101 or 104	3	MATH 202	3	MATH 221	4	Core C Elective	3
MATH 141	2	Core A Elective	3	Program Elective	3	Gen Ed Trans. Elec.	3
PE & W	1						

Administrative Office Specialist

Associate in Arts Degree – 1921

Business, Hospitality, Engineering, and Technology Division

The Administrative Office Specialist program prepares students to perform clerical, administrative, management, and information systems support in a variety of office-related environments. Graduates utilize skills in keyboarding, machine transcription, computer applications, written and oral communication and are able to integrate various software applications and use the Internet for research. The complete program is available at the Harrisburg and York Campuses; some required courses are available at the Lancaster and Lebanon Campuses.

Career Opportunities

Employment may be found in business offices, private industry, public service, state and federal government, and specialized environments such as legal, medical, financial, insurance, law enforcement, engineering, and management as administrative office specialists.

Competency Profile

This curriculum is designed to prepare students to:

- Show proficiency in keyboarding and machine transcription
- Apply advanced software skills to produce business documents
- Integrate software applications
- Research using the Internet
- Manage records manually and electronically
- Perform basic accounting functions
- Create effective presentations
- Implement up-to-date office technologies and procedures
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 68)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	AOS 101 Document Processing	3	CIS 105 Introduction to Software for Business	3
ENGL 106 Business Communications	3	AOS 110 Microsoft Word	3	CIS 108 Introduction to Power Point	1
SPCH 104 Interpersonal Communication	3	AOS 111 Grammar & Punctuation Essen.	3	CIS 135 Intermediate Spreadsheet Applica.	3
Core A Elective	3	AOS 160 Office Accounting	3	CIS 207 Desktop Publishing	3
Core B Elective	3	AOS 202 Project Management	3	MATH 100 College Math for Business	3
Core C Elective	3	AOS 203 Records and Imaging Mgmt.	3	MGMT 202 Office Management	3
Free Elective	3	AOS 224 Office Applications	3	WEB 102 Internet and Web Design	3
Physical Education & Wellness	1	AOS 225 Office Procedures	3		
	22	AOS 226 Machine Transcription	3		19
			27		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer Session	Fall Semester	Spring Semester
AOS 111 3	ENGL 101 3	Free Elective 3	MGMT 202 3	AOS 160 3
CIS 105 3	AOS 110 3	Core C Elective 3	AOS 203 3	AOS 202 3
AOS 101 3	CIS 108 1		AOS 224 3	AOS 225 3
MATH 100 3	CIS 135 3		CIS 207 3	AOS 226 3
Core A Elective 3	WEB 102 3		ENGL 106 3	SPCH 104 3
	Core B Elective 3			PE & W 1

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Administrative Office Specialist

Certificate Program – 1371

Business, Hospitality, Engineering, and Technology Division

The Administrative Office Specialist program prepares students to perform clerical, administrative, management, and information systems support in a variety of office-related environments. Graduates utilize skills in keyboarding, machine transcription, computer applications, written and oral communication and are able to integrate various software applications and use the Internet for research. The complete program is available at the Harrisburg, Lebanon and York Campuses; selected courses are available at the Lancaster Campus.

Career Opportunities

Employment may be found in business offices, private industry, public service, state and federal government, and specialized environments such as legal, medical, financial, insurance, law enforcement, engineering, and management as administrative office specialists.

Competency Profile

This curriculum is designed to prepare students to:

- Show proficiency in keyboarding and machine transcription
- Apply advanced software skills to produce business documents
- Research using the Internet
- Manage records manually and electronically
- Perform basic accounting functions
- Create effective presentations
- Implement up-to-date office technologies and procedures

PROGRAM REQUIREMENTS (TOTAL CREDITS = 37)

General Education	Major		Other Required Courses	
	AOS 101 Document Processing	3	CIS 105 Intro to Software for Business	3
	AOS 110 Microsoft Word	3	CIS 108 Introduction to PowerPoint	1
	AOS 111 Grammar & Punctuation Essen.	3	CIS 207 Desktop Publishing	3
	AOS 202 Project Management	3	MATH 100 College Math for Business	3
	AOS 203 Records Management	3	WEB 102 Internet and Web Design	3
	AOS 225 Office Procedures	3	CIS Elective (any CIS course)	<u>3</u>
	AOS 226 Machine Transcription	<u>3</u>		16
		21		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Agribusiness and Management of Food Systems

Associate of Arts Degree – 1830 (continued)

Business, Hospitality, Engineering, and Technology Division

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer Session	
ENGL 101	3	ENGL 106 or 102	3	PE & W	1
BUSI 150	3	ACCT 101 (4) or		Core B	3
CIS 105 or Elective	3	ENTR 203	3		
MATH 100 or 103	3	BUSI 227 or			
Core C	3	ECON 201	3		
		CIS 108	1		
		MKTG 201	3		
Fall Semester		Spring Semester		Summer Session	
Core A	3	GIS 141 or FIN 201	3	BUSI 291 or Elective	3
BUSI 211/202/209	3	BUSI 250	3		
SPCH 101 or 104	3	Free Elective	3		
MKTG 212 or		MGMT 201	3		
MGMT 235	3	MGMT 226	3		
MGMT 204 or					
ACCT 200 (4)	3				

Agribusiness and Management of Food Systems

Certificate Program – 1191

Business, Hospitality, Engineering, and Technology Division

This program provides a solid foundation for students who are planning for an agribusiness career or for those already in agribusiness who wish to supplement their existing knowledge. Agribusiness is represented by the total of all institutions, firms, and activities involved in the commercial production of food including retail food, food service, and the full range of supporting industries. Students study economics, food marketing, supervision, finance, and other business subjects and learn to use them to create, manage and sustain the processes that move agricultural products from the field to the consumer. The complete program is available at the Harrisburg Campus. Certain required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses and at other sites.

Career Opportunities

Private firms, public organizations and government agencies hire program graduates in entry-level positions as food production and processing managers, sales and service representatives, retail food store managers, and government employees. Those hired into these positions are often hired as middle management providing industry oversight as well as a wide range of office support in finance, marketing, and technical services.

Competency Profile

This curriculum is designed to prepare students to:

- Acquire expertise in business analysis subject areas with emphasis on the application of these concepts for effective problem solving within the food system
- Obtain a sound understanding of the agribusiness sector and food system while learning how it functions within the boundaries of both national and international economics
- Assimilate information and develop inductive and deductive reasoning processes
- Acquire the knowledge base necessary for supporting sound business decisions
- Use communication skills for effective business application and personal growth opportunities
- Use those strengthened management and communication skills for effective business operations and personal growth opportunities

PROGRAM REQUIREMENTS (TOTAL CREDITS = 40)

General Education	Major	Other Required Courses
ENGL 101 English Composition I 3	ACCT 101 Principles of Accounting I or 4	CIS 105 Intro to Software for Business 3
ENGL 106 Written Business Comm. 3	ENTR 203 Fin. & Acct for Entrepreneur (3)	CIS 108 Introduction to PowerPoint <u>1</u>
SPCH 101 Effective Speaking or	BUSI 150 Introduction to Agribusiness 3	
SPCH 104 Interpersonal Communication <u>3</u>	BUSI 211 Agricultural Law or	
	BUSI 201 Business Law I 3	
	BUSI 250 Management of Food Systems 3	
	ECON 201 Principles of Economics I or	
	BUSI 227 Principles of Agricultural Econ 3	
	MKTG 201 Principles of Marketing 3	
	MKTG 212 Personal Selling 3	
	MGMT 201 Principles of Management 3	
	MGMT 226 Principles of Leadership <u>3</u>	
	27	

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Architectural Technology

Associate in Applied Science Degree – 4470

Business, Hospitality, Engineering, and Technology Division

Students prepare for employment in architectural firms and related settings. The preparation of architectural construction documents is emphasized; structural, mechanical, and electrical construction documents, as well as architectural presentation drawings, are explored. Students are positioned to move into management or supervisory positions in firms. The complete programs are available only at the Harrisburg Campus.

Career Opportunities

Graduates secure positions as CAD operators preparing construction documents for a wide variety of building types. Employment opportunities exist in architecture, design-build, construction and interior design firms, as well as code researchers, construction supervisors, facility planners, and interior designers.

Competency Profile

This curriculum is designed to prepare students to:

- Conceptualize the technical requirements of an architectural project and prepare preliminary and design development drawings
- Prepare all required general construction drawings
- Understand mechanical, electrical, and structural systems and their integration into the building process
- Understand construction materials, systems, and methods
- Understand how to use a computer in an architectural office or related setting
- Assist in preparing cost estimates
- Assist in building code research
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 66)

General Education		Major		Other Required Course	
ENGL 101 English Composition I	3	ARCH 110 Construction Print Reading	3	CAD 114 AutoCAD I	1
ENGL 104 Report and Technical Writing	3	ARCH 111 Architectural Graphics I	3	CAD 124 AutoCAD II	1
SPCH 104 Interpersonal Communication	3	ARCH 112 Architectural Working Drawings I	3	CAD 134 AutoCAD - Three Dimensional	1
Core A Elective	3	ARCH 130 Construction Materials and Methods	3	MATH 913 Basic Applied Math III*	3
Core B Elective	3	ARCH 135 Codes, Specifications & Estimating	3		6
Core C Elective	3	ARCH 210 Professional Practice for Architects	3		
Free Elective	3	ARCH 211 Architectural Graphics II or	2		
Physical Education & Wellness	<u>1</u> 22	ARCH 253 Sustainable Architecture or	(3)		
		ARCH 291 Arch Cooperative Work Experience	(3)		
		ARCH 212 Architectural Working Drawings II	4		
		ARCH 214 Site Planning and Surveying	3		
		ARCH 230 Structural Concepts	4		
		ARCH 233 Renovations and Architectural Detailing	4		
		ARCH 251 Environmental Control Systems for Buildings	<u>3</u> 38		

*Higher level math permitted.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ARCH 110	3	ARCH 112	3	ARCH 210	3	ARCH 212	4
ARCH 111	3	Free Elective	3	ARCH 233	4	ARCH 214	3
CAD 114	1	ARCH 130	3	ARCH 251	3	ARCH 230	4
CAD 124	1	ARCH 135	3	Core C Elective	3	SPCH 104	3
CAD 134	1	Core A Elective	3	ARCH 211, 253, or 291	2 or 3	Core B Elective	3
ENGL 101	3	ENGL 104	3	PE & W	1		
MATH 913	3						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students prepare for employment in architectural firms and related settings. The preparation of architectural construction documents is emphasized; structural, mechanical, and electrical construction documents, as well as architectural presentation drawings, are explored. The complete programs are available only at the Harrisburg Campus.

Career Opportunities

Graduates may secure positions as CAD operators preparing construction documents for a wide variety of building types. Employment opportunities exist in architectural, design-build, construction and interior design firms.

Competency Profile

This curriculum is designed to prepare students to:

- Conceptualize the technical requirements of an architectural project and prepare preliminary and design development drawings
- Prepare all required general construction drawings
- Understand mechanical, electrical, and structural systems and their integration into the building process
- Understand construction materials, systems, and methods
- Understand how to use a computer in an architectural office or related setting

PROGRAM REQUIREMENTS (TOTAL CREDITS = 33)

General Education	Major		Other Required Courses	
	ARCH 110 Construction Print Reading	3	CAD 114 AutoCAD I	1
	ARCH 111 Architectural Graphics I	3	CAD 124 AutoCAD II	1
	ARCH 112 Architectural Working Drawings I	3	CAD 134 AutoCAD - Three Dimensional	1
	ARCH 130 Construction Materials and Methods	3	MATH 913 Basic Applied Math III*	3
	ARCH 212 Architectural Working Drawings II	4		6
	ARCH 230 Structural Concepts	4		
	ARCH 233 Renovations and Architectural Detailing	4		
	Program Specific Elective*	<u>3</u>		
		<u>27</u>		

*Select program specific elective from the following:
ARCH 210, 211, 214, 251, 253, 291

Architecture

Associate in Arts Degree – 4010

Business, Hospitality, Engineering, and Technology Division

Architecture combines the traditional liberal arts with engineering and technology. The minimum educational requirement to become a Registered Architect in the Commonwealth of Pennsylvania is the Bachelor of Architecture degree. This program prepares students for transfer to a senior institution where the degree may be earned. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ARCH 101 Architectural Design I	3	Free Elective	<u>3</u>
ENGL 102 English Composition II	3	ARCH 102 Architectural Design II	3		3
SPCH 101 Effective Speaking	3	ARCH 111 Architectural Graphics I	3		
Core A HUM 115 Architecture: Aesthetics and History*	3	ARCH 121 History of Architecture I (D)	3		
Core B Elective	3	ARCH 201 Architectural Design III	4		
Core B Elective	3	ARCH 202 Architectural Design IV	4		
Core C MATH 121 Calculus I*	3-4	ARCH 221 History of Architecture II	3		
General Education Transfer Elective**	3	ARCH 241 Architectural Sketching	3		
Physical Education & Wellness	<u>1</u>	PHYS 201 General Physics I (Core C)	4		
	25	PHYS 202 General Physics II	<u>4</u>		
			34		

* Suggested Course

**Suggested Transfer Elective:

ARCH 112, 135, 211, 214, 253, 293(D), 295(D), 297(D) or ART 176

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ARCH 101	3	ARCH 102	3	ARCH 201	4	ARCH 202	4
SPCH 101	3	ARCH 121 (D)	3	ARCH 221	3	ARCH 241	3
ENGL 101	3	ENGL 102	3	PHYS 201 (Core C)	4	Core B Elective	3
HUM 115 (Core A)	3	MATH 121 (Core C)	4	Core B Elective	3	Free Elective	3
ARCH 111	3	PE & W	1	GenEd Trans. Elec.	3	PHYS 202	4

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The program serves as a foundation for students who plan to transfer to four-year institutions for further work in fine arts, graphic design, or specialty areas of ceramic, drawing, jewelry, painting, printmaking, sculpture, and art history. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	ART 105 Fundamentals of Two – Dimensional Design	3
ENGL 102 English Composition II	3	ART 107 Fundamentals of Three – Dimensional Design	3
SPCH 101 Effective Speaking	3	ART 108 Fundamentals of Computer Art or	
Core A ART 181 (D)	3	ART 176 Digital Photo Imaging	3
Core B Elective	3	ART 111 Black and White Photography	3
Core B Elective	3	ART 121 Drawing I	3
Core C Elective (Math)	3	ART 122 Drawing II	3
Core C Elective (Science)	3	ART 131 Painting I	3
Core C Elective	3	ART 182 Art through the Ages II (D)	3
General Education Transfer Elective*	3	Transfer Electives*	6
Physical Education & Wellness	1		30
	<u>31</u>		

*Choose general education courses appropriate for the transfer college; see HACC catalog for suggested options.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ART 105	3	ART 107	3	ART 131	3	ART 111	3
ART 121	3	ART 122	3	Core A ART 181 (D)	3	ART 182 (D)	3
ENGL 101	3	ENGL 102	3	SPCH 101	3	Transfer Elective	3
Core B Elective	3	Core C (Math)	3	Transfer Elective	3	Core B Elective	3
GenEd Trans. Elec.	3	ART 108 or 176	3	Core C (Science)	3	Core C Elective	3
PE & W	1						

Auctioneering

Certificate Program – 1160

Business, Hospitality, Engineering, and Technology Division

Students prepare to become self-employed as auctioneers. The programs have received the approval of the Pennsylvania State Board of Auctioneer Examiners as meeting the educational course requirements necessary to sit for the Auctioneer License Examination. The complete program is available only at the Harrisburg Campus

Career Opportunities

Upon completion of the 20 credit hours of specialty auctioneering courses and passing the Pennsylvania State Auctioneer License Examination the graduate becomes a Licensed Auctioneer.

Competency Profile

This curriculum is designed to prepare students to:

- Understand the use of appraisal sources and techniques
- Understand legal issues related to auctioneering
- Organize and conduct an auction
- Meet requirements to sit for the Pennsylvania Licensing Examination
- Prepare business correspondence and government forms
- Understand basic accounting principles
- Understand basic management principles

PROGRAM REQUIREMENTS (TOTAL CREDITS = 31)

General Education		Major		Other Required Courses	
ENGL 106 Written Business Communication	3	AUCT 101 Audience Communication	3	ACCT 101 Principles of Accounting I	4
Free Elective	$\frac{1}{4}$	AUCT 102 Procurement and Appraisal of Merchandise I	3	MGMT 121 Small Business Development and Management	$\frac{3}{7}$
		AUCT 103 Procurement and Appraisal of Merchandise II or			
		RE 108 Appraisal of Residential Property	3		
		AUCT 104 Auctioneering Law or			
		BUSI 201 Business Law I	3		
		AUCT 105 Preparation for the Auction	3		
		AUCT 106 The Auction	3		
		AUCT 202 Practicum in Auctioneering	$\frac{2}{20}$		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students prepare to become self-employed as auctioneers. The programs have received the approval of the Pennsylvania State Board of Auctioneer Examiners as meeting the educational course requirements necessary to sit for the Auctioneer License Examination. The complete program is available only at the Harrisburg Campus

Career Opportunities

Upon completion of the specialty auctioneering courses and passing the Pennsylvania State Auctioneer License Examination the graduate becomes a Licensed Auctioneer.

Competency Profile

This curriculum is designed to prepare students to:

- Understand the use of appraisal sources and techniques
- Understand legal issues related to auctioneering
- Organize and conduct an auction
- Meet requirements to sit for the Pennsylvania Licensing Examination
- Prepare business correspondence and government forms

PROGRAM REQUIREMENTS (TOTAL CREDITS = 20)

General Education	Major	
	AUCT 101 Audience Communications	3
	AUCT 102 Procurement and Appraisal of Merchandise I	3
	AUCT 103 Procurement and Appraisal of Merchandise II or	
	RE 101 Real Estate Fundamentals or	
	RE 108 Appraisal of Residential Property	3
	AUCT 104 Auctioneering Law or	
	BUSI 201 Business Law I	3
	AUCT 105 Preparation for the Auction	3
	AUCT 106 The Auction	3
	AUCT 202 Practicum in Auctioneering	<u>2</u>
		20

Automotive Technology

Associate in Applied Science Degree – 4480

Business, Hospitality, Engineering, and Technology Division

The program serves the needs of high school and vocational-technical graduates as well as persons already employed in the industry. The program is operated in cooperation with the National Automotive Dealers' Association, local vocational-technical schools, the U.S. Department of Labor, and local dealer associations. Graduates of vocational-technical school auto-mechanics programs or applicants with substantial work experience may receive up to nine credits after submitting appropriate documentation. This program is certified in the eight categories of automotive repair by the Automotive Service Excellence/National Automotive Technicians Education Foundation (ASE/NATEF). The program is available only at the Harrisburg Campus and is offered only in the evening.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Contact the program coordinator for specific program entry requirements.

Career Opportunities

Graduates of the program are prepared for employment as service technicians and future management personnel in the automotive industry.

Competency Profile

This curriculum is designed to prepare students to:

- Complete the Pennsylvania Safety Inspection License examination
- Complete the eight examinations developed by the National Institute for Automotive Service Excellence (NIASE), with the ability to earn certification as General Automotive Technicians
- Work as service technicians in automotive shops or dealerships
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 65)

General Education		Major	
ENGL 101 English Composition I	3	AUTO 101 Automotive Fundamentals	3
ENGL 104 Report and Technical Writing	3	AUTO 103 Automotive Powerplants	3
SPCH 101 Effective Speaking or		AUTO 105 Fundamental of Electrical	
SPCH 104 Interpersonal Communication	3	Electronics I	3
Core A Elective	3	AUTO 107 Fuel and Emission Systems	3
Core B Elective	3	AUTO 151 Braking Systems	3
Core C Elective	3	AUTO 153 Suspension Systems	3
Free Elective	3	AUTO 157 Engine Performance Testing	3
Physical Education & Wellness	1	AUTO 159 Heating and Air Conditioning	
	22	Systems	3
		AUTO 191 Cooperative Work Experience*	2
		AUTO 203 Manual Transmissions/ Transaxels and Differentials	3
		AUTO 205 Intermediate Electrical/ Electronics	3
		AUTO 207 Computerized Powertrain Controls	3
		AUTO 251 Service Department Management	2
		AUTO 253 Automatic Transmissions/ Transaxels	3
		AUTO 255 Advanced Electrical/ Electronics	3
			43

*(Enrollment after completion of AUTO 101, 103, 105, 151, and 153)

(continued next page)

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Automotive Technology

Associate in Applied Science Degree – 4480 (continued)

Business, Hospitality, Engineering, and Technology Division

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Year I

AUTO 101	3
AUTO 105	3
ENGL 101	3
AUTO 151	3
AUTO 153	3
ENGL 104	3
AUTO 103	3
AUTO 159	3
SPCH 101 or 104	3
PE & W	1

Year II

AUTO 107	3
AUTO 205	3
AUTO 251	2
Core A Elective	3
Core B Elective	3
Core C Elective	3
AUTO 203	3
AUTO 207	3
AUTO 157	3
AUTO 253	3
AUTO 255	3
Free Elective	3
AUTO 191	2

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Automotive Technology

Certificate Program – 4200

Business, Hospitality, Engineering, and Technology Division

The program serves the needs of high school and vocational-technical graduates as well as persons already employed in the industry. The program is operated in cooperation with the National Automotive Dealers' Association, local vocational-technical schools, the U.S. Department of Labor, and local dealer associations. Graduates of vocational-technical school auto-mechanics programs or applicants with substantial work experience may receive up to nine credits after submitting appropriate documentation. This program is certified in the eight categories of automotive repair by the Automotive Service Excellence/National Automotive Technicians Education Foundation (ASE/NATEF). The program is available only at the Harrisburg Campus.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Contact the program coordinator for specific program entry requirements.

Career Opportunities

Graduates of the program are prepared for employment as service technicians and future management personnel in the automotive industry.

Competency Profile

This curriculum is designed to prepare students to:

- Complete the Pennsylvania Safety Inspection License examination
- Complete the eight examinations developed by the National Institute for Automotive Service Excellence (NIASE), with the ability to earn certification as General Automotive Technician
- Work as service technicians in automotive shops or dealerships

PROGRAM REQUIREMENTS (TOTAL CREDITS = 41)

General Education		
	Major	
	AUTO 101 Automotive Fundamentals	3
	AUTO 103 Automotive Powerplants	3
	AUTO 105 Fundamentals of Electrical/ Electronics	3
	AUTO 107 Fuel and Emission Systems	3
	AUTO 151 Braking Systems	3
	AUTO 153 Suspension Systems	3
	AUTO 157 Engine Performance Testing	3
	AUTO 159 Heating and Air Conditioning Systems	3
	AUTO 191 Cooperative Work Experience*	2
	AUTO 203 Manual Transmissions/ Transaxels and Differentials	3
	AUTO 205 Intermediate Electrical/ Electronics	3
	AUTO 207 Computerized Powertrain Controls	3
	AUTO 253 Automatic Transmissions/ Transaxels	3
	AUTO 255 Advanced Electrical/ Electronics	3
		<u>3</u>
		41

*(Enrollment after completion of AUTO 101, 103, 105, 151, and 153)

Automotive Technology – General Motors ASEP

Associate in Applied Science Degree – 4570 (continued)

Business, Hospitality, Engineering, and Technology Division

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester	
AGM 101	3	AGM 151	3	AGM 205	3	AGM 203	2	AGM 251	2
AGM 103	3	AGM 153	3	AGM 291A	1	AGM 207	2	AGM 253	3
AGM 105	3	AGM 157	3	Core B SOCI 201(D)	3	AGM 255	2	AGM 293A	1
AGM 107	3	AGM 159	3	BUSI 200	3	AGM 292A	1	ENGL 104	3
AGM 191	1	AGM 192	1	PE & W	1	ENGL 101	3	Core A HUM 101	3
Core C PHSC 113	3	MATH 172	3			SPCH 101 or 104	3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The Baking and Pastry Arts Certificate Program is designed for students who wish to have careers as retail bakers, wholesale bakers, pastry cooks, cake decorators, as well as, entrepreneurs. The students move through all aspects of the bakeshop from product knowledge, bakeshop math and sanitation to the production of various bread types, cake baking and assembly, plus traditional pastry products. Students are introduced to business management and marketing courses. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses and at other sites.

Career Opportunities

Graduates of the program find employment as retail and wholesale bakers, pastry cooks, and assistants.

Competency Profile

This curriculum is designed to prepare students to:

- Apply industry sanitation and safety procedures
- Determine and apply the characteristics, properties and functions of the major baking ingredients
- Use mathematical techniques to make accurate adjustments in bakeshop formulas and percentages
- Exhibit the correct procedures for the preparation of quickbreads; cookies and yeast-raised products using starters, sponges and straight-dough method of fermentation
- Exhibit the correct procedures for the preparation of custards and curds, doughs, tarts and pies, meringues and frostings, mousses and bavarians, ice cream, and cake baking and decorating procedures
- Determine and apply the characteristics, properties and functions of the major baking and pastry ingredients

PROGRAM REQUIREMENTS (TOTAL CREDITS = 31)

General Education		Major		Other Required Courses	
ENGL 106 Written Business Comm.	<u>3</u>	BAKE 101 Baking I	4	CIS 105 Intro to Software for Business	3
	3	BAKE 103 Baking II	2	HRIM 102 Applied Hospitality Math	2
		BAKE 111 Pastry Arts I	4	HRIM 113 Sanitation and Safety	2
		BAKE 113 Pastry Arts II	2	MGMT 121 Small Business Development & Mgmt	3
		BAKE 291 Baking/Pastry Arts		MKTG 205 Visual Merchandising	<u>3</u>
		Internship	<u>3</u>		13
			15		

Banking and Financial Services

Associate in Arts Degree – 1491

Business, Hospitality, Engineering, and Technology Division

Graduates of the Professional Banking and Financial Services program will possess the required knowledge and skills to pursue opportunities in the financial services industry. This program works cooperatively with the Pennsylvania Bankers Association’s Professional Development Network (PBA-PDN). The complete program is available at the Harrisburg, Lancaster, Gettysburg and York Campuses; some required courses are at the Lebanon Campus. All BANK courses are offered on-line through our affiliation with the PBA-PDN.

Career Opportunities

Graduates of this program find employment at an entry level as tellers, clerks and trainees in specialty areas of banking. The program also prepares currently employed bank employees for upward mobility into supervisory and management positions.

Competency Profile

This curriculum is designed to prepare students to:

- Understand basic financial accounting practices and statements
- Use financial data in making decisions
- Demonstrate a clear understanding of banking principles and related procedures
- Understand how specialized training fits into a larger context
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	CIS 105 Intro to Software for Business	3
ENGL 102 English Composition II or		BANK 101 AIB Principles of Banking	3	CIS 108 Intro to Power Point	1
ENGL 106 Written Business Comm.	3	BANK 103 AIB Law & Banking Applic. or		FIN 201 Principles of Finance	3
SPCH 101 Effective Speaking	3	BANK 105 AIB Law & Banking Princ.	3	MATH 100 College Math for Business or	
Core A Elective	3	BANK 107 Marketing Financial Serv.	3	MATH 202 Intro to Statistics	3
Core B Elective	3	BANK 133 AIB Consumer Lending	3	MGMT 201 Principles of Management	3
Core C Elective	3	ECON 201 Principles of Economics I	3	MKTG 212 Personal Selling	3
Free Elective	3		19	Program Electives*	6
Physical Education & Wellness	1				22
	22				

* Select 6 credits from BUSI, MKTG, or MGMT

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
BANK 101	3	SPCH 101	3	MGMT 201	3	MKTG 212	3
CIS 105	3	FIN 201	3	ECON 202	3	Core C	3
ENGL 101	3	BANK 103 or 105	3	ENGL 102 or 106	3	CIS 108	1
MATH 100 or 202	3	Core A	3	Program Elective	3	Free Elective	3
ACCT 101	4	ECON 201	3	BANK 107	3	Program Elective	3
		PE & W	1			BANK 133	3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Banking and Financial Services Certificate Program – 1251

Business, Hospitality, Engineering, and Technology Division

Graduates of the Professional Banking and Financial Services program will possess the required knowledge and skills to pursue opportunities in the financial services industry. This program works cooperatively with the Pennsylvania Bankers Association's Professional Development Network (PBA-PDN). The complete program is available at the Harrisburg, Lancaster, Gettysburg and York Campuses; some required courses are at the Lebanon Campus. All BANK courses are offered on-line through our affiliation with the PBA-PDN.

Career Opportunities

Graduates of this program find employment at an entry level as tellers, clerks and trainees in specialty areas of banking. The program also prepares currently employed bank employees for upward mobility into supervisory and management positions.

Competency Profile

This curriculum is designed to prepare students to:

- Understand basic financial accounting practices and statements
- Use financial data in making decisions
- Demonstrate a clear understanding of banking principles and related procedures
- Understand how specialized training fits into a larger context

PROGRAM REQUIREMENTS (TOTAL CREDITS = 32)

General Education		Major		Other Required Courses	
ENGL 106 Written Business Comm.	<u>3</u>	ACCT 101 Principles of Accounting	4	CIS 105 Intro to Software for Business	3
	3	BANK 101 AIB Principles of Banking	3	CIS 108 Intro to Power Point	1
		BANK 103 AIB Law & Banking		FIN 201 Principles of Finance	3
		Applications or		MGMT 201 Principles of Management	3
		BANK 105 AIB Law & Banking Princ.	3	MKTG 212 Personal Selling	<u>3</u>
		BANK 107 AIB Marketing Financial Ser.	3		13
		BANK 133 AIB Consumer Lending	<u>3</u>		
			16		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Biology

Associate in Arts Degree – 3091

Mathematics, Science, and Allied Health Division

Lower division courses in the life sciences are offered as preparation for a student who will transfer to a four-year institution that offers a bachelor's degree program in biology, pre-medicine, pre-veterinary, ecology, marine biology, physical therapy, or teaching. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available at the Harrisburg and York Campuses; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	BIOL 102 General Biology II	4
ENGL 102 English Composition II	3	CHEM 102 General Inorganic Chemistry & Qualitative Analysis	4
SPCH 101 Effective Speaking	3	MATH 104 Trigonometry or higher	3
Core A Elective	3	Biology Electives:	8
Core B Elective	3	Select two of the following courses: BIOL 121, 122, 201, 202, 212, 215, 221, 225, BTC 201, ENVS 201; 4 of the 8 credits may be selected from the following, BIOL 103, 130; BTC 101	
Core B Elective	3	Transfer Electives	9
Core C BIOL 101 General Biology I	4	Suggested courses: CHEM 203, 204, 221; GEOL 101, 102, 201; MATH 121, 122, 202; PHYS 201, 202	
Core C CHEM 101 General Inorganic I	4		
Core C MATH 103 College Algebra or higher	3		
General Education Transfer Elective	3		
Physical Education & Wellness	1		
	33		28

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	BIOL 102	4	SPCH 101	3	Biology Elective	4
BIOL 101 (Core C)	4	CHEM 102	4	Biology Elective	4	Core B Elective	3
CHEM 101 (Core C)	4	ENGL 102	3	Core A Elective	3	Transfer Electives	6
Math 103 or higher	3	MATH 104 or higher	3	Transfer Elective	3		
Core B Elective	3	GenEd Trans. Elec	3	PE & W	1		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The College's range of education programs allows students planning a career in teaching to complete the first two years of a transfer program and earn an associate in arts degree whether they plan to teach in elementary or secondary schools. All students should be aware of the standards of the Pennsylvania Department of Education and that they specify different preparations for elementary and secondary school teachers.

The PA State Board of Education passed new requirements for admission to, as well as exit from, professional education programs. On October 7, 2000, Title 22 of the PA School Code, Chapter 354, became law. This regulation affects every institution that prepares teachers in the Commonwealth of Pennsylvania. These requirements affect all (elementary and secondary) bachelor's level-education programs for PA Teacher Certification. Students who complete 48 credit hours after August 15, 2002 but prior to August 15, 2003 must have a 2.8 GPA (3.0 GPA after August 15, 2003) to enter professional courses leading to initial teacher certification. They will also be required to attain a qualifying score on the PRAXIS-I Academic Skills Assessment test.

Each student will be required to have an Act 34 Criminal Background Investigation and an Act 151 Child Abuse Clearance prior to any practicum/student teaching experience and employment. The student should consider these factors prior to enrolling in this program.

Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The entire program is available at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 64)

General Education		Major	
ENGL 101 English Composition I	3	EDUC 101 Foundations of Education	3
ENGL 102 English Composition II	3	BIOL 102 General Biology II	4
SPCH 101 Effective Speaking	3	CHEM 102 General Inorganic Chemistry/Qual. Analysis	4
Core A Elective	3	MATH 104 Trigonometry or higher	3
Core B Elective	3	Biology Electives*	8
Core B Elective	3	Transfer Electives**	9
Core C BIOL 101 General Biology I	4		31
Core C CHEM 101 General Inorganic I	4		
Core C MATH 103 College Algebra or higher	3		
General Education Transfer Elective	3		
Physical Education & Wellness	1		
	33		

*Select two of the following courses: BIOL 121, 122, 201, 202, 212, 215, 221, 225; BTC 201; ENVS 201; 4 of the 8 credits may be selected from the following: BIOL 103, 130; BTC 101

** Suggested Transfer Electives: CHEM 203, 204, 221; GEOL 101, 102, 201; MATH 121, 122, 202; PHYS 201, 202

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	BIOL 102	4	SPCH 101	3	Biology Elective	4
BIOL 101 (Core C)	4	CHEM 102	4	Biology Elective	4	Core B Elective	3
CHEM 101 (Core C)	4	ENGL 102	3	Core A Elective	3	Transfer Electives	6
MATH 103 (Core C)	3	MATH 104	3	Transfer Elective	3	PE & W	1
Core B Elective	3	GenEd Trans. Elec.	3	EDUC 101	3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Building Construction Technology

Associate in Applied Science Degree – 4510

Business, Hospitality, Engineering, and Technology Division

Students are prepared for positions in the construction/contracting field as quantity take-off technicians and estimators, detailers, and construction inspectors. All graduates will have general knowledge of the overall construction process. The Building Construction and General Technology courses are offered only in the evening. The complete program is available at the Harrisburg and Lancaster Campuses.

Career Opportunities

Graduates of the program are prepared for positions in the construction/contracting field as project managers or supervisors, construction schedulers, or construction estimators and contractors.

Competency Profile

This curriculum is designed to prepare students to:

- Understand general construction drawings and contract specifications
- Understand construction materials, systems, and methods
- Show a working knowledge of construction law
- Estimate material and labor requirements
- Demonstrate skills in planning, scheduling, labor relations, and general management
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 65)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ARCH 110 Construction Print Reading	3	MATH 913 Basic Applied Math III*	3
ENGL 104 Report and Technical Writing	3	ARCH 111 Architectural Graphics I	3	CIS 105 Introduction to Software for Business	<u>3</u>
SPCH 104 Interpersonal Communication	3	ARCH 130 Construction Materials and Methods	3		6
Core A Elective	3	ARCH 214 Site Planning and Surveying	3		
Core B Elective	3	ARCH 251 Environmental Control Systems	3	*Higher level math permitted	
Core C Elective	3	BCT 211 Construction Design Methods	3		
Free Elective	3	BCT 212 Construction Contracts and Related Laws	3		
Physical Education & Wellness	<u>1</u>	BCT 213 Construction Supervision and Leadership	3		
	22	BCT 214 Project Management	3		
		BCT 215 Construction Estimating	3		
		BCT 216 Construction Planning and Scheduling	3		
		BCT 217 Construction Project Administration	3		
		BCT 218 Construction Documents Technology	<u>1</u>		
			37		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
ARCH 110	3	ARCH 111	3	ARCH 214	3	BCT 211	3	BCT 212	3	SPCH 104	3
MATH 913	3	ARCH 130	3	CIS 105	3	BCT 213	3	BCT 214	3	PE & W	1
ENGL 101	3	ENGL 104	3			BCT 215	3	BCT 216	3	Free Elective	3
Core A Elective	3	Core C Elective	3			ARCH 251	3	BCT 217	3		
Core B Elective	3							BCT 218	1		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Building Construction Technology

Certificate Program – 4250

Business, Hospitality, Engineering, and Technology Division

Students are prepared for positions in the construction/contracting field as quantity take-off technicians and estimators, detailers, and construction inspectors. All graduates will have general knowledge of the overall construction process. The Building Construction and General Technology courses are offered only in the evening. The complete program is available at the Harrisburg and Lancaster Campuses.

Career Opportunities

Graduates of the program are prepared for positions in the construction/contracting field as project managers, construction schedulers, or construction estimators.

Competency Profile

This curriculum is designed to prepare students to:

- Understand general construction drawings and contract specifications
- Understand construction materials, systems, and methods
- Show a working knowledge of construction law
- Estimate material and labor requirements
- Demonstrate skills in planning, scheduling, labor relations, and general management

PROGRAM REQUIREMENTS (TOTAL CREDITS = 34)

General Education	Major		Other Required Courses	
	ARCH 110 Construction Print Reading	3	MATH 913 Basic Applied Math III*	3
	ARCH 111 Architectural Graphics I	3		3
	ARCH 130 Construction Materials and Methods	3		
	BCT 212 Construction Contracts and Related Laws	3	*Higher level math permitted.	
	BCT 213 Construction Supervision and Leadership	3		
	BCT 214 Project Management	3		
	BCT 215 Construction Estimating	3		
	BCT 216 Construction Planning and Scheduling	3		
	BCT 217 Construction Project Administration	3		
	BCT 218 Review/Construction Documents Technology	1		
	Program Specific Elective*	3		
		31		

*Select one of the following:
ARCH 214, 251; CVTE 103

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Business

Certificate Program – 1200

Business, Hospitality, Engineering, and Technology Division

Students gain a basic knowledge of the business system and its operations. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

Graduates of this program will acquire sufficient information to enable them to gain entry-level employment in business, industry, or governmental agencies in positions leading toward the supervisory level.

Competency Profile

This curriculum is designed to prepare students to:

- Understand financial accounting data
- Communicate effectively
- Understand computer applications in business
- Understand the basic operations of an organization

PROGRAM REQUIREMENTS (TOTAL CREDITS = 32)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	CIS Elective	<u>3</u>
ENGL 104 Report and Technical Writing or		ACCT 200 Principles of Accounting II	4		3
ENGL 106 Written Business Communication	3	MGMT 121 Small Business Development			
SPCH 101 Effective Speaking	<u>3</u>	and Management or			
	9	MGMT 201 Principles of Management or			
		MGMT 203 Human Resources			
		Management or			
		MGMT 204 Human Relations in			
		Business	3		
		Program Specific Electives*	<u>9</u>		
			20		

*See advisor for course selection options.

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

A general transfer program for the student who plans to pursue a bachelor's degree in accounting, finance, information systems, management, marketing, economics, business administration, or a related field. The Business Administration AA degree program is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year college and universities. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education		Major	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4
ENGL 102 English Composition II or		ACCT 200 Principles of Accounting II	4
ENGL 106 Written Business Comm.	3	BUSI 201 Business Law I or	
SPCH 101 Effective Speaking	3	BUSI 209 Legal Environment/Business	3
Core A Elective	3	CIS 105 Introduction to Software for Business	3
Core B ECON 201 Principles I: Macro	3	Transfer Electives	<u>18</u>
Core B ECON 202 Principles II: Micro	3		32
Core C MATH 103, 110, or 202*	6		
Core C Science	3		
General Education Transfer Elective	3		
Physical Education & Wellness	<u>1</u>		
	31		

* Select two courses.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ACCT 101	4	ACCT 200	4	BUSI 201 or 209	3	ECON 202 (Core B)	3
CIS 105	3	ENGL 102 or 106	3	ECON 201 (Core B)	3	Transfer Electives	9
ENGL 101	3	MATH 103, 110, or		Transfer Electives	6	Gen Ed Trans. Elec.	3
MATH 103, 110, or		202 (Core C)	3	Core C Elective	3		
202 (Core C)	3	Transfer Elective	3				
Core A Elective	3	SPCH 101	3				
PE & W	1						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Business Education

Associate in Arts Degree – 1100

Business, Hospitality, Engineering, and Technology Division

The College’s range of education programs allows students planning a career in teaching to complete the first two years of a transfer program and earn an associate in arts degree whether they plan to teach in elementary or secondary schools. All students should be aware of the standards of the Pennsylvania Department of Education and that they specify different preparations for elementary and secondary school teachers.

The PA State Board of Education passed new requirements for admission to, as well as exit from, professional education programs. On October 7, 2000, Title 22 of the PA School Code, Chapter 354, became law. This regulation affects every institution that prepares teachers in the Commonwealth of Pennsylvania. These requirements affect all (elementary and secondary) bachelor’s level-education programs for PA Teacher Certification. Students who complete 48 credit hours after August 15, 2002 but prior to August 15, 2003 must have a 2.8 GPA (3.0 GPA after August 15, 2003) to enter professional courses leading to initial teacher certification. They will also be required to attain a qualifying score on the PRAXIS-I Academic Skills Assessment test.

Each student will be required to have an Act 34 Criminal Background Investigation and an Act 151 Child Abuse Clearance prior to any practicum/student teaching experience and employment. The student should consider these factors prior to enrolling in this program.

Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college’s catalog. The complete program is available at the Harrisburg, Lebanon and York Campuses; some required courses are available at the Lancaster and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4
ENGL 102 English Composition II or ENGL 106 Written Business Comm.	3	EDUC 101 Foundations of Education	3
SPCH 101 Effective Speaking	3	PSYC 201 Educational Psychology	3
Core A Elective	3	Program Specific Electives*	12
Core B Elective	3	Transfer Electives	9
Core B PSYC 101 General Psychology	3		31
Core C MATH Elective (103 – 299)	3		
Core C Elective Science	3	*Select courses from the following subject areas: ACCT, AOS, AUCTION, BUSI, CIS, FIN, HM, HRIM, MGMT, MKTG, OIS, RE, TOUR, WEB	
Core C Elective	3		
General Education Transfer Elective	3		
Physical Education & Wellness	1		
	31		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ACCT 101	4	ENGL 102 or 106	3	PSYC 201	3	Program Specific Electives	9
ENGL 101	3	EDUC 101	3	Core C Science	3	Transfer Electives	6
Core A	3	SPCH 101	3	GenEd Trans. Elec.	3		
Core C MATH	3	PSYC 101 (Core B)	3	Transfer Electives	6		
Core B	3	Core C Science	3				
PE & W	1						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

These programs incorporate specialty courses in management, marketing, finance, and data processing. The courses provide students with the knowledge of management concepts, procedures, operations, and problem-solving techniques needed for employment or advancement. The Business Management AA degree programs are accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete programs are available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

Graduates prepare for entry-level positions in organizations with career paths that eventually lead to a position as a bookkeeper, accounting clerk, accounting supervisor, account receivable supervisor, company's comptroller, computerized accounting clerk, credit manager, finance supervisor, internal auditors, IRS agents, investments advisor, junior accountants, and tax advisors. The programs also prepare currently employed individuals for upward mobility within their organizations.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate an ability to analyze problems including problem identification and problem solution
- Understand the interaction of the various functional areas of an organization in a systems context
- Understand the dynamic economic, social, political, and technological environment and its impact on organizations and demands placed on management
- Analyze various financial statements for information concerning costs, volume, profit and capital, and compare key financial ratios
- Perceptually envision the organization of the future and the skills necessary for the manager to operate within it
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 65)

General Education	Credits	Major	Credits	Other Required Courses	Credits
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	MATH 100 College Math for	
ENGL 102 English Composition II or		ACCT 200 Principles of Accounting II	4	Business**	3
ENGL 106 Written Business Communications	3	ACCT 203 Income Tax Accounting	4		3
SPCH 101 Effective Speaking	3	ACCT 204 Managerial Cost Accounting or			
Core A Elective	3	ACCT 207 Government & Not-for			
Core B Elective	3	Profit	3-4	** May be replaced with a higher	
Core C Elective	3	ACCT 215 Microcomputer Accounting		level MATH offering	
Free Elective *	3	Applications	3		
Physical Education & Wellness	1	BUSI 201 Business Law I	3		
	22	CIS 105 Introduction to Software for			
		Business	3		
		CIS 108 Introduction to PowerPoint	1		
		ECON 201 Principles of Economics I:			
		Macro	3		
		FIN 201 Principles of Finance	3		
		Management Electives	2		
			40		

* Recommend BUSI 291

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Credits	Spring Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
ACCT 101	4	ACCT 200	4	ACCT 215	3	ACCT 204 or 207	3-4
CIS 105	3	BUSI 201	3	ECON 201	3	FIN 201	3
ENGL 101	3	ENGL 102 or 106	3	ACCT 203	4	Free Elective	3
MATH 100 or		Management Elec.	3	Management Elec.	3	Management Elec.	3
higher	3	SPCH 101	3	Core C Elective	3	CIS 108	1
Core A Elective	3	Core B Elective	3	PE & W	1		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Business Management, Computer Information Systems

Associate in Arts Degree – 1480

Business, Hospitality, Engineering, and Technology Division

These programs incorporate specialty courses in management, marketing, finance, and data processing. The courses provide students with the knowledge of management concepts, procedures, operations, and problem-solving techniques needed for employment or advancement. The Business Management AA degree programs are accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete programs are available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

Graduates prepare for entry-level positions in organizations with career paths that eventually lead to a position as a computer operator, data entry supervisor, data processing supervisor, data base analyst, data storage manager, information technology coordinator, management information systems supervisor, systems analyst, systems comptroller, technical specialist, and webmaster. The programs also prepare currently employed individuals for upward mobility within their organizations.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate an ability to analyze problems including problem identification and problem solution
- Understand the interaction of the various functional areas of an organization in a systems context
- Understand the dynamic economic, social, political, and technological environments and their impact on organizations and demands placed on management
- Analyze various financial statements for information concerning costs, volume, profit and capital, and compare key financial ratios
- Perceptually envision the organization of the future and the skills necessary for the manager to operate within it
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 64)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	MATH 100 College Math for	
ENGL 102 English Composition II or		ACCT 200 Principles of Accounting II	4	Business or higher	3
ENGL 106 Written Business Communication	3	BUSI 201 Business Law I	3		
SPCH 101 Effective Speaking	3	CIS 105 Introduction to Software for			
Core A Elective	3	Business	3		
Core B Elective	3	ECON 201 Principles of Economics I:			
Core C Elective	3	Macro	3		
Free Elective *	3	MKTG 201 Principles of Marketing	3		
Physical Education & Wellness	1	CIS Electives	9		
	22	(Select from the following: CIS 110,			
		127, 135, 140)			
		CIS 108 Introduction to PowerPoint	1		
		Management Electives	9		
			39		

*Recommend BUSI 291

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
CIS 105	3	ACCT 101	4	ACCT 200	4	CIS Elective	3
ENGL 101	3	BUSI 201	3	ECON 201	3	Management Elec.	6
Math 100 or		ENGL 102 or 106	3	MKTG 201	3	Core C Elective	3
higher	3	CIS Elective	3	CIS Elective	3	Free Elective	3
Core A Elective	3	SPCH 101	3	Management Elec.	3	CIS 108	1
Core B Elective	3						
PE & W	1						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Business Management – General

Associate in Arts Degree – 1510

Business, Hospitality, Engineering, and Technology Division

These programs incorporate specialty courses in management, marketing, finance, and data processing. The courses provide students with the knowledge of management concepts, procedures, operations, and problem-solving techniques needed for employment or advancement. The Business Management AA degree programs are accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete programs are available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

Graduates prepare for entry-level positions in organizations with career paths that eventually lead to a position as an advertising coordinator, assistant manager, buyer coordinator, communications director, distribution manager, distribution supervisor, general manager, operations manager, office manager, public relations manager, purchasing agent, sales manager, sales assistant manager, service manager, and shipping manager. The programs also prepare currently employed individuals for upward mobility within their organizations.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate an ability to analyze problems including problem identification and problem solution
- Understand the interaction of the various functional areas of an organization in a systems context
- Understand the dynamic economic, social, political, and technological environments and their impact on organizations and demands placed on management
- Analyze various financial statements for information concerning costs, volume, profit and capital, and compare key financial ratios
- Perceptually envision the organization of the future and the skills necessary for the manager to operate within it
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 64)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	MATH 100 College Math for	
ENGL 102 English Composition II or		ACCT 200 Principles of Accounting II	4	Business or higher	<u>3</u>
ENGL 106 Written Business Communication	3	BUSI 201 Business Law I	3		3
SPCH 101 Effective Speaking	3	CIS 105 Introduction to Software for			
Core A Elective	3	Business	3		
Core B Elective	3	ECON 201 Principles of Economics I:			
Core C Elective	3	Macro	3		
Free Elective*	3	ECON 202 Principles of Economics II:			
Physical Education & Wellness	<u>1</u>	Micro	3		
	22	FIN 201 Principles of Finance	3		
		MKTG 201 Principles of Marketing	3		
		CIS 108 Introduction to PowerPoint	1		
		Management Electives	<u>12</u>		
			39		

*Recommend BUSI 291

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
CIS 105	3	ACCT 101	4	ACCT 200	4	ECON 202	3
ENGL 101	3	BUSI 201	3	ECON 201	3	FIN 201	3
MATH 100 or		ENGL 102 or 106	3	MKTG 201	3	Management Elec.	6
higher	3	SPCH 101	3	Management Elec.	6	PE & W	1
Core A Elective	3	Core C Elective	3	CIS 108	1	Free Elective	3
Core B Elective	3						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Business Management – HRIM

Associate in Arts Degree – 1590

Business, Hospitality, Engineering, and Technology Division

These programs incorporate specialty courses in management, marketing, finance, and data processing. The courses provide students with the knowledge of management concepts, procedures, operations, and problem-solving techniques needed for employment or advancement. The Business Management AA degree programs are accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete program is available at the Harrisburg Campus. Selected courses are available at the Lancaster Campus.

Career Opportunities

Graduates prepare for entry-level positions in organizations with career paths that eventually lead to a position as an assistant chef, chef, food buyer, institutional restaurant planner, restaurant manager, and sanitation specialist. The programs also prepare currently employed individuals for upward mobility within their organizations.

Competency Profile

- This curriculum is designed to prepare students to:
- Demonstrate an ability to analyze problems including problem identification and problem solution
- Understand the interaction of the various functional areas of an organization in a systems context
- Understand the dynamic economic, social, political, and technological environments and their impact on organizations and demands placed on management
- Analyze various financial statements for information concerning costs, volume, profit and capital, and compare key financial ratios
- Perceptually envision the organization of the future and the skills necessary for the manager to operate within it
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	MATH 100 College Math for	
ENGL 102 English Composition II or		ACCT 200 Principles of Accounting II	4	Business or higher	<u>3</u>
ENGL 106 Written Business Communication	3	BUSI 201 Business Law I	3		3
SPCH 101 Effective Speaking	3	ECON 201 Principles of Economics I:			
Core A Elective	3	Macro	3		
Core B Elective	3	FIN 201 Principles of Finance	3		
Core C Elective	3	HRIM Electives	8-9		
Free Elective	3	(Select two courses from the following:			
Physical Education & Wellness	<u>1</u>	HRIM 108 or 110 or HRIM 113 or 122.			
	22	HRIM 223, 225, and 226 are required.)			
		CIS 105 Introduction to Software for			
		Business	3		
		CIS 108 Introduction to PowerPoint	1		
		Management Electives	<u>9</u>		
			38-39		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Fall Semester	Spring Semester
CIS 105 3	ACCT 101 4	ACCT 200 4	FIN 201 3
ENGL 101 3	BUSI 201 3	ECON 201 3	Management Elec. 3
Math 100 or higher 3	ENGL 102 or 106 3	HRIM Elective 3	Core C Elective 3
Core A Elective 3	SPCH 101 3	Management Elec. 6	Free Elective 3
Core B Elective 3	HRIM Elective 2-3		HRIM Elective 3
	CIS 108 1		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Cabinetry-Millwork

Diploma Program – 0510

Business, Hospitality, Engineering, and Technology Division

Students receive theory and hands on training in hand and power tools, joinery, construction and finishing techniques as related to the cabinetry and millwork industry. Students acquire the woodworking expertise and the knowledge of materials required for employment in a variety of cabinetry and millwork businesses from small shops to large custom-cabinetry firms. Evening classes are held at Mill Creek Cabinetry in Elizabethtown. Students may continue their studies and apply most credits toward a certificate or associate degree in Technology Studies.

Career Opportunities

Graduates find employment as entry level craftsmen in custom cabinetry, millwork or wood product manufacturing plants.

Competency Profile

This curriculum is designed to prepare students to:

- Interpret blueprints
- Use basic hand tools, power tools and stationary power equipment
- Understand and use basic and advanced construction methods including frame and frameless construction casework and wood joinery
- Demonstrate competence in finishing techniques including sanding, staining, topcoating, designing, and laminating
- Plan, design, estimate cost of, and install custom cabinetry

PROGRAM REQUIREMENTS (TOTAL CREDITS = 19)

General Education

Major

CBNT 101 Introduction to Cabinetry I	4
CBNT 102 Introduction to Cabinetry II	4
CBNT 103 Intermediate Cabinetry	4
CBNT 104 Advanced Cabinetry	4
	<u>16</u>

Other Required Courses

ENGL 901 Basic Communications Skills	1
MATH 912 Basic Applied Math II	<u>2</u>
	3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The Cardiology Technician Certificate Program is designed to prepare the student with the theoretical and technical expertise to perform basic cardiovascular assessment preliminary to treating patients with cardiac and peripheral vascular disease. The student may be required to submit Act 33 Child Abuse and /or Act 34 Pennsylvania State Police Criminal Background Checks prior to obtaining employment. The student should consider this factor before enrolling in this program. The complete program is available at the Harrisburg and Lancaster campuses.

Career Opportunities

This program will prepare individuals for employment as a cardiology technician in various healthcare settings from hospital facilities to physician practices.

Competency Profile

This curriculum is designed to prepare students to:

- Perform various cardiology tests including EKG's, Holter Monitors, and Stress Tests
- Interpret EKG changes by identifying various types of cardiac dysrhythmias
- Obtain cardiac history
- Perform patient assessments and identify abnormalities of the CV system
- Take the national certification examination for Certified Cardiac Technicians

*Completion of this certificate program, CCT certification and one year of work experience may allow articulation of up to 10 credits to either of the two current Cardiovascular Technology Degree Programs. (Courses: CVT101, CVT102, CVT103, and AH 140)

PROGRAM REQUIREMENTS

This program was academically designed to be completed in approximately a year.

Medical Terminology	30 hours
Introduction to Anatomy & Physiology	30 hours
HIPAA/Bloodborne Pathogens	6 hours
EKG Theory	33 hours
EKG Applications	30 hours

RECOMMENDED SEQUENCE FOR STUDENTS

Students can complete this program by taking one or more courses each semester.

Medical Terminology
Introduction to Anatomy & Physiology
HIPAA/Bloodborne Pathogens
EKG Theory
EKG Applications

Cardiovascular Technology – Invasive Cardiovascular Technology

Associate in Science Degree – 3510

Mathematics, Science, and Allied Health Division

An Invasive Cardiovascular Technologist is a healthcare professional who, through the utilization of specialized equipment and under the direction of the physician, performs procedures on patients resulting in accurate diagnosis and/or optimal treatment of congenital and acquired heart disease. The program is accredited by the Commission on Accreditation of Allied Health Education Programs. This program requires the student to complete a Pennsylvania Child Abuse History Clearance and/or State Police Criminal Record Check prior to enrollment, prior to the start of a clinical experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean. The complete program is available only at the Lancaster Campus; general education courses in the degree program are available at the Harrisburg, Lebanon, and Gettysburg Campuses.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates will be qualified to seek employment as cardiovascular technologists in both diagnostic and interventional facilities, specifically in a Cardiac Catheterization laboratory.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate competencies needed to gain employment in the Cardiac Catheterization area
- Demonstrate proficiency in all aspects of diagnostic and therapeutic procedures
- Demonstrate the ability to utilize a variety of equipment in the Catheterization setting
- Assist the physician in patient-care aspects of the Catheterization laboratory
- Function effectively as a member of the healthcare team
- Become eligible to sit for the national registry examination
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 71)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	CVT 101 Intro to Cardiovascular Tech	3	AH 140 Intro to Allied Health	3
ENGL 102 English Composition II	3	CVT 102 Intro to Cardiovascular Tech Lab	1	AH 209 Pharmacology for Allied Health	3
SPCH 101 Effective Speaking or		CVT 103 Cardiovascular Tech Clinical	2	BIOL 121 Anatomy and Physiology I	4
SPCH 104 Interpersonal Communication	3	CVT 204 Cardiac Pathophysiology I	3	BIOL 122 Anatomy and Physiology II	4
Core A Elective	3	CVT 205 Cardiac Pathophysiology II	3	MATH 103 College Algebra	3
Core B Elective	3	CVT 210 Intro to Invasive Cardiovascular	3		17
Free Elective	3	CVT 211 Radiation/Safety Invasive Instru	2		
Physical Education & Wellness	1	CVT 212 Invasive Cardiovascular Proc.	3		
	19	CVT 213 Invasive Instrumentation Lab	2		
		CVT 214 Interventional Cardiac Practices	3		
		CVT 215 Invasive Clinical Practicum I	4		
		CVT 216 Congenital Heart Disease	1		
		CVT 217 Invasive Clinical Practicum II	5		
			35		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer Session		Fall Semester	
AH 140	3	ENGL 101	3	ENGL 102	3	CVT 210	3
BIOL 121	4	BIOL 122	4	SPCH 101 or 104	3	CVT 211	2
CVT 101	3	CVT 103	2	Core A	3	CVT 204	3
CVT 102	1	MATH 103	3			CVT 212	3
PE & W	1					CVT 213	2
Spring Semester		Summer Session					
CVT 214	3	CVT 217	5				
AH 209	3	Core B	3				
CVT 205	3	Free Elective	3				
CVT 215	4						
CVT 216	1						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Chemistry

Associate in Arts Degree – 3020

Mathematics, Science, and Allied Health Division

The curriculum in chemistry is designed to enable the student to complete the first two years of a baccalaureate program in chemistry. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution. Courses in chemistry and related subjects are offered for students who expect to transfer to four-year college or university programs in chemistry, medicine, dentistry, pharmacy, teaching, veterinary science, or other science curricula.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	CHEM 102 General Inorganic/Qual. Analysis	4
ENGL 102 English Composition II	3	CHEM 203 Organic Chemistry I	4
SPCH 101 Effective Speaking	3	CHEM 204 Organic Chemistry II	4
Core A Elective	3	CPS 113 BASIC Programming or higher	3
Core B Elective	3	PHYS 201 General Physics I or	
Core B Elective	3	PHYS 211 Physics: Engineers/Scientists I	4
Core C CHEM 101 General Inorganic I	4	PHYS 202 General Physics II or	
Core C MATH 121 Calculus I	4	PHYS 212 Physics: Engineers/Scientists II	4
Core C MATH 122 Calculus II	4	Transfer Elective	4
General Education Transfer Elective	3	(Recommended elective: BIOL 101, 102; CHEM 202;	
Physical Education & Wellness	<u>1</u>	CPS 135 or higher; MATH 221, 222)	
	34		<u>27</u>

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	CHEM 203	4	CHEM 204	4
CHEM 101 (Core C)	4	CHEM 102	4	CPS 113 or higher	3	PHYS 202 or 212	4
MATH 121 (Core C)	4	MATH 122 (Core C)	4	PHYS 201 or 211	4	Transfer Elective	4
SPCH 101	3	Core A Elective	3	GenEd Trans. Elec.	3	Core B Elective	3
PE & W	1	Core B Elective	3				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students are prepared with skills needed to work with groups of children in childcare settings such as daycare centers, nursery schools, and family daycare homes. The program is also appropriate for persons who are employed as aides in daycare centers and who would like to become assistant group supervisors (in accordance with Department of Public Welfare regulations). All courses in the curriculum may be applied toward an AA degree in Early Childhood Education, and students who elect to complete the degree program may qualify for employment as center directors and group supervisors. This program requires the student to submit Act 33 Child Abuse and Act 34 Pennsylvania State Police Criminal Background Checks prior to the start of a lab or field experience or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Program Director. The complete program is available at the Harrisburg, Lancaster, Lebanon and York Campuses, selected courses are offered at the Gettysburg Campus.

Career Opportunities

Graduates of this program can obtain employment as a Child Care or Head Start Assistant or family care provider.

Competency Profile

- This curriculum is designed to prepare students to:
- Demonstrate competencies needed to work as assistant group supervisors in a childcare setting
- Plan and supervise curricular activities for preschool children based on understanding normal growth patterns and developmental needs
- Provide a safe, healthy learning environment
- Manage children’s behavior in positive ways that support social and emotional development
- Communicate and work with children, their parents, and staff members

PROGRAM REQUIREMENTS (TOTAL CREDITS = 31)

General Education		Major	
ENGL 101 English Composition I	3	EDUC 122 Child Observation Strategies	1
	3	EDUC 231 The Early Childhood Professional	3
		EDUC 232 Development and Behavior of Children: Birth-12 years	3
		EDUC 240 Introduction to Early Childhood Education	3
		EDUC 242 Health, Safety and Nutrition in Early Childhood Education	3
		EDUC 254 Creative Experience in ECE	3
		EDUC 124 EDUC Lab: Creative Arts	1
		EDUC 256 Early Childhood Literacy & Language Arts	3
		EDUC 126 EDUC Lab: Literacy & Language Arts	1
		EDUC 258 Curriculum Development in ECE	3
		EDUC 128 EDUC Lab: Curriculum Development	1
		CIS 109 Integrating Technology into the K-12 Classroom or	
		EDUC 132 Fundamentals of Family Child Care or	
		EDUC 134 Fundamentals of School-Age Child Care or	
		EDUC 247 Introduction for Young Children with Special Needs or	
		EDUC 248 Mathematics and Science for Young Children or	
		EDUC 250 Family Focused Infant and Toddler Care	3-4 28

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Child Development Associate Diploma Program – 0600

Communications, Arts, and Social Sciences Division

The Child Development Associate (CDA) Diploma Program trains entry-level child care providers, and prepares them for assessment by the Council for Professional Development. The CDA is a national competency-based credential for persons who work in early childhood settings. Students completing this program who meet the requirements of the Council are eligible to apply for assessment. Persons who successfully complete the assessment are awarded the CDA credential. Credits in this program may be applied to the Child Care Certificate and Associate Degree Programs. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

This program is intended for personnel who are working as caregivers in center-based or home-based child care settings.

Competency Profile

- This curriculum is designed to prepare students to:
- Establish and maintain a safe, healthy learning environment
- Advance the physical and intellectual competence of young children
- Support social and emotional development and provide positive guidance for young children
- Establish positive and productive relationships with families
- Ensure a well run program that is responsive to participant needs
- Maintain a commitment to professionalism

PROGRAM REQUIREMENTS (TOTAL CREDITS = 16)

General Education	Major		Other Required Courses	
	EDUC 122 Child Observation Strategies	1	General Education Elective 100-299	2
	EDUC 130 Introduction to the Child Development Associate (CDA)	1		2
	EDUC 131 CDA Assessment & Portfolio Preparation	3		
	EDUC 231 The Early Childhood Professional	3		
	EDUC 242 Health, Safety and Nutrition in ECE	3		
	EDUC Elective*	<u>3-4</u> 14		

* EDUC Elective: EDUC 132 **or** EDUC 250 **or** EDUC 254 **and** EDC 124 **or** EDUC 256 **and** EDUC 126 **or** EDUC 258 **and** EDUC 128

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students are introduced to the basics of CAD drafting and design in the following areas of civil engineering: highway, land development, drainage, erosion and sedimentation control, and surveying. In addition, they are able to write specifications and assist in preparing reports, permits, cost estimates, project documentation, and presentations. The complete program is available only at the Harrisburg Campus and the CVTE courses are taught evenings only.

Career Opportunities

Graduates of this program are trained to work as technicians, engineering technicians, designers, and CAD operators in the civil engineering field. The program prepares students for positions with surveying companies or as members of surveying crews.

Competency Profile

This curriculum is designed to prepare students to:

- Use both AutoCAD and MicroStation CAD software in the civil engineering environment
- Function as members of a crew performing surveying operations and processing data
- Layout an engineer’s conceptual highway design and create horizontal and vertical alignment
- Design commercial and residential building sites under the supervision of an engineer
- Know the major laws and codes that govern the practice of civil engineering, architecture, and surveying
- Draw and understand boundary surveys
- Draft and design horizontal curves and vertical curves and operate a CAD station efficiently
- Develop contour plans, profiles, cut and fill, and cross sections
- With supervision, prepare drainage design for storm sewers, culverts and outfall protection
- Develop erosion and sedimentation control plans with the assistance of an engineer
- Write specifications and prepare cost estimates for highway and land development projects
- Understand and utilize PennDOT Design Manuals for highway design and plan presentation
- Understand design basics for storm water management, utilities, parking, contours, plans, and profiles
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education	Major	Other Required Courses
ENGL 101 English Composition I 3	CVTE 102 Intro to Highway, Drainage, Erosion & Sedimentation Control 3	CAD 115 MicroStation I 1
ENGL 104 Report & Technical Writing 3	CVTE 103 Surveying I 3	CAD 125 MicroStation II 1
SPCH 104 Interpersonal Communication or 3	CVTE 105 Numerical Methods Civil Eng. 3	CAD 130 Civil Engineering Drawing 1
SPCH 101 Effective Speaking 3	CVTE 110 Civil Engineering Graphics 2	MATH 913 Basic Applied MATH III* 3
Core A Elective 3	CVTE 111 Topographic Site Mapping 2	6
Core B Elective 3	CVTE 112 Topographic Highway Mapping 2	
Core C Elective 3	CVTE 120 Codes, Laws, Acts & Regulations 1	*May be replaced with a higher level MATH.
Free Elective 3	CVTE 203 Surveying II 3	
Physical Education & Wellness 1	CVTE 205 Highway Design 3	
22	CVTE 207 Drainage Design 3	
	CVTE 209 Topics in Site Design 3	
	CVTE 211 Erosion and Sedimentation Control and Permits 3	
	CVTE 213 Capstone Project 3	
	34	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

CVTE courses are taught in the afternoon and evenings only.

Fall Semester	Spring Semester	Summer Session
CVTE 110 2	CVTE 120 1	CVTE 103 3
CAD 130 1	CVTE 111 2	Core B 3
MATH 913 3	CVTE 105 3	
ENGL 101 3	CVTE 102 3	
Core A 3	ENGL 104 3	
Fall Semester	Spring Semester	Summer Session
CVTE 205 3	CVTE 211 3	CVTE 203 3
CVTE 207 3	CVTE 209 3	Free Elective 3
CAD 115 1	CAD 125 1	
CVTE 112 2	CVTE 213 3	
Core C 3	PE & W 1	

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Civil Technology

Certificate Program – 4220

Business, Hospitality, Engineering, and Technology Division

Students are introduced to the basics of CAD drafting and design in the following areas of civil engineering: highway, land development, drainage, erosion and sedimentation control, and surveying. In addition, they are able to write specifications and assist in preparing reports, permits, cost estimates, project documentation, and presentations. The complete program is available only at the Harrisburg Campus and the CVTE courses are taught evenings only.

Career Opportunities

Graduates of this program are trained as technicians, designers, and CAD operators for employment in the civil engineering field. The program also prepares students for positions with surveying companies or as members of surveying crews.

Competency Profile

This curriculum is designed to prepare students to:

- Use both AutoCAD and MicroStation CAD software in the civil engineering environment
- Function as members of a crew performing surveying operations and processing data
- Layout an engineer's conceptual highway design and create the horizontal and vertical alignment
- Design commercial and residential building sites under the supervision of an engineer
- Know the major laws and codes that govern the practice of civil engineering, architecture, and surveying
- Draw and understand boundary surveys
- Draft and design horizontal curves and vertical curves and operate a CAD station efficiently
- Develop contour plans, profiles, cut and fill lines, and cross sections
- With supervision, prepare drainage design for storm sewers, culverts and outfall protection
- Develop erosion and sedimentation control plans with the assistance of an engineer
- Write specifications and prepare cost estimates for highway and land development projects
- Understand and utilize PennDOT Design Manuals for highway design and plan presentation
- Understand design basics of storm water management, utilities, parking, contours, plans, and profiles
- Design storm sewers, culverts, and outfall protection based on instruction from an engineer

PROGRAM REQUIREMENTS (TOTAL CREDITS = 41)

General Education	Major	Other Required Courses	
	CVTE 102 Intro to Highway, Drainage, Erosion & Sedimentation Control	CAD 115 MicroStation I	1
	CVTE 103 Surveying I	CAD 125 MicroStation II	1
	CVTE 105 Numerical Methods in Civil Engineering	CAD 130 Civil Engineering Drawing	1
	CVTE 110 Civil Engineering Graphics	ENGL 901 Basic Communication Skills	1
	CVTE 111 Topographic Site Mapping	MATH 913 Basic Applied MATH III	<u>3</u>
	CVTE 112 Topographic Highway Mapping		7
	CVTE 120 Codes, Laws, Acts & Regulations		
	CVTE 203 Surveying II		
	CVTE 205 Highway Design		
	CVTE 207 Drainage Design		
	CVTE 209 Topics in Site Design		
	CVTE 211 Erosion and Sedimentation Control and Permits		
	CVTE 213 Capstone Project		<u>3</u>
			34

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students utilize both AutoCAD 200 and MicroStation CAD drafting packages in the civil engineering environment. This includes the following areas of civil engineering: highway, site development, drainage, erosion and sedimentation control, and culvert and storm sewer sizing. Design and computation issues are also considered for each project. Drafting and design classes are supported by state-of-the-art CAD software. The complete program is available only at the Harrisburg Campus and the CVTE courses are taught evenings only.

Career Opportunities

Graduates of this program are trained as technicians and CAD operators for employment in the civil engineering field. The program also prepares students for positions with surveying companies or as members of surveying crews.

Competency Profile

This curriculum is designed to prepare students to:

- Use both AutoCAD and MicroStation CAD software in the civil engineering environment
- Function as members of a crew performing surveying operations and processing data
- Layout an engineer's conceptual highway design and create the horizontal and vertical alignment
- Operate a CAD station efficiently
- Know the major laws and codes that govern the practice of civil engineering, architecture, and surveying
- Understand boundary surveys
- Understand contour plans, profiles, cut and fill, and cross sections
- Develop erosion and sedimentation control plans with the assistance of an engineer
- Write specifications and prepare cost estimates for highway and land development projects

PROGRAM REQUIREMENTS (TOTAL CREDITS = 23)

General Education	Major	Other Required Courses	
	CVTE 102 Intro to Highway, Drainage Erosion & Sedimentation Control	CAD 115 MicroStation I	1
		CAD 125 MicroStation II	1
	CVTE 103 Surveying I	CAD 130 Civil Engineering Drawing	1
	CVTE 105 Numerical Methods in Civil Engineering	ENGL 901 Basic Communication Skills	1
	CVTE110 Civil Engineering Graphics	MATH 913 Basic Applied MATH III	<u>3</u>
	CVTE 111 Topographic Site Mapping		7
	CVTE 112 Topographic Highway Mapping		
	CVTE 120 Codes, Laws, Acts & Regulations		<u>1</u> 16

Computer Information Security

Certificate Program – 1211

Business, Hospitality, Engineering, and Technology Division

The Computer Information Security program enables students currently studying or working in information technology to further their knowledge, understanding, and application as it pertains to information security. The coursework focuses on applying technical solutions to satisfy business requirements to preserve and protect data and information systems. Throughout the program of study, students are exposed to multiple operating systems, hardware devices, applications, and industry specific legal issues. Students with little or no computer experience will need additional coursework prior to starting the program.

Career Opportunities

Graduates of this program find employment, depending on experience, as Security Information Services Operators, Information Security Specialists, Information Security Administrators, Information Security Advisors, Information Security Consultants, Information Security Analysts, Information Security Managers, and Information Security Architects.

Competency Profile

This curriculum is designed to prepare students to:

- Develop information security policies and procedures
- Apply technology devices to meet business requirements
- Secure information system components
- Design secure network architectures
- Implement technological solutions, both hardware and software, as it pertains to information security
- Maintain and awareness of industry requirements and laws
- Respond to information system intrusions and support investigative processes
- Manage information security resources
- Provide information security training and awareness programs

PROGRAM REQUIREMENTS (TOTAL CREDITS = 35)

General Education	Major	Other Required Courses
	CIS 222 Introduction to Windows Server or	
	CIS 226 Novell Netware Administration or	
	CIS 265 Fundamentals of Unix Administration	3
	CIS 224 Systems Analysis and Design	3
	CISE 200 Information Security Fundamentals	3
	CISE 210 Information Security Administration	4
	CISE 220 Information Security Analysis & Response	4
	CISE 230 Information Security Management	3
	CJ 103 Principles of Security/Loss Prevention	3
	CJ 223 Loss Prevention Issues	3
	CTEC 122 Internetworking II	3
	CTEC 221 Technical Aspects of NOS	3
	Programming Elective*	<u>3-4</u>
		35

*Select 3 credits from the following courses:
CIS 238, 249; CPS 115, 121, 135, 141, 151, 230

The CIS degree program allows for specialization as a Computer Support Specialist or Database Analyst. Students complete 22 credits in general education plus program-specific requirements and electives, and additional credits in the area of concentration. Students are encouraged to meet with an advisor upon entering the program, and again to assist in scheduling higher-level courses. Students entering the CIS program are expected to be competent in the skills included in CIS 105 (Introduction to Software for Business, see College Catalog). Students who believe they have a working knowledge of Microsoft Office are encouraged to contact a program coordinator or full-time faculty member for permission to waive this prerequisite. Students must earn grades of C or higher in all computer-related courses (CAD, CIS, CNT, CPS, GIS, or WEB). The complete Computer Support Specialist concentration is available at the Harrisburg and Lancaster Campuses. The complete Database Analyst concentration is available at the Harrisburg Campus. Most of the courses are available at the Lebanon, Gettysburg, York and Virtual Campuses, and other off-campus locations.

Career Opportunities

Graduates from the CIS Computer Support Specialist degree concentration find employment as computer operators, technicians, and technical-support specialists, where an understanding of the interplay of software, hardware, networking, security and the Internet are critical to job performance. These jobs can include performing equipment-related activities, converting system design into computer language, installing and supporting personal computer equipment and software, troubleshooting client and/or server problems, and determining procedural and software solutions.

Graduates from the CIS Database Analyst degree concentration find employment as database analysts and data modelers. They use data modeling techniques and tools to analyze, tune, and specify data usage within an application area.

Students graduating with a degree are prepared to assume positions involving management and supervision.

Competency Profile

These degree concentrations are designed to prepare students to:

- Use professionally developed computer software
- Adapt to changing computer software and hardware environments
- Understand local area networks (LANs), data communications, and multi-user systems
- Troubleshoot and install computer software and hardware
- Configure computer information systems
- Demonstrate a working knowledge of Web and Internet usage
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Understand how specialized training fits into the larger management and societal context

PROGRAM REQUIREMENTS (TOTAL CREDITS = 68)

General Education		Major	
ENGL 101 English Composition I	3	CIS 110 Introduction to Computer Information Systems	3
ENGL 102 English Composition II or		CIS 127 Introduction to Microsoft Windows	3
ENGL 106 Business Communications or		CNT 120 Network Communication Technology I	3
ENGL 104 Report and Technical Writing	3	MATH 202 Introduction to Statistics or	
SPCH 101 Effective Speaking or		ACCT 101 Principles of Accounting	3-4
SPCH 104 Interpersonal Communication	3	MGMT 121 Small Business Development and Management or	
Core A Elective	3	MGMT 201 Principles of Management or	
Core B Elective	3	MGMT 204 Human Relations in Business	3
Core C Elective	3	Computer Programming Elective *	3
Free Elective	3		18
Physical Education & Wellness	1		
	22		
* Select one of the following programming courses: CIS 238; CPS 115, 121, 135, 141, 151, 230; WEB 125, 140, 143, 240, 247, 253, 255, 256			
Computer Support Specialist Option		Database Analyst Option	
CIS 135 Intermediate Spreadsheet Applications	3	CIS 140 Intermediate Database Management	3
CIS 140 Intermediate Database Management	3	CIS 224 Systems Analysis and Design	4
CIS 222 Introduction to Windows Servers	3	CIS 241 Database Administration I	3
CIS 227 Technical Support	3	CIS 243 Database Administration II	3
CISE 200 Information Security Fundamentals	3	CIS 245 Database Programming	3
ELEC 125 Introduction to PC Technology	3	CIS 247 Database Backup and Recovery	3
ELEC 126 Installing and troubleshooting PC's	4	CIS 278 Advanced Database Project	3
Computer Related Elective**	6	Computer Related Elective***	3
	28	Database Related Elective***	3
			28

** Select Computer Related Elective from the following subjects: CAD; CIS (except CIS 100, 105); CISE; CPS; CNT/CTEC; GIS; and WEB

***Select any Database Related Elective from the following: CIS 222, 249, 264, and WEB 126

(continued next page)

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Computer Information Systems

Associate in Arts Degree – 1792 (continued)

Business, Hospitality, Engineering, and Technology Division

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Computer Support Specialist

Semester I		Semester II		Summer		Semester III		Semester IV	
CIS 110	3	CIS 127	3	CIS 222	3	Programming Elective	3	Core C Elective	3
SPCH 101 or 104	3	CNT 120	3	ELEC 125	3	Core B Elective	3	Free Elective	3
ENGL 101	3	CIS 140	3			MGMT Elective	3	CIS 227	3
MATH 202 or ACCT 101	3-4	ENGL 102/104/104	3			CISE 200	3	Computer Electives	6
CIS 135	3	Core A Elective	3			ELEC 126	4		
		PE & W	1						

Database Analyst

Semester I		Semester II		Summer		Semester III		Semester IV	
CIS 110	3	CIS 127	3	Database Elective	3	CIS 243	3	CIS 224	4
SPCH 101 or 104	3	CNT 120	3	Programming Elec.	3	Core B Elective	3	CIS 247	3
ENGL 101	3	CIS 241	3			CIS 245	3	CIS 278	3
MATH 202 or ACCT 101	3-4	ENGL 102/104/104	3			Computer Elective	3	MGMT Elective	3
CIS 140	3	Core A Elective	3			Core C Elective	3	Free Elective	3
		PE & W	1						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The CIS certificate program allows for specialization as a Computer Support Specialist or Database Analyst. Students are encouraged to meet with an advisor upon entering the program, and again to assist in scheduling higher-level courses. Students entering the CIS program are expected to be competent in the skills included in CIS 105 (Introduction to Software for Business, see College Catalog). Students who believe they have a working knowledge of Microsoft Office are encouraged to contact a program coordinator or full-time faculty member for permission to waive this prerequisite. Students must earn grades of C or higher in all computer-related courses (CIS, CNT, CPS, GIS, or WEB). The complete Computer Support Specialist concentration is available at the Harrisburg and Lancaster Campuses. The complete Database Analyst concentration is available at the Harrisburg Campus. A number of the courses are available at the Lebanon, Gettysburg, York and Virtual campuses and other off-campus locations.

Career Opportunities

Graduates from the CIS Computer Support Specialist certificate concentration find employment as computer operators, technicians, and technical-support specialists, where an understanding of the interplay of software, hardware, networking, security, and the Internet are critical to job performance. These jobs can include performing equipment-related activities, converting system design into computer language, installing and supporting personal computer equipment and software, troubleshooting client and/or server problems, and determining procedural and software solutions.

Graduates from the CIS Database Analyst certificate concentration find employment as database analysts and data modelers. They use data modeling techniques and tools to analyze, tune, and specify data usage within an application area.

Graduates with a certificate in either of the program concentrations are prepared to enter the workforce with specific technical skills. The certificate is also appropriate for individuals currently in the workforce who are interested in updating skills, or in re-training in a skill-based field.

Competency Profile

The certificate concentrations are designed to prepare students to:

- Use professionally developed computer software
- Adapt to changing computer software and hardware environments
- Understand local area networks (LANs), data communications, and multi-user systems
- Troubleshoot and install computer software and hardware
- Configure computer information systems
- Demonstrate a working knowledge of Web and Internet usage

PROGRAM REQUIREMENTS (TOTAL CREDITS = 40)

General Education

Major

CIS 110 Introduction to Computer Information Systems	3
CIS 127 Introduction to Microsoft Windows	3
CNT 120 Network Communication Technology I	3
Computer Programming Elective *	3
	12

* Select one of the following programming courses: CIS 238; CPS 115, 121, 135, 141, 151, 230; WEB 125, 140, 143, 240, 247, 253, 255, 256

Computer Support Specialist Option

CIS 135 Intermediate Spreadsheet Applications	3
CIS 140 Intermediate Database Management	3
CIS 222 Introduction to Windows Servers	3
CIS 227 Technical Support	3
CISE 200 Information Security Fundamentals	3
ELEC 125 Introduction to PC Technology	3
ELEC 126 Installing and troubleshooting PC's	4
Computer Related Electives **	6
	28

Database Analyst Option

CIS 140 Intermediate Database Management	3
CIS 224 Systems Analysis and Design	4
CIS 241 Database Administration I	3
CIS 243 Database Administration II	3
CIS 245 Database Programming	3
CIS 247 Database Backup and Recovery	3
CIS 278 Advanced Database Project	3
Computer Related Elective**	3
Database Related Elective***	3
	28

**Select computer related electives from the following subjects: CAD; CIS (except CIS 100, 105); CISE; CPS; CNT/CTEC; GIS; and WEB

***Select any Database Related Elective from the following: CIS 222, 249, 264; WEB 126

Computer Information Systems – Software Specialist

Diploma Program – 0220

Business, Hospitality, Engineering, and Technology Division

This diploma program prepares students for careers as computer information systems software specialists. The coursework focuses on developing proficiency in word processing, spreadsheet creation to solve problems, computerized presentations, and development of database applications. These skills enable a student to work effectively with software tools in a business/organizational environment. The courses also prepare the student to take the Microsoft Officer User Specialist (MOUS) examinations to be certified by Microsoft as expert users of the software. This program can be completed in two semesters.

Career Opportunities

Graduates of the program will be able to work effectively with software tools in a business/organizational environment.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate mastery of various software packages on computers
- Be able to decide which application tools is best suited to achieve the desired result
- Demonstrate the ability to integrate various applications and link them
- Understand the use of software as a communication tool in a business environment.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 19)

General Education	Major	
	CIS 105 Introduction to Software for Business	3
	CIS 108 Introduction to Power Point	1
	CIS 110 Introduction to Computer Systems	3
	CIS 127 MS Windows Operating System	3
	CIS 135 Intermediate Spreadsheet Applications	3
	CIS 140 Intermediate Database Management	3
	AOS 110 Microsoft Word	3
		<u>19</u>

Computer Networking Technology

Associate in Applied Science – 4590

Business, Hospitality, Engineering, and Technology Division

Students prepare to work in the field of computer networking. They are trained to design, install, configure, and maintain networks. The program includes the study of data communications, telecommunications, Networking Operating System fundamentals, TCP/IP, cabling, terminations, network connections, cable testers, network analyzers, PBX equipment, NIC's, hubs, bridges, switches, and routers. The program is vendor neutral and coordinates with national standards from the National Association of Communication Systems Engineers and the Computing Technology Industry Association. The complete programs are available only at the Harrisburg Campus.

Career Opportunities

Graduates prepare for positions as network support technicians, network administrators, network planning analysts, systems analysts, network coordinators, telecommunications specialists, information technology specialists, consultants, market representatives, and related information technologist positions.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate an understanding of the underlying concepts of network communications
- Use current terminology of networking when preparing reports and proposals
- Apply the correct hardware/software technology for effective use in a business environment
- Distinguish between the latest LAN, WAN, and MAN technologies
- Demonstrate the installation, maintenance, and technical support of popular networking hardware/software systems
- Demonstrate network troubleshooting and diagnostic techniques
- Distinguish between the important networking architectures and the network operating systems
- Demonstrate network design and network management skills
- Demonstrate an understanding of client/server systems
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 70)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	CIS 150 Desktop Support	3	Program Specific Electives**	10
ENGL 102 English Composition II or		CIS 222 Introduction to Windows Servers or			10
ENGL 104 Report and Tech. Writing or		CIS 223 Intermediate Windows Servers or			
ENGL 106 Written Bus. Communication	3	CIS 226 Novell NetWare Administration or			
SPCH 101 Effective Speaking or		CIS 264 Fundamentals of Linux Administration or			
SPCH 104 Interpersonal Communication	3	CIS 265 Fundamentals of UNIX Administration	3		
Core A Elective	3	CIS 224 Systems Analysis and Design	3		
Core B Elective	3	CNT 120 Network Communication Technology I	3		
Core C Elective (MATH required)	3	CNT 125 Network Communication Technology II	4		
Free Elective	3	CNT 130 Fundamentals of Telecommunication	3		
Physical Education & Wellness	1	CNT 140 The Physical Network	3		
	22	CNT 200 Technical Aspects of Network Operating Systems	4		
		CNT 220 Internetworking	5		
		ELEC 126 Installing & Troubleshooting PC's	4		
		Computer Programming Elective*	3		
			38		

*Select Computer Programming Elective from the following: CIS 238, 246, 248, 249; CPS 115, 121, 135, 141, 151, 230; WEB 144, 244

* Select program specific electives from the following: CNT 240, 260, 291; CAD 114, 115, 124, 125, 134; CIS 222, 223, 226, 264, 265; CISE 200, 210, 220, 230; ELEC 100, 101, 106, 108, 111, 211, 213, 215; MGMT 121, 201, 204

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer	Fall Semester	Spring Semester
CNT 120	CNT 125	Program. Elective	CNT 200	CIS Server Elective
ENGL 101	CNT 130	Core A Elective	CNT 220	CNT 224
SPCH 101 or 104	CNT 140		CIS 150	Tech Elective
Core B Elective	ELEC 126		Tech Electives	Core C Elective
Free Elective	ENGL 102/104/106			PE & W

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Computer Networking Technology

Certificate Program – 4230

Business, Hospitality, Engineering, and Technology Division

Students prepare to work in the field of computer networking. They are trained to design, install, configure, and maintain networks. The program includes the study of data communications, telecommunications, Networking Operating System fundamentals, TCP/IP, cabling, terminations, network connections, cable testers, network analyzers, PBX equipment, NIC's, hubs, bridges, switches, and routers. The program is vendor neutral and coordinates with national standards from the National Association of Communication Systems Engineers and the Computing Technology Industry Association. The complete programs are available only at the Harrisburg Campus.

Career Opportunities

Graduates prepare for positions as network support technicians, network planning analysts, network coordinators, telecommunications specialists, information technology specialists, consultants, market representatives, and related information technologist positions.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate an understanding of the underlying concepts of network communications
- Use current terminology of networking when preparing reports and proposals
- Apply the correct hardware/software technology for effective use in a business environment
- Distinguish between the latest LAN, WAN, and MAN technologies
- Demonstrate the installation, maintenance, and technical support of popular networking hardware/software systems
- Demonstrate network troubleshooting and diagnostic techniques
- Distinguish between the important networking architectures and the network operating systems
- Demonstrate network design and network management skills
- Demonstrate an understanding of client/server systems

PROGRAM REQUIREMENTS (TOTAL CREDITS = 38)

General Education	Major		Other Required Courses	
	CIS 150 Desktop Support	3	Program Specific Electives*	6
	CIS 222 Introduction to Windows Servers or			6
	CIS 223 Intermediate Windows Servers or			
	CIS 226 Novell NetWare Administration or			
	CIS 264 Fundamentals of Linux Administration or			
	CIS 265 Fundamentals of UNIX Administration	3		
	CNT 120 Network Communication Technology I	3		
	CNT 125 Network Communication Technology II	4		
	CNT 130 Fundamentals of Telecommunication	3		
	CNT 140 The Physical Network	3		
	CNT 200 Technical Aspects of Network Operating Systems	4		
	CNT 220 Internetworking	5		
	ELEC 126 Installing & Troubleshooting PC's	4		
		32		

* Select program specific electives from the following: CNT 240, 260, 291; ELEC 100, 101, 106, 108, 111, 211, 213, 215; MATH 103, 104, 121, 122, 202

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Computer Repair Technology

Associate in Applied Science Degree – 4620

Business, Hospitality, Engineering, and Technology Division

Two programs (certificate and degree) provide increasing levels of technical expertise in PC repair related fields. Students advancing from the certificate program to the degree program can carry along technical credits previously earned. The beginning computer courses are designed for students new to the computer field and may be waived for students who demonstrate competence in the topic studied. These programs are available at the Harrisburg and Gettysburg Campuses.

Career Opportunities

Graduates obtain positions as help desk attendants and computer repair technicians.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate the use of common business software, such as MS Office
- Adapt to changing microcomputer software and hardware environments
- Install, configure, and troubleshoot microcomputers and peripheral equipment
- Describe microcomputer technical areas such as local area networks (LANs), data communications, and multi-user systems
- Install and troubleshoot PC cabling systems
- Pass the A+PC Technician Certification examination
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 66)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	CIS 105 Introduction to Software for Business	3	MATH 051 Intermediate Algebra	3
ENGL 102 English Composition II or		CIS 110 Introduction to Computer Systems	3	Program Specific Electives*	<u>15</u>
ENGL 104 Report and Tech. Writing or		CIS 115 Fundamentals of Network Communication or			18
ENGL 106 Written Business Comm.	3	CNT 120 Network Communications Technology I	3		
SPCH 101 Effective Speaking or		CIS 127 Microsoft Windows Operating System	3	*Select from the following: CIS 100-299 except CIS 210; CNT 100-299; CPS 100-299; ELEC 100-299, ELEC 108 recommended; WEB 100-299	
SPCH 104 Interpersonal Communication	3	CIS 129 Operating Systems for Technicians	3		
Core A Elective	3	CIS 222 Introduction to Windows Server	3		
Core B Elective	3	ELEC 100 Fundamentals of Electricity and Electronics	1		
Core C Elective	3	ELEC 125 Introduction to PC Technology	3		
Free Elective *	3	ELEC 126 Installing and Troubleshooting PC's	<u>4</u>		
Physical Education & Wellness	<u>1</u>		26		
	22				

*Select from program specific electives

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester	
CIS 105	3	CIS 115 or CNT 120	3	Core B Elective	3	CIS 129	3	Free Elective	3
CIS 110	3	CIS 127	3	Core C Elective	3	ELEC 125	3	ELEC 126	4
ENGL 101	3	Core A Elective	3			CIS 222	3	Program Electives	6
MATH 051	3	ENGL 102/104/106	3			Program Electives	6	SPCH 104 or 101	3
ELEC 100	1	Program Elective	3					PE & W	1

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Computer Repair Technology

Certificate Program – 4180

Business, Hospitality, Engineering, and Technology Division

Two programs (certificate and degree) provide increasing levels of technical expertise in PC repair related fields. Students advancing from the certificate to the degree program can carry along technical credits previously earned. The beginning computer courses are designed for students new to the computer field and may be waived for students who demonstrate competence in the topic studied. These programs are available at the Harrisburg and Gettysburg Campuses.

Career Opportunities

Graduates obtain positions as help desk attendants, computer repair technicians, and office machine repair technicians.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate the use of common business software, such as MS Office
- Adapt to changing microcomputer software and hardware environments
- Install, configure, and troubleshoot microcomputers and peripheral equipment
- Describe microcomputer technical areas such as local area networks (LANs), data communications, and multi-user systems
- Install and troubleshoot PC cabling systems
- Adapt to other PC hardware-related electronic areas, such as repair of automated office equipment using their electronics background
- Pass the A+PC Technician Certification examination

PROGRAM REQUIREMENTS (TOTAL CREDITS = 34)

General Education	Major		Other Required Courses	
	CIS 105 Introduction to Software for Business	3	MATH 051 Intermediate Algebra	3
	CIS 110 Introduction to Computer Systems	3	Program Specific Electives*	<u>5</u>
	CIS 115 Fundamentals of Network Communication or			8
	CNT 120 Network Communications Tech I	3	*Select from the following: CIS 100-299 except	
	CIS 127 Microsoft Windows Operating System	3	CIS 210; CNT 100-299; CPS 100-299; ELEC 100-299,	
	CIS 129 Operating Systems for Technicians	3	ELEC 108 recommended; WEB 100-299	
	CIS 222 Introduction to Windows Server	3		
	ELEC 100 Fundamentals of Electricity and Electronics	1		
	ELEC 125 Introduction to PC Technology	3		
	ELEC 126 Installing and Troubleshooting PCs	<u>4</u>		
		26		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Construction Codes and Safety Science

Associate in Applied Science Degree – 4730

Business, Hospitality, Engineering, and Technology Division

Students prepare to enter the job market as codes enforcement officers or administrators. Students have the choice of entering one of three programs: AAS Degree, Certificate, or Diploma. The career degree program provides additional codes courses and a broad range of general education courses to complement the skills and knowledge gained in the Certificate program. Specialized classes are held evenings only at the Harrisburg Campus.

Career Opportunities

Graduates find employment in city, county, state, or federal agencies or in the construction industry. Professionals in the field of code enforcement prepare for advanced certification. Contractors, architects, engineers, and other design professionals gain knowledge required to comply with statewide building and construction codes.

Competency Profile

This curriculum is designed to prepare students to:

- Pass examinations developed and administered by the National Certification Program for Construction Codes Inspectors (NCPCCI)
- Function as codes enforcement officers in government
- Serve as codes specialists in private industry
- Interpret and apply code provisions to buildings and their sub-systems to achieve minimum compliance and safety standards
- Supervise entry-level personnel in code administration
- Issue advanced interpretations of code provisions
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Understand how specialized training fits into the larger management and societal context

PROGRAM REQUIREMENTS (TOTAL CREDITS = 64)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	BLDC 101 International Residential Code	3	CIS 105 Intro to Software for Business	<u>3</u>
ENGL 104 Report and Technical Writing	3	BLDC 103 Non-Structural Building Code	3		3
SPCH 104 Interpersonal Communication	3	BLDC 106 Handicapped Accessibility	3		
Core A Elective	3	BLDC 111 Inspection Techniques	2		
Core B Elective*	3	BLDC 135 Property Maintenance Code	3		
Core C Elective	3	BLDC 201 Structural Building Code	3		
Free Elective	3	BLDC 203 Energy Conservation Code	3		
Physical Education & Wellness	<u>1</u>	BLDC 207 Building Plan Review	4		
	22	BLDC 221 Plumbing Code	3		
*Recommend GP 202		BLDC 223 Mechanical Code	3		
		BLDC 225 Electrical Code	3		
		BLDC 227 Fire Code	3		
		BLDC 230 Codes Administration	<u>3</u>		
			39		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semesters		Summer Semester		Fall Semester		Spring Semester	
BLDC 101	3	BLDC 201	3	BLDC 207	4	BLDC 230	3	BLDC 203	3
BLDC 103	3	BLDC 106	3	BLDC 111	2	BLDC 223	3	BLDC 227	3
ENGL 101	3	ENGL 104	3	PE & W	1	BLDC 135	3	BLDC 225	3
CIS 105	3	BLDC 221	3			SPCH 104	3	Free Elective	3
Core A Elective	3	Core C Elective	3			Core B Elective	3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Construction Codes and Safety Science

Certificate Program – 4290

Business, Hospitality, Engineering, and Technology Division

Students prepare to enter the job market as codes enforcement officers or administrators. Students have the choice of entering one of three programs: AAS Degree, Certificate, or Diploma. The Certificate program is a continuation of the Diploma program, offering additional skills and deepening students' understanding of the field. Specialized classes are held evenings only at the Harrisburg Campus.

Career Opportunities

Graduates find employment in city, county, state, or federal agencies or in the construction industry. Professionals in the field of code enforcement prepare for advanced certification. Contractors, architects, engineers, and other design professionals gain knowledge required to comply with statewide building and construction codes.

Competency Profile

This curriculum is designed to prepare students to:

- Pass examinations developed and administered by the National Certification Program for Construction Codes Inspectors (NCPCCI)
- Function as codes enforcement officers in government
- Serve as codes specialists in private industry
- Interpret and apply code provisions to buildings and their sub-systems to achieve minimum compliance and safety standards
- Supervise entry-level personnel in code administration
- Issue advanced interpretations of code provisions

PROGRAM REQUIREMENTS (TOTAL CREDITS = 36)

General Education		Major		Other Required Courses	
ENGL 104 Report and Technical Writing	3	BLDC 101 International Residential Code	3	Program Specific Electives*	6
	3	BLDC 103 Non-Structural Building Code	3		6
		BLDC 106 Handicapped Accessibility	3		
		BLDC 111 Inspection Techniques	2		
		BLDC 135 Property Maintenance Code	3		
		BLDC 201 Structural Building Code	3		
		BLDC 203 Energy Conservation Code	3		
		BLDC 207 Building Plan Review	4		
		BLDC 227 Fire Code	3		
			<u>27</u>		
				*Select program specific electives from the following:	
				BLDC 221 Plumbing Code	3
				BLDC 223 Mechanical Code	3
				BLDC 225 Electrical Code	3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Construction Codes and Safety Science

Diploma Program – 0570

Business, Hospitality, Engineering, and Technology Division

Students prepare to enter the job market as codes enforcement officers or administrators. Students have the choice of entering one of three programs: AAS Degree, Certificate, or Diploma. The Diploma program offers entry-level skills. Specialized classes are held evenings only at the Harrisburg Campus.

Career Opportunities

Graduates find employment in city, county, state, or federal agencies or in the construction industry. Professionals in the field of code enforcement prepare for advanced certification. Contractors, architects, engineers, and other design professionals gain knowledge required to comply with statewide building and construction codes.

Competency Profile

This curriculum is designed to prepare students to:

- Pass examinations developed and administered by the National Certification Program for Construction Codes Inspectors (NCPCCI)
- Function as codes enforcement officers in government
- Serve as codes specialists in private industry
- Interpret and apply code provisions to buildings and their sub-systems to achieve minimum compliance and safety standards

PROGRAM REQUIREMENTS (TOTAL CREDITS = 21)

General Education		Major		Other Required Courses	
ENGL 104 Report and Technical Writing	3	BLDC 101 International Residential Code	3	Program Specific Elective*	3
	3	BLDC 103 Non-Structural Building Code	3		
		BLDC 111 Inspection Techniques	2		
		BLDC 201 Structural Building Code	3		
		BLDC 207 Building Plan Review 4			
			15		
				*Select program specific elective from the following:	
				BLDC 221 Plumbing Code	3
				BLDC 223 Mechanical Code	3
				BLDC 225 Electrical Code	3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Construction Estimating

Diploma Program – 0520

Business, Hospitality, Engineering, and Technology Division

Students are prepared for positions in the construction/contracting field as quantity take-off technicians and estimators. The program is available only at the Harrisburg Campus, evenings only.

Career Opportunities

Graduates secure positions in the construction/contracting field as project estimators.

Competency Profile

This curriculum is designed to prepare students to:

- Display general knowledge of the construction process
- Understand construction drawings and contract specifications
- Understand construction materials, systems, and methods
- Show a working knowledge of construction law
- Estimate materials and labor requirements

PROGRAM REQUIREMENTS (TOTAL CREDITS = 21)

General Education	Major		Other Required Courses	
	ARCH 110 Construction Print Reading	3	MATH 913 Basic Applied Math III	<u>3</u>
	ARCH 130 Construction Materials and Methods	3		3
	BCT 212 Construction Contracts and Related Laws	3		
	BCT 214 Project Management	3		
	BCT 215 Construction Estimating	3		
	BLDC 103 Non-Structural Building Code	<u>3</u>		
		18		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Construction Field Supervision Diploma Program – 0530

Business, Hospitality, Engineering, and Technology Division

Students are prepared for positions in the construction/contracting field as construction inspectors or supervisors. The program is available only at the Harrisburg Campus, evenings only.

Career Opportunities

Graduates secure positions in the construction/contracting field as project supervisors.

Competency Profile

This curriculum is designed to prepare students to:

- Display general knowledge of the construction process
- Understand construction drawings and contract specifications
- Show a working knowledge of construction administration
- Demonstrate skills in planning, scheduling, and general management

PROGRAM REQUIREMENTS (TOTAL CREDITS = 21)

General Education	Major		Other Required Courses	
	ARCH 110 Construction Print Reading	3	MATH 913 Basic Applied Math III*	<u>3</u>
	ARCH 214 Site Planning and Surveying or			3
	CVTE 103 Surveying I	3		
	ARCH 251 Environmental Control Systems for Buildings	3	*May be replaced with a higher level MATH offering.	
	BCT 213 Construction Supervision and Leadership	3		
	BCT 217 Construction Project Administration	3		
	BLDC 103 Non-Structural Building Code	<u>3</u>		
		18		

Construction Project Management

Diploma Program – 0540

Business, Hospitality, Engineering, and Technology Division

Students are prepared for positions in the construction/contracting field as construction managers. The complete program is available at the Harrisburg and Lancaster Campuses.

Career Opportunities

Graduates secure positions in the construction/contracting field as project managers.

Competency Profile

This curriculum is designed to prepare students to:

- Display general knowledge of the construction process
- Understand construction drawings and contract specifications
- Understand construction materials, systems, and methods
- Demonstrate a working knowledge of construction law
- Demonstrate skills in planning, scheduling, labor relations, and general management

PROGRAM REQUIREMENTS (TOTAL CREDITS = 24)

General Education	Major		Other Required Courses	
	ARCH 110 Construction Print Reading	3	MATH 913 Basic Applied Math III	<u>3</u>
	ARCH 130 Construction Materials and Methods	3		3
	BCT 212 Construction Contracts and Related Laws	3		
	BCT 214 Project Management	3		
	BCT 216 Construction Planning and Scheduling	3		
	BCT 217 Construction Project Administration	3		
	BLDC 103 Non-Structural Building Code	<u>3</u>		
		21		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Contemporary Crafts Marketing

Associate in Arts Degree – 2760

Communications, Arts, and Social Sciences Division

In an apprenticeship environment first-semester students produce professionally designed craft objects. During the second and third semesters students modify existing designs, design prototypes, and select materials and processes to execute a limited production run. After completing marketing, studio, and entrepreneurial classes, students prepare a display booth and sell their work in retail and wholesale markets. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Graduates of the program are prepared to design, produce, and market contemporary crafts in wholesale and retail markets.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate mastery and skill in jewelry, ceramics, or glass
- Demonstrate good design skills
- Evolve a personal style of contemporary crafts
- Design and execute a contemporary crafts production line
- Develop a marketing plan and display design for retail and wholesale presentation
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 65)

General Education		Major	
ENGL 101 English Composition I	3	ART 107 Fundamentals of Three-Dimensional Design	3
ENGL 106 Written Business Communication	3	ART 108 Fundamentals of Computer Art	3
SPCH 104 Interpersonal Communication	3	ART 189 Survey of Contemporary Crafts	3
Core A ART 182 Art Through the Ages II (D)	3	ART 210 Production and Marketing I	4
Core B Elective	3	ART 211 Production and Marketing II	4
Core C MATH 100 College Math for Business	3	ART 212 Clay Design and Production	3
Free Elective	3	CIS 105 Introduction to Software for Business	3
Physical Education & Wellness	1	MGMT 121 Small Business Development and Mgmt	3
	22	MKTG 212 Personal Selling	3
		Craft Electives*	9
		Studio Art (CoOp) Electives**	5
			43

*Select 3 of the following ART courses: ART 106, 151, 152, 171, 172, 177, 178, 191

** Select from the following courses: ART 102, 105, 106, 107, 110, 111, 112, 121, 122, 131, 132, 151, 152, 161, 162, 171, 172, 174, 175, 176, 191, 201, 202, 205, 206

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 106	3	ART 210	4	ART 108	3
ART 189	3	ART 107	3	ART 212	3	ART 211	4
CIS 105	3	Craft Electives	6	MKTG 212	3	MGMT 121	3
PE & W	1	Core C MATH 100	3	SPCH 104	3	Free Elective	3
Studio Art Electives	5			Core A ART 182 (D)	3	Core B Elective	3
						Craft Elective	3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Corrections

Certificate Program – 6200

Communications, Arts, and Social Sciences Division

Students develop an understanding of the criminal justice process, juvenile law, theories of crime causation, the history and philosophy of corrections, and the resources available to promote rehabilitation in institutional or non-institutional settings. This program may require the student to submit an Act 34 Pennsylvania State Police Criminal Background Check prior to enrollment, prior to the start of a field experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean. The program may be completed in one year by daytime students at the Harrisburg and York Campuses.

Career Opportunities

Upon completion of this program, graduates begin preparation for careers as corrections officers in adult prisons, counselor trainees, house parents, or life skills workers in juvenile justice facilities.

Competency Profile

- This curriculum is designed to prepare students to:
- Demonstrate competencies needed to work as beginning professional corrections workers
- Communicate effectively with youth and adults in the corrections system
- Understand and deal effectively with juvenile and adult offenders
- Understand racially and culturally diverse populations

PROGRAM REQUIREMENTS (TOTAL CREDITS = 30)

General Education	Major	Other Required Courses
ENGL 101 English Composition I	CJ 101 Introduction to Criminal Justice	Elective Courses
3	3	9
SPCH 101 Effective Speaking	CJ 106 Introduction to Corrections	9
3	3	Select three courses from the following:
6	CJ 108 Criminology	CJ 209 Institutional Treatment of Offenders
	3	CJ 210 Noninstitutional Treatment of Offenders
	CJ 212 Criminal Law & Procedures	CJ 211 Juvenile Delinquency
	3	CJ 213 Advanced Criminology
	CJ 240 Ethics & Diverse Cultures	CJ 215 Criminal Justice Organization and Administration
	3	CJ 245 Criminal Justice Seminar in London
	15	CJ 251 Criminal Justice Internship
		PSYC 101 General Psychology
		PSYC 211 Psychology of Adolescence
		SOSC 108 Drugs and Alcohol: Use and Abuse
		SOCI 201 Introduction to Sociology
		SOCI 211 Group Dynamics
		CIS 105 Introduction to Software for Business

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The Court and Realtime Reporting program teaches verbatim realtime reporting utilizing a computerized stenotype machine to prepare students to work as judicial reporters, freelance reporters, captioners, or CART (Communication Access Realtime Translation) providers. The complete program is available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster, Lebanon Campuses and at other sites.

Career Opportunities

Graduates find employment as judicial reporters on any government level, freelance reporters as independents or agents of a freelance firm, broadcast captioners in a variety of media fields, or CART providers for hearing impaired in an educational setting. In addition, this program is designed to provide potential employment in medical, legal, and executive fields of business.

Competency Profile

This curriculum is designed to prepare students to:

- Develop machine shorthand skill to 225 words per minute on a computerized stenotype machine
- Demonstrate competency by passing required dictation tests with 95% accuracy in computerized transcription
- Display proficiency in use of CaseCATalyst software for transcription, realtime translation, and maintenance of computer dictionary
- Exhibit ability to use proper spelling, punctuation, and grammar as they relate to transcription and dictation
- Apply knowledge of medical and legal terminology and usage to chosen jobs in reporting field
- Display ability to complete internship in judicial and freelance reporting and produce a ten page transcript from each profession
- Take and pass the Registered Professional Reporter four-part exam
- Appreciate accomplishments in the arts and sciences
- Write and speak effectively

PROGRAM REQUIREMENTS (TOTAL CREDITS = 69)

General Education		Major		Other Required Courses
ENGL 101 English Composition I	3	CRT 101 Court Reporting Theory I	6	
ENGL 106 Written Business Comm.	3	CRT 102 Court Reporting Theory II	6	
SPCH 101 Effective Speaking	3	CRT 103 English for Court Reporters	2	
Core A Elective	3	CRT 104 Technology for Court Reporters	2	
Core B Elective	3	CRT 105 Medical Terminology	3	
Core C Elective	3	CRT 201 Realtime Reporting I	5	
Free Elective	3	CRT 202 Realtime Reporting II	5	
Physical Education & Wellness	1	CRT 203 Realtime Reporting III	5	
	22	CRT 204 Realtime Reporting IV	5	
		CRT 211 Court Reporting Procedures	2	
		CRT 291 Realtime Reporting Internship	3	
		PLGL 101 Introduction to Paralegalism	3	
			47	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer Session	
CRT 101	6	CRT 102	6	CRT 201	5
CRT 103	2	Core A	3	Core C	3
ENGL 101	3	CRT 104	2		
PLGL 101	3	CRT 105	3		
Fall Semester		Spring Semester		Summer Session	
CRT 202	5	CRT 203	5	CRT 204	5
ENGL 106	3	CRT 211	2	CRT 291	3
Core B	3	SPCH 101	3		
PE & W	1	Free Elective	3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Court and Realtime Reporting

Certificate Program – 1361

Business, Hospitality, Engineering, and Technology Division

The Court and Realtime Reporting program teaches verbatim realtime reporting utilizing a computerized stenotype machine to prepare students to work as judicial reporters, freelance reporters, captioners, or CART (Communication Access Realtime Translation) providers. The complete program is available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster, Lebanon Campuses and at other sites.

Career Opportunities

Graduates find employment as judicial reporters on any government level, freelance reporters as independents or agents of a freelance firm, broadcast captioners in a variety of media fields, or CART providers for hearing impaired in an educational setting. In addition, this program is designed to provide potential employment in medical, legal, and executive fields of business.

Competency Profile

This curriculum is designed to prepare students to:

- Develop machine shorthand skill to 225 words per minute on a computerized stenotype machine
- Demonstrate competency by passing required dictation tests with 95% accuracy in computerized transcription
- Display proficiency in use of CaseCATalyst software for transcription, realtime translation, and maintenance of computer dictionary
- Exhibit ability to use proper spelling, punctuation, and grammar as they relate to transcription and dictation
- Apply knowledge of medical and legal terminology and usage to chosen jobs in reporting field
- Display ability to complete internship in judicial and freelance reporting and produce a ten page transcript from each profession
- Take and pass the Registered Professional Reporter four-part exam

PROGRAM REQUIREMENTS (TOTAL CREDITS = 41)

General Education	Major	Other Required Courses
	CRT 101 Court Reporting Theory I	6
	CRT 102 Court Reporting Theory II	6
	CRT 103 English for Court Reporters	2
	CRT 104 Technology for Court Reporters	2
	CRT 201 Realtime Reporting I	5
	CRT 202 Realtime Reporting II	5
	CRT 203 Realtime Reporting III	5
	CRT 204 Realtime Reporting IV	5
	CRT 211 Court Reporting Procedures	2
	CRT 291 Realtime Reporting Internship	3
		41

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Designed for students intending careers in law enforcement, correctional rehabilitation, juvenile and adult probation and parole, private security and investigations, forensic science, military police, and criminology. This program may require the student to submit to Act 33 Child Abuse and/or Act 34 Pennsylvania State Police Criminal Background Checks prior to enrollment. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available at the Harrisburg Campus; some required courses and option(s) are available at the Lancaster, Lebanon, Gettysburg and York Campuses, and at other sites.

Career Opportunities

Career opportunities are dependent upon the curriculum option chosen. Many graduates are engaged in careers as criminal investigators, patrol officers, drug agents, prosecuting attorneys, private criminal and civil attorneys, probation and parole officers, correctional counselors, security managers, private investigators, undercover investigators, crime-scene technicians, forensic scientists, crime-lab experts, and other positions in municipal, state, federal, and private agencies.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Criminal Justice Core	
ENGL 101 English Composition I	3	CJ 101 Introduction to Criminal Justice	3
ENGL 102 English Composition II	3	CJ 108 Criminology	3
SPCH 101 Effective Speaking	3	CJ 212 Criminal Law and Procedure	3
Core A Elective	3	CJ 240 Ethics and Diverse Cultures (D)	3
Core B Elective	3		12
Core B Elective	3		
Core C Elective Math	3		
Core C Elective Science	3		
Core C Elective	3		
General Education Transfer Elective	3		
Physical Education & Wellness	1		
	<u>31</u>		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
CJ 101	3	ENGL 102	3	Core B Elective	3	CJ 240 (D)	3
CJ 108	3	SPCH 101	3	Core C (Science)	3	Core C Elective	3
CJ 212	3	Core A Elective	3			GenEd Trans. Elec.	3
ENGL 101	3	Core B Elective	3				
Core C (Math) Elec.	3	PE & W	1				

Select one of the following options to complete the Criminal Justice Transfer degree requirements.

Law Enforcement Option (19 credits)

CJ 104 Police Operations	3 (Spring only)
CJ 201 Criminal Investigation	3 (Spring only)
CJ 203 Criminal Evidence	3 (Spring only)
CJ 206 Criminalistics	4 (Varied offering)
CJ 215 CJ Organization	3 (Fall only)
Transfer Elective	3

Corrections Option (18 credits)

CJ 106 Introduction to Corrections	3 (Spring only)
CJ 209 Institutional Treatment of the Offender or	3 (Spring only)
CJ 210 Non-Institutional Treatment of the Offender	3 (Fall only)
CJ 211 Juvenile Delinquency	3
CJ 213 Advanced Criminology	3 (Spring only)
CJ 215 CJ Organization	3 (Fall only)
Transfer Elective	3

Security Administration Option (18 credits)

CJ 103 Principles of Security and Loss Prevention	3 (Spring only)
CJ 220 Physical Security and Safety	3 (Fall only)
CJ 221 Retail Security and Safety	3 (Occasional offering)
CJ 222 Industrial Security And Safety	3 (Occasional offering)
Program Specific Electives	6

General Transfer Option (18-20 credits)

CJ 103, CJ 104 or CJ 106	3 (Spring only)
Any 200 level CJ course or Transfer Elective	6-8
Transfer Electives (No CJ Courses)	9

(Select two courses from the following: ACCT 101; BUSI 101, 201; CIS 105; CJ 201, 203, 223)

Culinary Arts

Associate in Arts Degree – 1581

Business, Hospitality, Engineering, and Technology Division

The hospitality industry offers many opportunities for employment and as a result learning experiences are varied. The program provides students with instruction in food preparation, production and service in the classroom and in on campus labs. Students gain supervised concentrated food preparation and production industry experience in an off campus commercial restaurant operation which is open to the public and located in downtown Harrisburg. The program is designed to lead directly to employment and is not intended as a transfer program, although students have transferred courses to other hospitality degree programs. The Culinary Arts degree is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. HACC is a ProMgmt Partner with the National Restaurant Association Educational Foundation which affords students the opportunity to earn scholarships and a special professional certification upon graduation. This program requires the student to submit to a drug screen prior to enrollment in Restaurant Operations and practicum courses. The student should consider this before enrolling in the program. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon and Gettysburg Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Contact the program coordinator for specific program entry requirements.

Career Opportunities

Graduates obtain positions as chef, sous chef, and food production supervisor in restaurants, catering companies, hotels, resorts, or food service contract companies.

Competency Profile

This curriculum is designed to prepare students to:

- Compose a complete meal using standardized recipes: hors d'oeuvres, soups, salads, sauces, meats, poultry, game, seafood, vegetables, starches and desserts
- Fabricate meat portions from primal cuts of meat, whole poultry and fish
- Produce a wide variety of baked goods, pastries and confections
- Demonstrate decorative skills, including garnishing and cake decorating
- Show skills necessary for efficient management, including personnel supervision and cost control
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 75)

General Education		Major		Other Required Courses
ENGL 101 English Composition I	3	HRIM 100 World of Wine	1	CIS 105 Intro. to Software for Business <u>3</u>
ENGL 106 Written Business Comm.	3	HRIM 101 Introduction to Hospitality Industry	3	3
SPCH 101 Effective Speaking	3	HRIM 102 Applied Hospitality Math	2	
Core A Elective	3	HRIM 104 Nutrition for Food Service	3	
Core B Elective	3	HRIM 110 Menu Design and Marketing	3	
Core C Elective*	3	HRIM 113 Sanitation & Safety	2	
Free Elective	3	HRIM 122 Food Purchasing, Receiving, & Storing	3	
Physical Education & Wellness	<u>1</u>	HRIM 125 Dining Room Management	3	
	22	HRIM 131 Culinary Fundamentals I	3	
		HRIM 132 Culinary Techniques I	2	
		HRIM 141 Culinary Fundamentals II	3	
*MATH 100 Recommended		HRIM 142 Culinary Techniques II	2	
		HRIM 151 Culinary Fundamentals III (D)	3	
		HRIM 152 Culinary Techniques III	2	
		HRIM 205 Restaurant Operations I	2	
		HRIM 206 Restaurant Operations II	2	
		HRIM 207 Restaurant Operations III	2	
		HRIM 231 Cost Control: Food and Labor	3	
		HRIM 251 Hospitality Supervision	3	
		HRIM 291 Culinary Arts Practicum	<u>3</u>	
			50	

(continued next page)

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Semester I		Semester II		Semester III		Semester IV		Semester V	
HRIM 101	3	HRIM 104	3	HRIM 100	1	HRIM 110	3	HRIM 291	3
HRIM 102	2	HRIM 122	3	HRIM 125	3	HRIM 231	3	Core A Elective	3
HRIM 113	2	HRIM 141	3	HRIM 151 (D)	3	HRIM 251	3	Core B Elective	3
HRIM 131	3	HRIM 142	2	HRIM 152	2	HRIM 207	2	Free Elective	3
HRIM 132	2	HRIM 205	2	HRIM 206	2	Core C Elective	3	SPCH 101	3
ENGL 101	3	CIS 105	3	ENGL 106	3				
				PE & W	1				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Culinary Arts

Certificate Program – 1261

Business, Hospitality, Engineering, and Technology Division

The hospitality industry offers many opportunities for employment and as a result learning experiences are varied. The program provides students with instruction in food preparation, production and service in the classroom and in on campus labs. Students gain supervised concentrated food preparation and production industry experience in an off campus commercial restaurant operation which is open to the public and located in downtown Harrisburg. The program is designed to lead directly to employment. HACC is a ProMgmt Partner with the National Restaurant Association Educational Foundation which affords students the opportunity to earn scholarships. This program requires the student to submit to a drug screen prior to enrollment in Restaurant Operations and practicum courses. The student should consider this before enrolling in the program. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon and Gettysburg Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Contact the program coordinator for specific program entry requirements.

Career Opportunities

Job opportunities include positions as cooks in restaurants, institutions and cafeterias; bakers; and food preparation workers and servers.

Competency Profile

This curriculum is designed to prepare students to:

- Plan and prepare a complete meal following standardized recipes
- Fabricate meat portions from primal cuts of meat, whole poultry and fish
- Produce a wide variety of baked goods, pastries and confections
- Demonstrate decorative skills, including garnishing and cake decorating
- Plan menus, estimate food consumption, requisition supplies and construct a basic budget
- Show skills necessary for efficient management, including personnel supervision

PROGRAM REQUIREMENTS (TOTAL CREDITS = 47)

General Education		Major	
ENGL 106 Written Business Comm.	<u>3</u>	HRIM 100 World of Wine	1
	3	HRIM 101 Introduction to the Hospitality Industry	3
		HRIM 102 Applied Hospitality Math	2
		HRIM 104 Nutrition for Food Service	3
		HRIM 110 Menu Design and Marketing	3
		HRIM 113 Sanitation & Safety	2
		HRIM 122 Food Purchasing, Receiving, & Storing	3
		HRIM 125 Dining Room Management	3
		HRIM 131 Culinary Fundamentals I	3
		HRIM 132 Culinary Techniques I	2
		HRIM 141 Culinary Fundamentals II	3
		HRIM 142 Culinary Techniques II	2
		HRIM 151 Culinary Fundamentals III	3
		HRIM 152 Culinary Techniques III	2
		HRIM 205 Restaurant Operations I	2
		HRIM 206 Restaurant Operations II	2
		HRIM 207 Restaurant Operations III	2
		HRIM 251 Hospitality Supervision	3
		HRIM 268 Culinary Arts Internship	<u>3</u>
			44

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The hospitality industry offers many opportunities for employment and as a result learning experiences are varied. The program provides students with instruction in food preparation, production and service in the classroom and in on campus labs. This program is designed to lead directly to employment. The complete program is available only at the Harrisburg Campus; some required courses are available at Lancaster, Lebanon and Gettysburg Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Contact the program coordinator for specific program entry requirements.

Career Opportunities

Job opportunities include positions as cooks in restaurants, institutions, and cafeterias; food preparation workers and servers; catering cooks and servers; personal chef; and managing or owning a small food service or catering business.

Competency Profile

This curriculum is designed to prepare students to:

- Plan and prepare a complete meal by following standardized recipes
- Fabricate meat portions from primal cuts of meats, whole poultry and fish
- Produce a wide variety of baked goods, pastry and confections
- Demonstrate decorative skills, including garnishing and cake decorating
- Understand management techniques
- Begin a small catering or restaurant business or become a personal chef

PROGRAM REQUIREMENTS (TOTAL CREDITS = 27)

General Education	Major		Other Required Courses	
	HRIM 100 World of Wine	1	MGMT 121 Sm. Business Development	<u>3</u>
	HRIM 102 Applied Hospitality Math	2		3
	HRIM 106 Professional Bartending	1		
	HRIM 113 Sanitation & Safety	2		
	HRIM 131 Culinary Fundamentals I	3		
	HRIM 132 Culinary Techniques I	2		
	HRIM 141 Culinary Fundamentals II	3		
	HRIM 142 Culinary Techniques II	2		
	HRIM 151 Culinary Fundamentals III	3		
	HRIM 152 Culinary Techniques III	2		
	HRIM 223 Catering: Principles	1		
	HRIM 225 Catering: Garnishing	1		
	HRIM 226 Catering: Hors D'oeuvres	<u>1</u>		
		24		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Dental Assistant

Certificate Program – 3200

Mathematics, Science, and Allied Health Division

A student prepares to become an important and qualified member of a dental team. This program provides instruction and experience in various areas of dental practice, offering the opportunity for the student to acquire the knowledge, skill, and attitudes necessary to become a proficient member of a modern dental team. Pennsylvania dental law does not permit a dental assistant to perform certain procedures on patients in the clinical setting. Only those procedures legally permitted will be taught to clinical competence; all other procedures will be taught to laboratory competence. The complete program is available only at the Harrisburg Campus. Some core courses are held at the Cumberland-Perry Area Vocational-Technical School in Mechanicsburg. Some required courses are available at the Gettysburg, Lancaster, and Lebanon Campuses and at other sites. The program in Dental Assisting is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312)440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates of the program find employment as chairside assistants in a variety of dental offices: examples include, general practice, orthodontics, periodontics, oral and maxillofacial surgery, pediatrics, and endodontics. Graduates may also secure positions in dental insurance, as a dental supply representative, and as a laboratory technician.

Competency Profile

This curriculum is designed to prepare students to:

- Perform radiographic techniques in all types of dental offices
- Assist a dental practitioner in all office procedures
- Perform routine office management operations effectively
- Function in the office laboratory environment
- Participate as an integral member of the dental health team
- Sit for the Dental Assistant National Board examination
- Apply the role of dental assisting to various practice settings

PROGRAM REQUIREMENTS (TOTAL CREDITS = 40)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	DA 171 Dental Assistant I	4	BIOL 111 Introduction to Human Biology	$\frac{3}{3}$
SPCH 104 Interpersonal Communication	$\frac{3}{6}$	DA 172 Dental Assisting II	4		
		DA 173 Dental Radiology I	4		
		DA 174 Dental Radiology II	3		
		DA 175 Oral Anatomy	3		
		DA 176 Dental Specialties	3		
		DA 178 Dental Clinical Experience I	2		
		DA 179 Dental Clinical Experience II	5		
		DA 180 Dental Office Practice	$\frac{3}{31}$		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer Session	
DA 171	4	DA 172	4	DA 179	5
DA 173	4	DA 174	3	SPCH 104	3
DA 175	3	DA 176	3		
DA 180	3	DA 178	2		
BIOL 111	3	ENGL 101	3		

Post Graduate:

AH 252 Expanded Function I	4
AH 253 Expanded Function II	2

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students learn to care for clients in private dental offices and public clinics, filling a current need in the community. The program in Dental Hygiene is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312)440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The complete program is only available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster and Lebanon Campuses and at other sites. Pennsylvania Dental Law #216 states that the State Board of Dentistry may refuse to license a person whom as been convicted of a crime or misdemeanor involving moral turpitude, or a felony.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

This program prepares graduates for employment as dental hygienists that care for clients in private offices and other dental clinical facilities.

Competency Profile

This curriculum is designed to prepare students to:

- Utilize the dental hygiene process of care (assessment, planning, implementation, and evaluation) in the provision of comprehensive treatment to all clients in the community without discrimination
- Demonstrate accountability in dental hygiene practice
- Apply the roles of dental hygiene to various practice settings, demonstrating competence, ethical behaviors, and professionalism
- Participate as an integral member of the dental health team, providing expertise in the area of preventive health care
- Perform to the level of competency specified by the faculty, the state board of dental examiners, and employers, those oral health services legally approved for a dental hygienist in the Commonwealth of Pennsylvania, and other states and territories
- Value a commitment to professional organizations and continuing education
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Render service to all patients without regard to race, ethnicity, physical or psychological impairments

PROGRAM REQUIREMENTS (TOTAL CREDITS = 81)

General Education	Major	Other Required Courses
ENGL 101 English Composition I	3	BIOL 121 Anatomy & Physiology I
ENGL 102 English Composition II	3	BIOL 122 Anatomy & Physiology II
SPCH 101 Effective Speaking	3	BIOL 221 Microbiology
Core A Elective	3	BIOL 245 Anatomy & Histology of the
Core B Elective	3	Head and Neck
Free Elective	3	NUTR 104 Nutrition
Physical Education & Wellness	1	PSYC 101 General Psychology
	19	SOCI 201 Introduction to Sociology (D)
		<u>3</u>
		25
	DH 101 Clinical Experience I	
	4	
	DH 102 Clinical Experience II	
	4	
	DH 110 Dental Radiology I	
	3	
	DH 111 Dental Radiology II	
	1	
	DH 120 Dental Anatomy I	
	2	
	DH 121 Periodontics I	
	2	
	DH 130 Medical/Dental Emergencies	
	1	
	DH 201 Clinical Experience III	
	5	
	DH 202 Clinical Experience IV	
	4	
	DH 210 Dental Materials	
	2	
	DH 221 Periodontics II	
	2	
	DH 222 Periodontics III	
	1	
	DH 230 Oral Pathology	
	2	
	DH 233 Community Dental Health I	
	1	
	DH 234 Community Dental Health II	
	1	
	DH 240 Pharmacology	
	2	
	<u>37</u>	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Summer Session		Fall Semester		Spring Semester	
BIOL 121	4	DH 101	4	DH 102	4
ENGL 101	3	DH 110	3	DH 111	1
		DH 120	2	DH 121	2
		BIOL 122	4	DH 130	1

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Diagnostic Medical Sonography – Ultrasound Technology

Associate in Science Degree – 3540

Mathematics, Science, and Allied Health Division

Students learn to perform ultrasound examinations—general: abdomen and small parts, obstetrics and gynecology—including preparation of patients and use of various types of equipment and transducers. The program is offered in cooperation with affiliated hospitals and medical imaging centers; the College provides classroom instruction, while the hospitals and imaging centers provide the clinical instruction. The program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography. The complete program is available only at the Harrisburg Campus.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates find employment as sonographers in hospital ultrasound departments and independent medical imaging centers.

Competency Profile

This curriculum is designed to prepare students to:

- Work effectively with other healthcare personnel
- Demonstrate the skills prescribed by the Council on Allied Health Education and Accreditation
- Take the registry examination administered by the American Registry of Diagnostic Medical Sonography
- Understand how specialized training fits into the healthcare delivery system
- Upon graduation, be proficient as an entry-level sonographer

PROGRAM REQUIREMENTS (TOTAL CREDITS = 76)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ULSO 201 Abdominal Ultrasound I	4	AH 140 Introduction to Allied Health	3
ENGL 102 English Composition II	3	ULSO 202 Abdominal Ultrasound II	4	AH 141 Patient Care Skills Laboratory	1
SPCH 101 Effective Speaking or		ULSO 206 Obstetrics I	3	BIOL 121 Anatomy & Physiology I	4
SPCH 104 Interpersonal Communication	3	ULSO 207 Obstetrics II	3	BIOL 122 Anatomy & Physiology II	4
Core A Elective	3	ULSO 208 Gynecology	4	MATH 103 College Algebra	3
Core B Elective	3	ULSO 215 Small Parts	2	PHYS 151 Physics for Technicians	4
Free Elective	3	ULSO 216 Intro to Vascular Sonography	2		
Physical Education & Wellness	1	ULSO 220 Clinical Experience I	3		
	19	ULSO 221 Clinical Experience II	3		
		ULSO 223 Clinical Experience III	4		
		ULSO 225 Acoustical Princ. & Instrum. I	4		
		ULSO 226 Acoustical Princ. & Instrum. II	2		
			38		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Spring Semester	Summer Semester	Fall Session
ENGL 101 3	ENGL 102 3	SPCH 101 or 104 3
BIOL 121 4	BIOL 122 4	AH 140 3
MATH 103 3	PE & W 1	AH 141 1
Core A Elective 3	Core B Elective 3	PHYS 151 4
		Free Elective 3

Spring Semester	Summer Semester	Fall Semester
ULSO 201 4	ULSO 202 4	ULSO 207 3
ULSO 208 4	ULSO 206 3	ULSO 216 2
ULSO 220 3	ULSO 215 2	ULSO 223 4
ULSO 225 4	ULSO 221 3	
	ULSO 226 2	

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Dietary Manager

Associate in Arts Degree – 1611

Business, Hospitality, Engineering, and Technology Division

The healthcare industry offers many opportunities for employment and as a result learning experiences are varied. This food service management program provides the student with instruction in food preparation, production and service in the classroom and in on campus labs and in an off campus commercial restaurant operation which is open to the public and located in downtown Harrisburg. In the Dietary Manager courses (HRIM 273, 274, 275, and 276) the student must be supervised by a Registered Dietitian who has at least one year of experience. Students who successfully complete the program have the opportunity to sit for the Dietary Managers Association certification exams after completing HRIM 113, 251, 273, 274, 275, and 276. This degree program includes not only specialized courses but also courses in related business areas and in general education, which allow the student to become an effective, well-rounded manager. This program is designed to lead directly to employment and is not intended as a transfer program. The Dietary Manager degree is approved by the Dietary Managers Association and is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. HACC is also a ProMgmt Partner with the National Restaurant Association Educational Foundation which affords students the opportunity to earn scholarships and a special professional certificate upon graduation. This program requires the student to submit to a drug screen prior to enrollment in Restaurant Operations courses. Upon employment and possibly during field experience, students must submit to Act 34 Pennsylvania State Police Criminal Background Checks. The student should consider this before enrolling in the program. The complete program is available at the Harrisburg Campus and biennially at the Lancaster Campus; some required courses are available at the Lebanon and Gettysburg Campuses and at other sites.



Career Opportunities

Graduates of the program are employed in dietary departments of healthcare institutions, childcare centers, retirement communities, assisted living facilities, schools and correctional facilities.

Competency Profile

This curriculum is designed to prepare students to:

- Apply nutritional principles to dietary department management in healthcare facilities
- Provide basic medical nutrition therapy under the supervision of a registered dietitian
- Display knowledge of basic food preparation and production
- Use appropriate supervisory style
- Apply financial information to internal control and operational decision making
- Use computers for management activities
- Follow federal, state, and local regulations
- Sit for the certification exam of the Dietary Manager Association
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 70)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	HRIM 101 Introduction to Hospitality	3	BIOL 105 Medical Terminology	3
ENGL 102 English Composition II or		HRIM 102 Applied Hospitality Math	2	CIS 105 Introduction to Software for Bus.	3
ENGL 104 Report and Technical Writing or		HRIM 113 Sanitation & Safety	2	Business or Management Elective*	<u>3</u>
ENGL 106 Written Business Comm.	3	HRIM 122 Food Purchasing,			9
SPCH 101 Effective Speaking	3	Receiving, & Storing	3		
Core A Elective	3	HRIM 131 Culinary Fundamentals I	3	*Select from the following areas: ACCT; AOS;	
Core B Elective	3	HRIM 132 Culinary Techniques I	2	BUSI; CIS; HRIM; MGMT; MKTG; TOUR; WEB	
Core C Elective	3	HRIM 141 Culinary Fundamentals II	3		
Free Elective	3	HRIM 142 Culinary Techniques II	2		
Physical Education & Wellness	<u>1</u>	HRIM 205 Restaurant Operations I	2		
	22	HRIM 206 Restaurant Operations II	2		
		HRIM 231 Cost Control: Food & Labor	3		
		HRIM 251 Hospitality Supervision	3		
		HRIM 273 Dietary Manager I	3		
		HRIM 274 Dietary Manager Experience I	2		
		HRIM 275 Dietary Manager II	2		
		HRIM 276 Dietary Manager Experience II	<u>2</u>		
			39		

(continued next page)

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Dietary Manager**Associate in Arts Degree – 1611 (continued)***Business, Hospitality, Engineering, and Technology Division***RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS**

Part-time students can complete this program by taking one or more courses each semester.

Semester I		Semester II		Semester III		Semester IV		Semester V	
ENGL 101	3	ENGL 102, 104, or 106	3	HRIM 206	2	HRIM 122	3	HRIM 251	3
HRIM 101	3			CIS 105	3	HRIM 231	3	HRIM 275	2
HRIM 102	2	HRIM 141	3	Core C Elective	3	HRIM 273	3	HRIM 276	2
HRIM 113	2	HRIM 142	2	SPCH 101	3	HRIM 274	2	Core B Elective	3
HRIM 131	3	HRIM 205	2			Core A Elective	3	Bus/Mgmt Elective	3
HRIM 132	2	BIOL 105	3					Free Elective	3
		PE & W	1						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The hospitality industry offers many opportunities for employment. Whenever appropriate, the programs include supervised on-the-job experience; HACC has state-of-the-art on-campus facilities for food preparation, production, and service. The Hotel and Restaurant Management AA degree programs in Culinary Arts, Healthcare, and Restaurant and Food Service Management are accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. This program is designed for individuals who are employed and is not intended for transfer. This program is designed for persons currently employed in an institutional setting where they can be supervised by a Registered Dietitian who has at least one year experience. Upon completion of HRIM 113, 251, 273, 274, 275 and 276 the student is eligible to sit for the certification test of the Dietary Managers Association. The complete program is available only at the Harrisburg Campus but is offered occasionally using compressed video with the Lancaster Campus.



Career Opportunities

Graduates of the program are usually employed as supervisors or department managers in dietary departments of healthcare institutions or assisted living facilities.

Competency Profile

This curriculum is designed to prepare students to:

- Apply nutritional principles to dietary department management in long-term care facilities
- Display knowledge of basic food preparation and production
- Use a motivational supervisory style
- Follow federal, state and local regulations in work situations
- Sit for the certification test of the Dietary Managers Association

PROGRAM REQUIREMENTS (TOTAL CREDITS = 17)

General Education		Major	
ENGL 106 Written Business Communication	3	HRIM 113 Sanitation & Safety	2
	3	HRIM 251 Hospitality Supervision	3
		HRIM 273 Dietary Manager I	3
		HRIM 274 Dietary Manager Experience I	2
		HRIM 275 Dietary Manager II	2
		HRIM 276 Dietary Manager Experience II	<u>2</u>
			14

Early Childhood Education

Associate in Arts Degree – 5500

Communications, Arts, and Social Sciences Division

The Early Childhood Education program prepares students to work in a variety of inclusive early childhood programs. This program is intended to lead directly to an occupation. It fulfills requirements of the Pennsylvania Department of Education for Assistant Nursery School teachers and provides the qualifications for child care staff required by the Department of Public Welfare. Graduates of this program are not qualified for Pennsylvania early childhood/elementary teaching certificates, which require a baccalaureate degree. This program requires the student to submit to Act 33 Child Abuse and Act 34 Pennsylvania State Police Criminal Background Checks prior to the start of a lab or field experience or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Program Director. The complete program is available at the Harrisburg, Lancaster, Lebanon and York Campuses; selected courses are available at the Gettysburg Campus.

Career Opportunities

Graduates of this program can obtain employment as lead teachers or program directors in childcare centers and Head Start Programs. They may also be employed as assistant teachers in nursery schools and private kindergarten programs or be self-employed as family child care providers.

Competency Profile

This curriculum is designed to prepare students to:

- Plan and supervise educational activities that promote the development of cognitive, creative, and physical abilities in young children
- Assess children’s developmental levels and respond to their diverse abilities and multicultural differences
- Arrange a safe, stimulating classroom environment that enhances children’s social and emotional development and that includes a positive approach to managing behavior
- Communicate effectively with children, parents, and staff
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 69)

General Education		Major	
ENGL 101 English Composition I	3	CIS 109 Integrating Technology into the K-12 Classroom	3
ENGL 102 English Composition II	3	EDUC 122 Child Observation Strategies	1
SPCH 101 Effective Speaking or		EDUC 208 Early Childhood Education Practicum or	6
SPCH 104 Interpersonal Communication	3	EDUC 205 Practicum in Family Child Care	
Core A Elective	3	EDUC 232 Development & Behavior of Children: Birth -12 Years or	
Core B, PSYC 101 General Psychology	3	*PSYC 212 Child Growth and Development	3
Core C Elective	3	EDUC 231 The Early Childhood Professional	3
Free Elective	3	EDUC 240 Introduction to ECE	3
Physical Education & Wellness	1	EDUC 242 Health, Safety and Nutrition in ECE	3
	22	EDUC 247 Introduction to Programs for Young Children with Special Needs	3
		EDUC 248 Mathematics and Science for Young Children	3
		EDUC 250 Family Focused Infant and Toddler Care	4
		EDUC 254 Creative Experience in ECE	3
		EDUC 124 EDUC Lab: Creative Arts	1
		EDUC 256 Early Childhood Literacy & Language Arts	3
		EDUC 126 EDUC Lab: Literacy & Language Arts	1
		EDUC 258 Curriculum Development in ECE	3
		EDUC 128 EDUC Lab: Curriculum Development	1
		EDUC Elective	3
			47

*PSYC 212 has a prerequisite of PSYC 101. Students electing this course may need to consult an advisor to plan their sequence of courses.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer	Fall Semester	Spring Semester
ENGL 101 3	EDUC 232 or PSYC 212 3	Core A 3	EDUC 258 3	EDUC 208 or 205 6
EDUC 231 3	CIS 109 3	Core C 3	EDUC 128 1	Free Elective 3
EDUC 242 3	SPCH 101 or 104 3		EDUC 250 4	EDUC 248 3
PSYC 101 3	EDUC 240 3		EDUC 247 3	EDUC Elective 3
EDUC 256 3	EDUC 254 3		ENGL 102 3	
EDUC 126 1	EDUC 124 1		PE & W 1	
EDUC 122 1				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Electrical Technology – Electrical Occupations

Diploma Program – 0300

Business, Hospitality, Engineering, and Technology Division

The Electrical Technology Diploma program prepares students with the knowledge and skills needed for immediate job entry. Emphasis is placed on residential and small commercial applications. Topics include basic electrical theory, residential and commercial wiring, safety, the National Electrical Code, and blueprint reading. Students calculate, install, and troubleshoot typical circuits. The program is offered at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus. Students may attend full time during the day or part time during the evening.

Career Opportunities

Graduates are employed as entry level maintenance and electrician helpers/apprentices.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate a variety of technical skills in the electrical field and understand safety requirements, as needed, to meet workplace quality standards
- Properly and safely handle electrical tools and materials
- Read and interpret blueprints necessary for specified installations
- Demonstrate procedures used in residential, commercial, and industrial electrical construction
- Troubleshoot equipment and demonstrate repair procedures

PROGRAM REQUIREMENTS (TOTAL CREDITS = 25)

General Education	Major		Other Required Courses	
	ELOC 153 Fundamentals of Electricity	4	Program electives*	<u>6</u>
	ELOC 157 Electrical Wiring I	4		6
	ELOC 163 Electrical Wiring II	4		
	ELOC 172 National Electrical Code	2	* Select program electives from the following:	
	GTEC 101 Safety and Health in the Workplace	3	ELOC 165, 171; ENGL 901 or higher level;	
	GTEC 130 Blueprint reading: Electrical	<u>2</u>	IMT 102; MATH 913 or higher level	
		19		

Electrical Technology

Associate in Applied Science Degree – 4750

Business, Hospitality, Engineering, and Technology Division

The Electrical Technology Career Degree Program prepares students with the knowledge and skills needed for employment and advancement in the electrical field. Emphasis is placed on residential and commercial applications of this technology. Topics include basic electrical theory, residential and commercial wiring, safety, the National Electrical Code, and blueprint reading. In addition, students elect those advanced technical courses which best meet their career goals within the electrical field. The program is offered at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus. Students can attend full time during the day or part time during the evening.

Career Opportunities

Graduates of this program are employed as general electricians, residential service technicians, commercial service technicians, electrical-equipment repair technicians, electrical system installers, maintenance technicians, work-team supervisors, electrical estimators, and electrical system designers.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate a variety of technical skills in the electrical field
- Understand and practice safe and healthy work procedures
- Properly and safely handle electrical tools and materials
- Read and interpret blueprints necessary for specified installations
- Interpret the National Electric Code and use it in specific applications
- Demonstrate procedures used in residential, commercial, and industrial electrical construction
- Wire complex motor and control circuits
- Install, maintain, and repair automated electrical systems
- Solve complex problems of circuit design and analysis
- Troubleshoot equipment and demonstrate proper repair procedures
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 65)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ELOC 153 Fundamentals of Electricity	4	MATH 102 Technical Math for Electronics 3	
ENGL 104 Report and Technical Writing	3	ELOC 157 Electrical Wiring I	4	Program electives*	<u>21</u>
SPCH 104 Interpersonal Communication	3	ELOC 163 Electrical Wiring II	4		24
Core A Elective	3	ELOC 172 National Electric Code	2	Select program electives from the following:	
Core B Elective	3	GTEC 101 Safety and Health in the Workplace	3	CIS 105; ELOC 165, 168, 171, 175, 291; ELEC 107, 108; IA 201, 202, 208, 213, 221; IMT 102, 104, 204; MATH 913 if taken to meet ET diploma requirements; MGMT 119, 121, 201, 226; MKTG 212; WELD 111	
Core C Elective	3	GTEC 130 Blueprint Reading: Electrical	<u>2</u>		
Free Elective	3		19		
Physical Education & Wellness	<u>1</u>				
	22				

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ELOC 153	4	ELOC 157	4	ENGL 101	3	ENGL 104	3
ELOC 172	2	ELOC 163	4	SPCH 104	3	Core B Elective	3
GTEC 101	3	MATH 102	3	Core A Elective	3	Core C Elective	3
GTEC 130	2	Program Electives	6	Program Electives	6	Free Elective	3
Program Electives	6					PE & W	1
						Program Elective	3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The Electrical Technology Certificate program prepares students with the knowledge and skills needed for employment in the electrical field. Emphasis is placed on residential and light-commercial applications of this technology. Topics include basic electrical theory, residential and commercial wiring, safety, the National Electrical Code, and blueprint reading. In addition, students elect those advanced technical courses which best meet their career goals within the electrical field. The program is offered at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus. Students can attend full time during the day or part time during the evening.

Career Opportunities

Graduates of this program are employed as general electricians, electrician apprentices, residential electricians, electrical service technicians, electric linemen, electric installers and industrial maintenance technicians.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate a variety of technical skills in the electrical field
- Understand and practice safe and healthy work procedures
- Properly and safely handle electrical tools and materials
- Read and interpret blueprints necessary for specified installations
- Interpret the National Electric Code and use it in specific applications
- Demonstrate procedures used in residential, commercial, and industrial electrical construction
- Wire motor and control circuits
- Install, maintain, and repair automated electrical systems
- Solve complex problems of circuit design and analysis
- Troubleshoot equipment and demonstrate proper repair procedures

PROGRAM REQUIREMENTS (TOTAL CREDITS = 35)

General Education	Major	Other Required Courses
ENGL 104 Report and Technical Writing 3	ELOC 153 Fundamentals of Electricity 4	MATH 102 Technical Math for Electronics 3
	ELOC 157 Electrical Wiring I 4	Program electives* 10
	ELOC 163 Electrical Wiring II 4	13
	ELOC 172 National Electric Code 2	*Select program electives from the following:
	GTEC 101 Safety and Health in the Workplace 3	CIS 105; ELOC 165, 168, 171, 175;
	GTEC 130 Blueprint Reading: Electrical 2	IA 201, 202, 208, 213, 221; IMT 102, 104, 204;
	19	MATH 913 if taken to meet ET diploma requirements;
		WELD 111

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Electronic Engineering Technology

Associate in Science Degree – 4580

Business, Hospitality, Engineering, and Technology Division

Students prepare to enter the job market as electronic or electro-mechanical technicians working with electrical or electronic systems, digital systems, and computer equipment. The complete program is available only at the Harrisburg Campus; several required courses are available at the Lancaster and Lebanon Campuses and at other sites.

Career Opportunities

Graduates of the program enter the electrical or electronic job market as high-level service technicians. They assist the engineering staff in the design, construction, and testing of prototype equipment manufactured in today's advanced technologies.

Competency Profile

This curriculum is designed to prepare students to:

- Assist in the design and development of new devices
- Install, operate, service, and maintain complex electrical and electronic equipment
- Prepare reports, specifications, and manuals under the direction of scientists and engineers
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS =62)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	CAD 154 Computer Aided Drafting & Design or		MATH 103 College Algebra	3
ENGL 102 English Composition II or		MDRF 101 Engineering Drawing	3-2	MATH 104 Trigonometry	3
ENGL 104 Report and Technical Writing	3	ELEC 100 Fundamentals of Electricity and Electronics	1		6
SPCH 101 Effective Speaking or		ELEC 101 Equipment Utilization	1		
SPCH 104 Interpersonal Communication	3	ELEC 106 Fundamentals of Electronics	4		
Core A Elective	3	ELEC 108 Applied Digital Electronics	3		
Core B Elective	3	ELEC 111 AC/DC Circuits I	4		
Free Elective	3	ELEC 125 Introduction to PC Technology	3		
Physical Education & Wellness	1	ELEC 126 Installing and Troubleshooting PCs	4		
	19	ELEC 203 Electronic Circuit Design	4		
		ELEC 211 AC/DC Circuits II	4		
		ELEC 213 Digital Electronics	4		
		GTEC 111 General Technology Orientation	1		
		IA 208 PLCs and Automation or			
		IA 213 Troubleshooting PLCs	2-3		
			37		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer Session		Fall Semester		Spring Semester	
ELEC 100	1	ELEC 111	4	Core A Elective	3	Free Elective	3	SPCH 104 or 101	3
ELEC 101	1	ELEC 125	3	Core B Elective	3	ELEC 106	4	ELEC 126	4
ELEC 108	3	MATH 103	3			ELEC 211	4	ELEC 203	4
CAD 154 or		ENGL 104 or 102	3			MATH 104	3	ELEC 213	4
MDRF 101	3-2	IA 208 or 213	2-3			PE & W	1		
GTEC 111	1								
ENGL 101	3								

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

This program is designed primarily for students who are working in electronics and wish to advance in their careers. The program is available only at the Harrisburg Campus.

Career Opportunities

Graduates of the program enter the job market at an introductory level in a variety of electronic-related industries as service technicians or technical information specialists. They work in a laboratory or customer-oriented environment.

Competency Profile

This curriculum is designed to prepare students to:

- Construct electronic prototype circuits
- Test electronic circuits with modern laboratory equipment
- Install, operate, service, and troubleshoot complex electrical and electronic equipment
- Prepare reports under the supervision of engineers

PROGRAM REQUIREMENTS (TOTAL CREDITS = 31)

General Education	Major	Other Required Courses	
	ELEC 100 Fundamentals of Electricity and Electronics	MATH 103 College Algebra	3
	ELEC 101 Equipment Utilization	MATH 104 Trigonometry	3
	ELEC 106 Fundamentals of Electronics		6
	ELEC 108 Digital		3
	ELEC 111 AC/DC Circuits I		4
	ELEC 125 Introduction to PC Technology		3
	ELEC 126 Installing and Troubleshooting PCs		4
	ELEC 213 Digital Electronics		4
	GTEC 111 General Technology Orientation		1
			25

Elementary Education

Associate in Arts Degree – 5100

Communications, Arts, and Social Sciences Division

The College’s range of education programs allows students planning a career in teaching to complete the first two years of a transfer program and earn an associate in arts degree whether they plan to teach in elementary or secondary schools. All students should be aware of the standards of the Pennsylvania Department of Education and that they specify different preparations for elementary and secondary school teachers.

The PA State Board of Education passed new requirements for admission to, as well as exit from, professional education programs. On October 7, 2000, Title 22 of the PA School Code, Chapter 354, became law. This regulation affects every institution that prepares teachers in the Commonwealth of Pennsylvania. These requirements affect all (elementary and secondary) bachelor’s level-education programs for PA Teacher Certification. Students who complete 48 credit hours after August 15, 2002 but prior to August 15, 2003 must have a 2.8 GPA (3.0 GPA after August 15, 2003) to enter professional courses leading to initial teacher certification. They will also be required to attain a qualifying score on the PRAXIS-I Academic Skills Assessment test.

Each student will be required to have an Act 34 Criminal Background Investigation and an Act 151 Child Abuse Clearance prior to any practicum/student teaching experience and employment. The student should consider these factors prior to enrolling in this program.

Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college’s catalog. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

This transfer Pre-Teaching curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	Communication/Arts Elective	3
ENGL 102 English Composition II	3	CIS 105 Intro to Software for Business	3
SPCH 101 Effective Speaking	3	EDUC 101 Foundation of Education	3
Core A Elective	3	EDUC 202 Intro to Educating Children	
Core B Elective *	3	with Exceptionalities	3
Core B Elective (PSYC 101)	3	EDUC 203 Intro to Classroom Instruction	3
Core C Elective Math **	3	MATH Elective**	3
Core C Elective Science	3	PSYC 201 Educational Psychology	3
Core C Elective (Recommend Science)	3	PSYC 212 Child Growth and Development	3
General Education Transfer Elective	3	Transfer Electives	6
Physical Education & Wellness	1		30
	31		

*Select from HIST 101(D), 102(D), 103, 104, 107, 201, 202

**Select from MATH 103, 104, 110, 111, 113, 114, 119, 121, 122, 202

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	SPCH 101	3	EDUC 202	3
EDUC 101	3	EDUC 203	3	PSYC 212	3	Transfer Elective	3
MATH Elective	3	Core C MATH	3	Core B HIST	3	Core C Science	3
Core A	3	CIS 105	3	Core C Science	3	C&A Elective	3
PSYC 101 (Core B)	3	PSYC 201	3	Transfer Elective	3	Gen Ed Trans. Elect	3
				PE & W	1		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Emergency Health Services Management

Associate in Arts Degree – 3500

Mathematics, Science, and Allied Health Division

Students are prepared for leadership roles in a wide variety of settings related to emergency health services; management skills are emphasized. The program is designed to help students currently employed in the field advance in their careers. The complete program is available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster, and Lebanon Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Program is designed for graduates to advance in their careers.

Competency Profile

This curriculum is designed to prepare students to:

- Assume leadership roles in various occupational settings in emergency health systems
- Interact effectively with other professionals in the health care system
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	EMS 240 EMS: Introduction	3	BIOL 111 Introduction to Human Biology	3
ENGL 104 Report and Technical Writing	3	EMS 241 EMS: Externship	3	PSYC 101 General Psychology	3
SPCH 101 Effective Speaking	3	EMS 242 EMS: Management	3	SOCI 201 Introduction to Sociology (D)	3
Core A Elective	3	MGMT 201 Principles of Management	3	MATH 103 College Algebra	3
Core B Elective	3	MGMT 203 Human Resources	3	ACCT 101 Principles of Accounting I	4
Core C Elective	3	BUSI 101 Intro to Business or	3	ACCT 200 Principles of Accounting II	4
Free Elective	3	BUSI 201 Business Law I or	3	CIS 105 Introduction to Software for Business	3
Physical Education & Wellness	<u>1</u>	ECON 201 Principles Econ. I	<u>3</u>	or CPS 113 Basic Programming	<u>3</u>
	22		18		23

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer Session	Fall Semester	Spring Semester
BIOL 111 3	ACCT 101 4	SOCI 201 (D) 3	ACCT 200 4	CIS 105 or CPS 113 3
EMS 240 3	BUSI 101 or 201 or		EMS 242 3	EMS 241 3
ENGL 101 3	ECON 201 3		MGMT 203 3	Core A Elective 3
PSYC 101 3	ENGL 104 3		MATH 103 3	Core C Elective 3
SPCH 101 3	MGMT 201 3		Core B Elective 3	Free Elective 3
PE & W 1				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Emergency Medical Technician – Basic

Certificate Program – Noncredit

Healthcare and Emergency Medical Services

An Emergency Medical Technician (EMT) is an entry level healthcare professional who upon successful completion of this 140-hour program along with the Pennsylvania Department of Health practical and written exams provides emergency medical care at the scene of illness or injury that may be simple to complex. All EMT (-B) candidates are required to submit a true and complete Pennsylvania Department of Health Criminal History Reporting form at the beginning of the educational program. Specific admission criteria must be met prior to the start of the program. The following courses are recommended though not required: Cardiopulmonary Resuscitation (CPR) and/or First Aid. HACC offers the EMT program at a variety of locations throughout the Commonwealth of Pennsylvania.

Career Opportunities

Typically, EMT's are employed by many organizations both public and private including ambulance companies or a fire department as a professional responder. Opportunities for employment can also exist in a variety of other healthcare, recreational and industrial settings. Frequently, patient care experience as an EMT can provide valuable insight in both academic and clinical components of other health careers should they choose to obtain other related professional degrees or licensure. A few examples may include Nursing (R.N.), EMT-Paramedic, Physician Assistant, or Physician.

Competency Profile

This curriculum is designed to prepare students to:

- Perform a rapid patient assessment
- Provide oxygen therapy and ventilation support
- Assist patients with certain medications
- Control external hemorrhage and splint suspected fractured bones
- Administer CPR and utilize an automated external defibrillator
- Efficiently transport patients to an appropriate healthcare facility
- Manage situations and conditions that may be constantly changing
- Develop patient rapport with patients of different cultural, socioeconomic and age groups

Please NOTE: The EMT-Basic Certificate program may be used as a free elective toward specific HACC degree programs.

PROGRAM REQUIREMENTS

The student must successfully complete the entire 140 hour program.

Students prepare to continue study toward the baccalaureate degree in engineering at a four-year institution. This curriculum places emphasis on mathematics and its application in the sciences; only students of high academic potential who have demonstrated excellence in mathematics will be admitted. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution. Engineers are employed in research and development, design, manufacturing, consulting, teaching, and administration in such areas as aerospace, agriculture, ceramics, chemicals, electrical and mechanical devices, metallurgy, and mining.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education		Major	
ENGL 101 English Composition I	3	CAD 154 Computer-Aided Drafting & Design	2
ENGL 102 English Composition II or		CPS 135 C Programming or	
ENGL 104 Report and Technical Writing	3	CPS 141 Pascal Programming or	
SPCH 101 Effective Speaking or		CPS 151 FORTRAN Programming	3
SPCH 1104 Interpersonal Communication	3	ENGR 100 Engineering Orientation	1
Core A Elective	3	ENGR 213 Statics	3
Core B Elective	3	GTEC 111 Technology Orientation	1
Core B (ECON 201 Principles of Economics I: Macro)	3	MATH 221 Calculus III	4
Core C (CHEM 101 General Inorganic Chemistry I)	4	MATH 222 Differential Equations	4
Core C (MATH 121 Calculus I)	4	PHYS 211 Physics for Engineers & Scientists I	4
Core C (MATH 122 Calculus II)	4	PHYS 212 Physics for Engineers & Scientists II	4
General Education Transfer Elective	3	Program Specific Elective*	3
Physical Education & Wellness	<u>1</u>		29
	34		

*Select one course from the following: BIOL 101; CHEM 102, 203; CPS 135, 141, 151, 161; ELEC 213; ENGR 214, 291; ENGY 111; ENVS 201; GEOL 101; MATH 125, 202, 220; PHYS 215

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
CAD 154	2	CPS 135, 141, or		ENGR 213	3	ECON 201 (Core B)	3
CHEM 101 (Core C)	4	151	3	MATH 221	4	MATH 222	4
ENGL 101	3	GTEC 111	1	PHYS 211	4	PHYS 212	4
ENGR 100	1	ENGL 102 or 104	3	Core A Elective	3	GenEd Trans. Elec.	3
MATH 121 (Core C)	4	MATH 122 (Core C)	4	Program Specific			
PE & W	1	SPCH 101 or 104	3	Elective	3		
		Core B Elective	3				

Entrepreneurial Leadership

Associate in Arts Degree – 1660

Business, Hospitality, Engineering, and Technology Division

Students acquire the knowledge and skills to become an entrepreneurial leader in a start-up business, existing business, government or non-profit organization. Skills developed in marketing, management and finance lead to the development of a sound business plan. Students and entrepreneurs already in the start-up stages of their business may take individual courses as needed. The complete program is available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster, and Lebanon Campuses and at other sites.

Career Opportunities

Entrepreneurial leadership graduates are prepared to start or expand their own business, governmental enterprise, or non-profit organization as owners, CEOs, or executives.

Competency Profile

This curriculum is designed to prepare students to:

- Develop a management plan for a new or existing small business or enterprise
- Develop a marketing plan for a new or existing small business or enterprise
- Develop a financial plan for a new or existing small business or enterprise
- Develop a comprehensive business plan.
- Appreciate accomplishments in the arts and sciences
- Write and speak effectively
- Understand small business' role in regional economic development

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major		Other Required Courses
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	
ENGL 102 English Composition II or		BUSI 209 Legal Environment for Business	3	
ENGL 106 Written Business Com	3	Computer Elective*	3	
SPCH 101 Effective Speaking or		ENTR 103 Product Management		
SPCH 104 Interpersonal Communication	3	for the Entrepreneur	3	
Core A Elective	3	ENTR 201 Marketing for the Entrepreneur	3	
Core B (ECON 201 Recommended)	3	ENTR 203 Finance and Accounting for the		
Core C Elective	3	Entrepreneur	4	
Free Elective	3	ENTR 271 Entrepreneurial Capstone	3	
Physical Education & Wellness	1	ENTR 273 Entrepreneurial Practicum	2	
	22	MGMT 121 Small Business Development		
		And Management	3	
		MGMT 203 Human Resources Management	3	
		MKTG 212 Personal Selling	3	
		MKTG 218 Advertising	3	
		MKTG 235 Internet Marketing or		
		WEB 205 Electronic Commerce	3	
			40	

*Select any CIS course; CIS 105 recommended

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester		Summer Session	
MGMT 121	3	ENTR 201	3	MKTG 218	3	MKTG 212	3	ENTR 273	2
ENTR 103	3	BUSI 209	3	ACCT 101	4	ENTR 203	4		
ENGL 101	3	ENGL 102 or 106	3	MGMT 203	3	ENTR 271	3		
Computer Elective	3	MKTG 235 or		Core A	3	SPCH 101 or 104	3		
Core B (ECON 201)	3	WEB 205	3	Core C	3	Free Elective	3		
		PE & W	1						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students acquire the knowledge and skills to become an entrepreneurial leader in a start-up business, existing business, government or non-profit organization. Skills developed in marketing, management and finance lead to the development of a sound business plan. Students and entrepreneurs already in the start-up stages of their business may take individual courses as needed. The complete program is available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster, and Lebanon Campuses and at other sites.

Career Opportunities

Entrepreneurial leadership graduates are prepared to start or expand their own business, governmental enterprise, or non-profit organization as owners, CEOs, or executives.

Competency Profile

This curriculum is designed to prepare students to:

- Develop a management plan for a new or existing small business or enterprise
- Develop a marketing plan for a new or existing small business or enterprise
- Develop a financial plan for a new or existing small business or enterprise
- Develop a comprehensive business plan.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 19)

General Education	Major	Other Required Courses
ENGL 106 Written Business Communication	Computer Elective*	
<u>3</u>	ENTR 201 Marketing for the Entrepreneur	3
3	ENTR 203 Finance and Accounting for the Entrepreneur	3
	ENTR 271 Entrepreneurial Capstone	4
	MGMT 121 Small Business Development and Management	3
		<u>3</u>
		16

*Select any CIS course; CIS 105 recommended

Entrepreneurship – Entrepreneurial Leadership

Certificate Program – 1270

Business, Hospitality, Engineering, and Technology Division

Students acquire the knowledge and skills to become an entrepreneurial leader in a start-up business, existing business, government or non-profit organization. Skills developed in marketing, management and finance lead to the development of a sound business plan. Students and entrepreneurs already in the start-up stages of their business may take individual courses as needed. The complete program is available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster, and Lebanon Campuses and at other sites.

Career Opportunities

Entrepreneurial leadership graduates are prepared to start or expand their own business, governmental enterprise, or non-profit organization as owners, CEOs, or executives.

Competency Profile

This curriculum is designed to prepare students to:

- Develop a management plan for a new or existing small business or enterprise
- Develop a marketing plan for a new or existing small business or enterprise
- Develop a financial plan for a new or existing small business or enterprise
- Develop a comprehensive business plan.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 33)

General Education	Major	Other Required Courses
	BUSI 209 Legal Environment for Business	3
	Computer Elective*	3
	ENTR 103 Product Management for the Entrepreneur	3
	ENTR 201 Marketing for the Entrepreneur	3
	ENTR 203 Finance and Accounting for the Entrepreneur	4
	ENTR 271 Entrepreneurial Capstone	3
	ENTR 273 Entrepreneurial Practicum	2
	MGMT 121 Small Business Development And Management	3
	MKTG 212 Personal Selling	3
	MKTG 218 Advertising	3
	MKTG 235 Internet Marketing or WEB 205 Electronic Commerce	3
		33

*Select any CIS course; CIS 105 recommended

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Environmental Associate Associate in Science Degree – 3060

Mathematics, Science, and Allied Health Division

Students in this program develop proficiency in environmental principles, field and laboratory methods, computer use, effective oral and written communication skills, and environmental compliance. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Contact the program coordinator for specific program entry requirements.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution. Transfer students may continue their education in preparation for fields as diverse as pollution prevention, waste management, environmental clean-up, air quality, environmental education, water and waste water, natural resource management, regulatory affairs, impact assessment, and environmental monitoring.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 70)

General Education		Major	
ENGL 101 English Composition I	3	BIOL 102 General Biology II	4
ENGL 102 English Composition II or		CHEM 102 General Inorganic Chemistry & Qualitative Analysis	4
ENGL 104 Report and Technical Writing	3	CHEM 200 Principles of Biological/Organic Chemistry	4
SPCH 101 Effective Speaking or		CIS 105 Introduction to Software for Business	3
SPCH 104 Interpersonal Communication	3	GEOL 201 Environmental Geology	4
Core A Elective	3	ENSP 160 Professional Issues	1
Core B Elective	3	ENSP 180 Intro to Environmental Technology or	
Core B Elective	3	ENVS 201 Intro to Environmental Science	4
Core C BIOL 101 General Biology I	4	ENSP 200 Quantitative Field Methods or	
Core C CHEM 101 General Inorganic Chemistry I	4	ENSP 205 Quantitative Laboratory Methods	4
Core C MATH 202 Introduction to Statistics	3	ENSP 210 Site Assessment and Planning	3
General Education Transfer Elective	3	ENSP 215 Hazardous Substances and Safety	3
Physical Education & Wellness	$\frac{1}{33}$	ENSP 220 Environmental Law, Regulations, & Compliance	$\frac{3}{37}$

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer Session	Fall Semester	Spring Semester
BIOL 101 (Core C) 4	BIOL 102 4	ENGL 102 or 104 3	CHEM 200 4	ENSP 210 3
CHEM 101 (Core C) 4	CHEM 102 4		ENSP 200 or 205 4	ENSP 215 3
CIS 105 3	ENSP 180 or		MATH 202 (Core C) 3	ENSP 220 3
ENGL 101 3	ENVS 201 4		Core A Elective 3	Core B Elective 3
SPCH 101 or 104 3	GEOL 201 4		Core B Elective 3	GenEd Trans. Elec. 3
ENSP 160 1	PE & W 1			

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Environmental Science

Associate in Arts Degree – 3040

Mathematics, Science, and Allied Health Division

This program provides the basic science and general education courses needed for transfer to a bachelor's degree program in ecology, environmental management, environmental science, industrial hygiene, recycling technology, or waste management. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution. Transfer students may continue their education in preparation for fields as diverse as pollution prevention, waste management, environmental clean up, air quality, environmental education, water and waste water, natural resource management, regulatory affairs, impact assessment, and environmental monitoring.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 68)

General Education		Major	
ENGL 101 English Composition I	3	BIOL 102 General Biology II	4
ENGL 102 English Composition II or		CHEM 102 General Inorganic Chemistry & Qualitative Analysis	4
ENGL 104 Report and Technical Writing	3	CPS 113 BASIC Programming	3
SPCH 101 Effective Speaking	3	ENVS 201 Introduction to Environmental Science	4
Core A Elective	3	GEOL 201 Environmental Geology	4
Core B ECON 201 Principles of Economics I: Macro	3	MATH 119 Pre-Calculus	4
Core B ECON 202 Principles of Economics II: Micro	3	(Course waived if student qualifies for MATH 121)	
Core C BIOL 101 General Biology I	4	MATH 121 Calculus I	4
Core C CHEM 101 General Inorganic Chemistry I	4	PHYS 201 General Physics I	4
Core C MATH 202 Introduction to Statistics	3	PHYS 202 General Physics II	4
General Education Transfer Elective	3		35
Physical Education and Wellness	1		
	33		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer Session	Fall Semester	Spring Semester
BIOL 101 (Core C) 4	BIOL 102 4	SPCH 101 3	CPS 113 3	ECON 202 (Core B) 3
CHEM 101 (Core C) 4	CHEM 102 4		ECON 201 (Core B) 3	GEOL 201 4
ENGL 101 3	ENGL 102 or 104 3		ENVS 201 4	PHYS 202 4
MATH 119 4	MATH 121 4		MATH 202 (Core C) 3	Core A Elective 3
PE & W 1			PHYS 201 4	GenEd Trans. Elec. 3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Environmental Specialist

Associate in Science Degree – 3570

Mathematics, Science, and Allied Health Division

Students in this program develop practical skills, including certifiable expertise. Proficiency in knowledge of environmental principles, applied mathematics, field and laboratory methods, computer use, effective oral and written communication skills, and environmental compliance are focal points. The complete program is available at the Harrisburg Campus. Certain required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Contact the program coordinator for specific program entry requirements.

Career Opportunities

Graduates of the program are prepared for a wide variety of industrial, governmental, and service jobs in such areas as environmental monitoring, laboratory services, pollution prevention, resource management, environmental cleanup, air quality, industrial safety, water and wastewater, solid and hazardous waste, natural resource management, and regulatory affairs.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate knowledge of environmental principles, applied field and laboratory methods, applied mathematics, effective oral and written communication skills, diverse computer applications, environmental compliance, and other subjects
- Receive certifications associated with selected environmental skills and coursework
- Exhibit practical expertise learned in workplace internships or work projects
- Understand environmental work practices and procedures, and professional conduct and expectations

PROGRAM REQUIREMENTS (TOTAL CREDITS = 67)

General Education	Major	Other Required Courses
ENGL 101 English Composition I 3	ENSP 160 Professional Issues 1	BIOL 101 General Biology I or
ENGL 104 Report and Technical Writing 3	ENSP 180 Introduction to Environmental Technology or	BIOL 130 Field Biology 4
SPCH 101 Effective Speaking or	ENVS 201 Intro. to Environ. Science 4	CHEM 101 General Inorganic Chemistry I or
SPCH 104 Interpersonal Communication 3	ENSP 200 Quantitative Field Methods or	CHEM 100 Principles of Chemistry 4-3
Core A Elective 3	ENSP 205 Quantitative Lab. Methods 4	MATH 178 Applied Mathematics 3
Core B Elective 3	ENSP 210 Site Assessment & Planning 3	GEOL 201 Environmental Geology 4
Free Elective 3	ENSP 220 Environmental Laws 3	CIS 105 Introduction to Software 3
Physical Education & Wellness 1	ENSP 215 Hazardous Substances 3	CHEM 200 Principles of Organic and Biological Chemistry 4
	ENSP 260A Environmental Internship 3	Program Electives 6
	ENSP 260B Environmental Internship* 3	Select two courses from the following:
		ENSP 225, 230, 235; ENGY 111, 215;
		ENGR 271; ELEC 101; BIOL 130, 212
		<u>27-28</u>

*Optional

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Fall Semester	Spring Semester	Summer Session
BIOL 101 or 130 4	CHEM 200 4	CIS 105 3	ENSP 210 3	ENSP 260 A, B 3-6
CHEM 101 or 100 3-4	ENGL 104 3	ENSP 200 or 205 4	ENSP 215 3	
ENGL 101 3	ENSP 180 or 3	SPCH 101 or 104 3	ENSP 220 3	
ENSP 160 1	ENVS 201 4	Program Elective 3	Program Elective 3	
MATH 178 3	GEOL 201 4	PE & W 1	Free Elective 3	
Core A Elective 3	Core B Elective 3			

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Fine Arts

Associate in Arts Degree – 2120

Communications, Arts, and Social Sciences Division

The program focuses on studies in art and design involving creative experience and technical training in the techniques and aesthetic principles of various art forms. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This program serves as a foundation for students who plan to transfer to professional schools for further work in the arts.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major	
ENGL 101 English Composition I	3	ART 105 Fundamentals of Two-Dimensional Design	3
ENGL 102 English Composition II	3	ART 107 Fundamental of Three-Dimensional Design	3
SPCH 101 Effective Speaking	3	ART 106 Printmaking or	
Core A ART 181 (D) or ART 182 (D)	3	ART 131 Painting I	3
Core B Elective	3	ART 108 Fundamentals of Computer Art or	
Core B Elective	3	ART 176 Digital Photo Imaging	3
Core C Elective	3	ART 121 Drawing I	3
General Education Transfer Elective*	3	ART 122 Drawing II	3
Physical Education & Wellness	<u>1</u>	ART 133 Introduction to MAC	1
	25	ART 151 Ceramics I or	
		ART 171 Jewelry and Metal Design	3
		ART 183 Twentieth-Century Art	3
		ART Electives**	9
		Transfer Elective*	<u>3</u>
			37

*Choose general education courses appropriate for the transfer college; see HACC catalog for suggested options.

** Choose from ART 102, 103, 106, 108, 110, 111, 112, 131, 132, 151, 152, 161, 162, 171, 172, 176, 181(D), 182(D), 184, 185, 186, 187, 188(D), 189, 191, 201, 202, 205, & 206

Some four-year institutions require both ART 181 and ART 182. Consider your transfer institution when choosing your courses to meet the specific B.A. in Arts or B.F.A. requirements.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

STUDENTS MAY SELECT A CONCENTRATION AFTER FOUNDATION YEAR (After foundation year, students should seek an advisor in the Art Department who will discuss concentration options.)

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ART 151 or 171	3	ART 131 or 106	3	ART 108 or 176	3	Core B Elective	3
ART 133	1	ART 107	3	ART Elective	3	ART Elective	3
ART 105	3	ART 122	3	ART Elective	3	Core C Elective	3
ART 121	3	ENGL 102	3	SPCH 101	3	Transfer Elective	3
ENGL 101	3	Core A ART 181(D) or 182 (D)	3	Core B Elective	3	GenEd Trans. Elec.	3
ART 183	3	PE & W	1				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The certificate program provides basic professional training while the degree program adds theoretical depth and managerial skills. Students who have successfully completed the HACC Fire Academy may be granted four credits in the degree program; FIRE 101 and PE. The complete programs are available only at the Harrisburg Campus. Fire science courses are offered at night and on Saturdays. General Education courses are offered during the day and evening.

Career Opportunities

Graduates find work in volunteer and paid community fire services and in other governmental, insurance, business, and industrial settings. Job titles include fire fighters, fire safety specialists, industrial safety specialists and underwriters, plan reviewer and code enforcement officers.

Competency Profile

This curriculum is designed to prepare students to:

- Identify the requirements of various fire protection environments and operate the equipment related to those environments
- Understand the prevention and suppression of hazards by means of building inspections and hazard descriptions, the application for safety codes, and the use of proper procedures for hauling and storing hazardous materials
- Understand fire extinguishing and warning systems
- Conduct fire investigations
- Manage a fire protection organization through effective use of manpower and equipment
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 67)

General Education	Major	Other Required Courses
ENGL 101 English Composition I 3	FIRE 101 Introduction to Fire Protection 3	ARCH 110 Construction Print Reading 3
ENGL 104 Report and Technical Writing 3	FIRE 102 Fire Protection Codes and Practices 3	CHEM 100 Principles of Chemistry or higher excluding CHEM 113 3
SPCH 101 Effective Speaking or	FIRE 103 Risk Management in the Fire Service 3	CIS 105 Introduction to Software 3
SPCH 104 Interpersonal Communication 3	FIRE 105 Building Construction for Fire Service 3	for Business 3
Core A Elective 3	FIRE 107 Fire Service Management 3	MATH 103 College Algebra <u>3</u>
Core B Elective 3	FIRE 201 Fire Protection Hydraulics 3	12
Core C Elective 3	FIRE 204 Fire Investigation 3	
Free Elective 3	FIRE 205 Fire Alarm/Detection Systems 3	
Physical Education & Wellness <u>1</u>	FIRE 207 Educational Methodology 3	
22	FIRE 208 Fire Suppressions Systems 3	
	FIRE 210 Community Risk Management <u>3</u>	
	33	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Fall Semester	Spring Semester
ENGL 101 3	ENGL 104 3	FIRE 107 3	FIRE 204 3
FIRE 101 3	MATH 103 3	FIRE 201 3	FIRE 207 3
FIRE 102 3	ARCH 110 3	FIRE 205 3	FIRE 208 3
SPCH 101 or 104 3	FIRE 103 3	CHEM 100 or higher 3	FIRE 210 3
CIS 105 3	FIRE 105 3	Core A Elective 3	Core C Elective 3
	Core B Elective 3	Free Elective 3	PE & W 1

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Fire Science Technology

Certificate Program – 6260

Business, Hospitality, Engineering, and Technology Division

The certificate program provides basic professional training while the degree program adds theoretical depth and managerial skills. Students who have successfully completed the HACC Fire Academy may be granted four credits in the degree program; FIRE 101 and PE. The complete programs are available only at the Harrisburg Campus. Fire science courses are offered at night and on Saturdays. General Education courses are offered during the day and evening.

Career Opportunities

Graduates find work in volunteer and paid community fire services and in other governmental, insurance, business, and industrial settings. Job titles include fire fighters, fire safety specialists, industrial safety specialists, underwriters, plan reviewers and code enforcement officers.

Competency Profile

This curriculum is designed to prepare students to:

- Identify the requirements of various fire protection environments and operate the equipment related to those environments
- Understand the prevention and suppression of hazards by means of building inspections and hazard descriptions, the application for safety codes, and the use of proper procedures for hauling and storing hazardous materials
- Understand fire extinguishing and warning systems
- Conduct fire investigations
- Manage a fire protection organization through effective use of manpower and equipment
- Write and speak effectively

PROGRAM REQUIREMENTS (TOTAL CREDITS = 39)

General Education		Major		Other Required Courses	
ENGL 104 Report and Technical Writing	<u>3</u>	FIRE 101 Introduction to Fire Protection Technology	3	MATH 103 College Algebra	<u>3</u>
	3	FIRE 102 Fire Prevention Codes and Practices	3		3
		FIRE 103 Risk Management in Fire Service	3		
		FIRE 105 Building Construction for Fire Service	3		
		FIRE 107 Fire Service Management	3		
		FIRE 201 Fire Protection Hydraulics	3		
		FIRE 204 Fire Investigation	3		
		FIRE 205 Fire Alarm/Detection Systems	3		
		FIRE 207 Educational Methodology	3		
		FIRE 208 Fire Suppressions Systems	3		
		FIRE 210 Community Risk Management	<u>3</u>		
			33		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The General Studies Curriculum is designed to meet academic needs not answered by more specific program offerings. Students interested in interdisciplinary study, specially designed programs of study not available in regular programs, or who are undecided as to career or transfer plans often enroll in the General Studies curriculum to gain a broad academic background in preparation for future transfer or specific study. The program provides a degree of flexibility not available in other programs, but requires a more careful planning process to ensure that transfer or career needs are met. Students must select courses in the Humanities and Arts, Social and Behavioral Sciences, and Mathematics, Natural and Physical Sciences, Diversity, and Physical Education and Wellness, in addition to the College's requirement in written and spoken communication.

Those who enroll in the General Studies curriculum should select their courses in consultation with a counselor to ensure that courses will apply to transfer requirements or meet career program requirements. Students who wish to graduate in this curriculum are encouraged to enter the curriculum as soon as possible and no later than prior to the scheduling of the last fifteen credits of study at the college. Many students enrolled in the General Studies curriculum are first advised by counseling staff at the regional campuses, but as students discover areas of interest they are advised by faculty in the discipline of interest.

Electives in the General Education Core areas are listed under the general degree requirements for the college. Program electives may be selected from any College course number 100 or above. No "0" level courses are accepted for graduation.

The program may be pursued full-time or part-time during the day or evening. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg, York and Virtual Campuses.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	Program Electives*	30
ENGL 102 English Composition II or		CIS 105 or higher or other curriculum approved Computer Literacy Course**	3
ENGL 104 Report and Technical Writing or			33
ENGL 106 Written Business Communication	3		
SPCH 101 Effective Speaking or			
SPCH 104 Interpersonal Communication	3		
Core A Elective	6		
Core B Elective	6		
Core C Elective	6		
Physical Education & Wellness	$\frac{1}{28}$		

* Students must choose any 100- or 200- level courses so long as they do not violate the credit limits on courses in physical education, military science, or cooperative work experience. Students who wish maximum transferability of their coursework should select electives that are acceptable for credit at the baccalaureate granting institution to which they plan to transfer.

** See advisor for course selection options.

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Geospatial Technology

Associate in Science Degree – 4760

Business, Hospitality, Engineering, and Technology Division

Harrisburg Area Community College’s GeoSpatial program provides foundation preparation for a student planning a career in geospatial technology, or supplemental preparation of a person already employed in a career related to geospatial technology. GeoSpatial technology is an emerging growth industry requiring technicians to be skilled in data acquisition, management, interpretation, integration, analysis, representation, and graphical display. In addition, the high-technology nature of geospatial technology demands personnel who are able to work in cross-functional teams in a rapidly evolving employment setting. The complete program is available at the Harrisburg Campus. Certain required courses are available at Lancaster, Lebanon and Gettysburg Campuses and at other sites.

Career Opportunities

Graduates with a GeoSpatial Technology degree will find employment as geographic information specialists, computer aided drafting specialists, or other disciplines related to the acquisition, use and processing of geographic and time-based data

Competency Profile

This curriculum is designed to prepare students to:

- Use CAD software packages
- Understand GIS and remote sensing theory, data acquisition, data processing, and applications
- Use Geographic Information System software packages and geospatial data processing tools
- Understand engineering, geological, and environmental applications of geospatial technologies
- Develop analytical skills, including inductive and deductive reasoning
- Write and speak effectively
- Use those strengthened written and oral communication skills and interpersonal characteristics for effective business opportunities and personal growth
- Understand fundamental concepts of business applications and decision-making related to geospatial technology
- Provide the student with a general educational background to facilitate analysis and interpretation of technical information
- Provide an educational experience that allows the student to effectively interact with others outside the geospatial technology discipline
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 67)

General Education	Major	Other Required Courses
ENGL 101 English Composition I 3	CAD 114 AutoCAD I 1	CIS 105 Introduction to Software for Business 3
ENGL 104 Report and Technical Writing 3	CAD 115 MicroStation I 1	CIS 140 Intermediate Database Mgmt 3
SPCH 104 Interpersonal Communication <u>or</u>	CAD124 AutoCAD II 1	MATH 103 College Algebra 3
SPCH 101 Effective Speaking 3	CAD 125 MicroStation II 1	MATH 104 Trigonometry 3
Core A Elective 3	CAD 134 AutoCAD: Three Dimensional 1	MGMT 201 Principles of Management 3
Core B Elective 3	CPS 115 Visual Basic Programming I <u>or</u>	MKTG 201 Principles of Marketing 3
Free Elective 3	CPS 121 Into to JAVA Programming <u>or</u>	
Physical Education & Wellness 1	CIS 238 Visual Basic for Bus Applications 3	
	ENGR 203 Engineering Geoscience 4	
	GIS 141 Intro to Geographic Information Systems 3	
	GIS 151 Cartographic Design for GIS 3	
	GIS 161 Data Acquisition and Remote Sensing 4	
	GIS 163 Advanced Geographic Information Systems 4	
	GIS 201 Professional Issues 1	
	GIS 291 Cooperative Work Experience 3	
		18
		30

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer Session
ENGL 101 3	ENGL 104 3	Core A 3
MATH 103 3	MATH 104 3	
CAD 114 1	CAD 115 1	
CAD 124 1	CAD 125 1	
CAD 134 1	GIS 151 3	
CIS 105 3	MGMT 201 3	
GIS 141 3	PE & W 1	
Fall Semester	Spring Semester	Summer Session
SPCH 104 or 101 3	Core B 3	GIS 291 3
CIS 140 3	Free Elective 3	
CPS 115 or 121 3	GIS 163 4	
or CIS 233 3	GIS 201 1	
ENGR 203 4	MKTG 201 3	
GIS 161 4		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Geospatial Technology

Certificate Program – 4410

Business, Hospitality, Engineering, and Technology Division

Harrisburg Area Community College’s GeoSpatial program provides foundation preparation for a student planning a career in geospatial technology, or supplemental preparation of a person already employed in a career related to geospatial technology. GeoSpatial technology is an emerging growth industry requiring technicians to be skilled in data acquisition, management, interpretation, integration, analysis, representation, and graphical display. In addition, the high-technology nature of geospatial technology demands personnel who are able to work in cross-functional teams in a rapidly evolving employment setting. The complete program is available at the Harrisburg Campus. Certain required courses are available at Lancaster, Lebanon and Gettysburg Campuses and at other sites.

Career Opportunities

Graduates with a GeoSpatial Technology degree will find employment as geographic information specialists, computer aided drafting specialists, or other disciplines related to the acquisition, use and processing of geographic and time-based data

Competency Profile

This curriculum is designed to prepare students to:

- Use CAD software packages
- Understand GIS and remote sensing theory, data acquisition, data processing, and applications
- Use Geographic Information System software packages and geospatial data processing tools
- Understand engineering, geological, and environmental applications of geospatial technologies

PROGRAM REQUIREMENTS (TOTAL CREDITS = 34)

General Education	Major		Other Required Courses	
	CAD 114 AutoCAD I	1	CIS 105 Introduction to Software for Business	3
	CAD 124 AutoCAD II	1	MATH 103 College Algebra	3
	CAD 134 AutoCAD: Three Dimensional	1	MGMT 201 Principles of Management or	
	CPS 115 Visual Basic Programming I or		MKTG 201 Principles of Marketing	3
	CPS 121 Introduction to JAVA or			9
	CIS 238 Visual Basic for Bus Applications	3		
	ENGR 203 Engineering Geoscience	4		
	GIS 141 Intro to Geographic Information Systems	3		
	GIS 151 Cartographic Design for GIS	3		
	GIS 161 Data Acquisition and Remote Sensing	4		
	GIS 163 Advanced Geographic Information Systems	4		
	GIS 201 Professional Issues	1		
		25		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

This certificate builds on the coursework of the Gerontology diploma and adds in-depth study of legal and ethical issues as well as of the psychological and emotional aspects of aging. This program provides basic knowledge of general concepts and practices in gerontology for a significant number of fields – social service, activity professionals, allied health professions, health care administration, marketing and business. The complete program is available at the Lebanon Campus. Some courses are available at the Harrisburg, Lancaster and Gettysburg Campuses, and at other sites.

Career Opportunities

This certificate is designed to expand the knowledge and opportunities for employment for those exploring or working in the aging field. Graduates may find career opportunities as activity professionals and work toward national certification. They may also work in social services, health care administration and allied health fields as well as marketing and business. Graduates may also pursue further academic study in social work, health care management, liberal arts, and business degrees.

Competency Profile

This curriculum is designed to prepare students to:

- Develop an understanding of the basic demographics of aging
- Apply basic principles of gerontology to social and health issues
- Recognize differences between normal aging and disease-related aging
- Develop an understanding of the physical, mental, social and psychological aspects of aging
- Develop an empathetic relationship with an aging person
- Identify the need for teamwork to provide optimal care for the aging population
- Explore opportunities for further study and workforce development in gerontology fields
- Obtain an in-depth understanding of legal and ethical issues related to aging and end of life issues
- Acquire an understanding of psychological and emotional processes associated with individuals as they are

PROGRAM REQUIREMENTS (TOTAL CREDITS = 30)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	GERT 100 Gerontology Overview	1	PSYC 101 General Psychology	3
Physical Education	<u>1</u>	GERT 101 Social Services	1	SOCI 201 Introduction to Sociology	3
	4	GERT 102 Allied Health	1	SOCI 226 Perspectives of Aging	3
		GERT 103 Psychosocial Issues	1	General Elective	3
		GERT 104 Service Learning	1	Program Elective*	<u>3</u>
		GERT 200 Legal and Ethical Aspects of Aging	3		15
		GERT 201 Psycho-emotional Aspects of Aging	<u>3</u>		
			11		

* Select courses from GERT, SOCI, PSYC

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Gerontology

Diploma Program – 0231

Mathematics, Science, and Allied Health Division

The Gerontology Diploma is designed to develop sensitivity and competence for those individuals in allied health, social services, activities professional, business, marketing and administrative fields who work with the aging population. The course content includes basic principles and issues in gerontology, allied health, social service, mental health, psychosocial and wellness as well as 20 hours of service learning volunteering. The complete program is available at the Lebanon Campus. Some courses in the program are available at the Lancaster, Harrisburg and Gettysburg Campuses.

Career Opportunities

The diploma program is designed to further enhance knowledge and effectiveness of personnel currently employed in senior facilities. Graduates find employment as activity professionals or social service aides, or may pursue further study in a number of related areas, such as nursing, allied health, social work, marketing, and management in institutions, agencies, long term care and assisted care facilities and home health.

Competency Profile

This curriculum is designed to prepare students to:

- Understand basic demographics of aging
- Apply basic principles of gerontology to social and health issues
- Recognize differences between normal aging and disease-related aging
- Understand physical, mental, social and psychological aspects of aging
- Develop an empathetic relationship with an aging person
- Identify the need for teamwork to provide optimal care for the aging population
- Explore opportunities for further study and workforce development in gerontology fields

PROGRAM REQUIREMENTS (TOTAL CREDITS = 17)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	<u>3</u>	GERT 100 Gerontology Overview	1	PSYC 101 General Psychology	3
	3	GERT 101 Social Services	1	SOCI 201 Introduction to Sociology	3
		GERT 102 Allied Health	1	SOCI 226 Perspectives of Aging or	
		GERT 103 Psychosocial Issues	1	Gerontology Elective	<u>3</u>
		GERT 104 Service Learning	<u>1</u>		9
			5		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

GM Express Maintenance Technician Diploma Program – 0350

Business, Hospitality, Engineering, and Technology Division

The GM Express Maintenance Technician program prepares students to perform skills in basic automotive maintenance including brakes, suspension, electrical systems and emissions testing necessary to work in a variety of service centers or dealerships.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Contact the program coordinator for specific program entry requirements.

Career Opportunities: Graduates find employment as an automotive light maintenance technician, a Pennsylvania safety inspection technician, a Pennsylvania emission inspection technician, or as an automotive technician.

Competency Profile

This curriculum is designed to prepare students to:

- Perform Pre-delivery inspection
- Perform under-hood, around wheel, and under car maintenance
- Practice safety and keep current in safety practices
- Repair basic electrical systems

PROGRAM REQUIREMENTS (TOTAL CREDITS = 21)

General Education	Major		Other Required Courses	
	AUTO 101 Automotive Fundamentals	3	ENGL 901 Basic Communication Skills*	1
	AUTO 105 Fundamentals of Electrical/ Electronics	3	MATH 172 Applied Math for Auto. Tech.	<u>3</u> 4
	AUTO 107 Fuel and Emission Systems	3		
	AUTO 151 Braking Systems	3		
	AUTO 153 Suspension Systems	3		
	AUTO 191 Cooperative Work Experience	<u>2</u>		
		17		

*May be replaced with higher level ENGL offering.

Graphic Design

Associate in Arts Degree – 2840

Communications, Arts, and Social Sciences Division

Graphic design students at HACC are trained to use industry-standard equipment and graphics software. Students will assemble a print and digital portfolio for job interviews that will demonstrate skills in digital imaging, layout, design, web, and interactive media. HACC is committed to high academic standards that reflect current trends in the field in order to prepare students for a career in graphic design. These standards are intended to assure high-quality experiences in small classes with access to new technologies and superior media and library support. While most of HACC's graphic design major courses are offered during the day, some courses are only available at night. All graphic design major courses are only available at the Harrisburg Campus. Some general education and foundation courses are available at the Lancaster, Lebanon and Gettysburg Campuses, and at other sites.

GRAPHIC DESIGN, Foundations Program - 2830

Students interested in entering Graphic Design AA Degree Program #2840 must first enroll in Foundations Program #2830. While in program #2830, students complete art foundation courses, specific math, writing, and reading requirements, and submit a portfolio as entry requirements for program #2840. Students must meet with a division counselor, (717) 780-2422 or 3227, or the program director, (717) 780-2423, upon enrolling in program #2830.

GRAPHIC DESIGN, Associate in Arts Degree - 2840

Selective Program: Any student who has passed the portfolio review and meets entry criteria is eligible to enroll in program #2840. Entry into program #2840 is not guaranteed with admission to the College or with admission into Foundations program #2830. Contact a division counselor or program director for entry criteria.

Career Opportunities

Job opportunities can be found as graphic designers in advertising agencies, design firms, newspapers, magazines, television stations, web and multimedia production companies, retail stores, printers, government agencies, and corporate in-house art departments.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate mastery of skills involved in the graphic design field
- Create an effective visual communication
- Operate computers and graphic software used in design, web and interactive media
- Present a professional portfolio
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 67)

General Education		Major	
ENGL 101 English Composition I	3	ART 105 Fundamentals of Two-Dimensional Design	3
ENGL 102 English Composition II <u>or</u>		ART 109 Computer Graphics	3
ENGL 106 Written Business Communication	3	ART 114 Interactive Media and Design	3
SPCH 101 Effective Speaking	3	ART 121 Drawing I	3
Core A Elective ART 182 Art through the Ages II (D)	3	ART 122 Drawing II	3
Core B Elective	3	ART 123 Illustration	3
Core C Elective	3	ART 140 Web Design	3
Free Elective (ART 148 Recommended)	3	ART 143 Typography	3
Physical Education & Wellness	1	ART 144 Graphic Design I	3
	22	ART 145 Graphic Design II	3
		ART 146 Graphic Design III	3
		ART 147 Portfolio Development	3
		ART 176 Digital Photo Imaging	3
		ART 183 Twentieth Century Art	3
		ART 190 History of Graphic Design	3
			45

(continued next page)

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

After the Graphic Design Foundations level, all graphic design courses must be taken as a block in the sequence shown.

<p>Fall Semester (Graphic Design Foundations #2830)</p> <p>ART 105 3 ART 121 3 ART 176 3 ENGL 101 3</p>	<p>Spring Semester (Graphic Design #2840)</p> <p>ART 109 3 ART 122 3 ART 143 3 ART 144 3 Core A ART 182 (D) 3</p>	<p>Summer (Graphic Design #2840)</p> <p>SPCH 101 3 ENGL 102 <u>or</u> 106 3 PE & W 1</p>
<p>Fall Semester (Graphic Design #2840)</p> <p>ART 123 3 ART 140 3 ART 145 3 ART 183 3</p>	<p>Spring Semester (Graphic Design #2840)</p> <p>ART 114 3 ART 146 3 ART 147 3 ART 190 3</p>	<p>Summer (Graphic Design #2840)</p> <p>Core B Elective 3 Core C Elective 3 Free Elective 3</p>

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Graphic Design

Certificate Program – 2200

Communications, Arts, and Social Sciences Division

Graphic design students at HACC are trained to use industry-standard equipment and graphics software. Students will assemble a print and digital portfolio for job interviews that will demonstrate skills in digital imaging, layout, design, web, and interactive media. HACC is committed to high academic standards that reflect current trends in the field in order to prepare students for a career in graphic design. These standards are intended to assure high-quality experiences in small classes with access to new technologies and superior media and library support.

While most of HACC’s graphic design major courses are offered during the day, some courses are only available at night. All graphic design major courses are only available at the Harrisburg Campus. Some general education and foundation courses are available at the Lancaster, Lebanon and Gettysburg Campuses, and at other sites.

GRAPHIC DESIGN, Foundations Program - 2830

Students interested in entering Graphic Design Certificate Program #2200 must first enroll in Foundations Program #2830. While in program #2830, students complete art foundation courses, specific math, writing, and reading requirements, and submit a portfolio as entry requirements for program #2200. Students must meet with a division counselor, (717) 780-2422 or 3227, or the program director, (717) 780-2423, upon enrolling in program #2830.

GRAPHIC DESIGN, Certificate Program - 2200

Selective Program: Any student who has passed the portfolio review and meets entry criteria is eligible to enroll in program #2200. Entry into program #2200 is not guaranteed with admission to the College or with admission into Foundations program #2830. Contact a division counselor or program director for entry criteria.

Career Opportunities

Job opportunities can be found as graphic designers in advertising agencies, design firms, newspapers, magazines, television stations, web and multimedia production companies, retail stores, printers, government agencies, and corporate in-house art departments.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate mastery of skills involved in the graphic design field
- Create an effective visual communication
- Operate computers and graphic software used in design, web and interactive media
- Present a professional portfolio

PROGRAM REQUIREMENTS (TOTAL CREDITS = 42)

General Education	Major	
	ART 105 Fundamentals of Two-Dimensional Design	3
	ART 109 Computer Graphics	3
	ART 114 Interactive Media and Design	3
	ART 121 Drawing I	3
	ART 122 Drawing II	3
	ART 123 Illustration	3
	ART 140 Web Design	3
	ART 143 Typography	3
	ART 144 Graphic Design I	3
	ART 145 Graphic Design II	3
	ART 146 Graphic Design III	3
	ART 147 Portfolio Development	3
	ART 176 Digital Photo Imaging	3
	Elective	3
		42

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

After the Graphic Design Foundations level, all graphic design courses must be taken as a block in the sequence shown.

Fall Semester (Graphic Design Foundations #2830)	Spring Semester (Graphic Design #2200)	Fall Semester (Graphic Design #2200)	Spring Semester (Graphic Design #2200)
ART 105 3	ART 109 3	ART 123 3	ART 114 3
ART 121 3	ART 122 3	ART 140 3	ART 146 3
ART 176 3	ART 143 3	ART 145 3	ART 147 3
	ART 144 3		Elective 3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Health Science Program

Associate in Science Degree – 3590

Mathematics, Science, and Allied Health Division

The Associate of Health Science is a degree completion program designed for actively credentialed or licensed health care professionals currently working in their fields. Each student must submit a portfolio for review. After portfolio evaluation, qualified applicants will be awarded 15 to 30 credits toward the Health Science degree. This is a selective admissions program. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates will be qualified to seek employment in the Management/Marketing, Medical Administration, or Social Services areas. Graduates will seek employment in physician practices, hospitals, and vendors for medical specialty products.

Competency Profile

This curriculum is designed to prepare students to:

Management/Marketing Option

- Demonstrate competencies needed to gain employment in the physician practices, hospitals, or vendors in the medical areas
- Demonstrate proficiency in all aspects of medical management for the hospital and/or physician practice
- Demonstrate the concepts of marketing to target audiences
- Demonstrate the ability to discuss human resource issues in the hospital or medical office

Medical Administration option

- Demonstrate competencies needed to gain employment in the physician practices or clinics in the medical area
- Demonstrate the ability to incorporate Healthcare Law and Ethics into the changing healthcare environment
- Demonstrate proficiency in medical office administration

Social Service Option

- Demonstrate competencies needed to gain employment in the physician practices, hospitals, or with vendors in the medical area
- Demonstrate the ability to recognize race and cultural relations as they relate to the healthcare area
- Demonstrate life cycle development in a variety of patient populations

Gerontology Option

- Demonstrate competencies of the workplace in understanding the demographics of aging as well as the physical, mental, social and psycho-social aspects of aging
- Demonstrate awareness of basic principles of gerontology applied to social, health and legal/ethical issues in the aging population
- Demonstrate competencies to gain employment in the continuum of health care for the aging population as well as activity professional, marketing and management, and social services areas in long term care, assisted living and home health care.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education

ENGL 101 English Composition I	3
ENGL 102 English Composition II	3
SPCH 101 Effective Speaking or	
SPCH 104 Interpersonal Communication	3
Core A Elective	3
Core B Elective	3
Free Elective	3
Physical Education & Wellness	1
	19

Major

Block Transfer	15-30*
Program Specific Electives	0-15
Option**	<u>12</u>
	42

*If less than 30 Allied Health credits are awarded, then approval is required for Program Specific Electives to make up the difference in credits

**Choose 12 credits from one of the 4 options listed below

Management/Marketing Option

ACCT 101 Principles of Accounting I	4
BUSI 201 Business Law I	3
MGMT 201 Principles of Management	3
MGMT 203 Human Resources Mgmt	3
MKTG 201 Principles of Marketing	3

Social Service Option

PSYC 209 Life Cycle Development	3
PSYC 213 Abnormal Psychology	3
SOCI 201 Introduction to Sociology (D)	3
SOCI 205 Race and Cultural Relations (D)	3
SOCI 211 Group Dynamics	3

Medical Administration Option

AH 150 Intro to Human Illness & Disease	3
AH 210 Health Care Law and Ethics	3
AH 213 Intro to Medical Insurance	3
MA 220 Medical Office Admin I	3
MA 221 Medical Office Admin II	3

Gerontology Option

GERT 100 Intro to Gerontology Overview	1
GERT 101 Intro Gerontology Social Serv.	1
GERT 102 Intro Gerontology AH	1
GERT 103 Intro Gerontology Psychosocial	1
GERT 200 Law, Ethics, and Aging	3
GERT 201 Psycho-emotional Aspects	3
SOCI 226 Perspectives on Aging	3
Any Elective (maximum of 3 credits)	3

(continued next page)

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Health Science Program

Associate in Science Degree – 3590 *(continued)*

Mathematics, Science, and Allied Health Division

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	Course options	6	Course options	6
SPCH 101 or 104	3	Free Elective	3				
Core A Elective	3	PE & W	1				
Core B Elective	3						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Heating, Ventilation, and Air Conditioning – HVAC

Associate in Applied Science Degree – 4780

Business, Hospitality, Engineering, and Technology Division

In addition to the courses in the HVAC Certificate program, the student receives a well-rounded education through completion of courses in communication, science, mathematics, and general education. The complete program is available at the Community Center for Technology and the Arts (CCTA) and Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Graduates have the knowledge and skills to move from entry-level, multi-skilled mechanic position into a supervisory position in industry.

Competency Profile

This curriculum is designed to prepare students to:

- Develop and apply basic skills of electricity, heating, refrigeration, and air conditioning technology
- Install, repair, and maintain heating, air conditioning, and refrigeration systems
- Cite federal laws relevant to refrigerant recovery and recycling
- Read HVAC blueprints
- Design HVAC systems to meet prescribed specifications
- Address customer-service issues
- Install and maintain building wide HVAC systems
- Design and install HVAC control systems in residential and commercial buildings
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 65)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	GTEC 105 Customer Service	1	MATH 913 Basic Applied Math I**	3
ENGL 102 English Composition II <u>or</u>		HVAC 100 EPA Refrigerant Handling, Preparation and Testing	1		3
ENGL 104 Report and Technical Writing	3	HVAC 101 Basic Electrical Fundamentals			
SPCH 101 Effective Speaking <u>or</u>		<u>or</u> ELOC 153 Fundamentals of Electricity	4		
SPCH 104 Interpersonal Communication	3	HVAC 103 Fundamentals of Air Conditioning I	4	** May be replaced with a higher level MATH offering.	
Core A Elective	3	HVAC 104 Print reading for HVAC	3		
Core B Elective	3	HVAC 105 Fundamental of Air Conditioning II	4		
Core C Elective	3	HVAC 107 Fundamentals of Low and Medium Temperature Refrigeration	4		
Free Elective	3	HVAC 109 Heating Systems	4		
Physical Education & Wellness	<u>1</u>	HVAC 110 Fundamentals of Air Conditioning and Heating System Design	3		
	22	HVAC 200 HVAC Control Systems	3		
		HVAC 201 HVAC Building Systems	3		
		Program Specific Electives*	<u>6</u>		
			40		

*Select from the following: CIS 105; ELOC 157, 172; HVAC 106, 291; IMT 106; MWT 111

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
HVAC 101 <u>or</u>		HVAC 100	1	HVAC 109	4	HVAC 201	3
ELOC 153	4	HVAC 105	4	HVAC 200	3	GTEC 105	1
HVAC 103	4	HVAC 107	4	SPCH 101/104	3	Core B Elective	3
HVAC 104	3	HVAC 110	4	Core A Elective	3	Core C Elective	3
MATH 913	3	ENGL 102/104	3	Program Elective	3	Free Elective	3
ENGL 101	3	PE & W	1			Program Elective	3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Heating, Ventilation, and Air Conditioning – HVAC

Certificate Program – 4280

Business, Hospitality, Engineering, and Technology Division

Students complete the diploma and continue their studies in more advanced HVAC topics including blueprint reading and HVAC design. Higher level mathematics and communication courses are included to support the advanced curriculum. The complete program is available at the Community Center for Technology and the Arts (CCTA) and Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Graduates find employment as HVAC service technicians, equipment installers, or HVAC maintenance technicians.

Competency Profile

This curriculum is designed to prepare students to:

- Develop and apply basic skills of electricity, heating, refrigeration, and air conditioning technology
- Install, repair, and maintain heating, air conditioning, and refrigeration systems
- Cite federal laws relevant to refrigerant recovery and recycling
- Read HVAC blueprints
- Design HVAC systems to meet prescribed specifications
- Address customer-service issues

PROGRAM REQUIREMENTS (TOTAL CREDITS = 34)

General Education		Major		Other Required Courses	
ENGL 104 Report and Technical Writing	3	GTEC 105 Customer Service	1	MATH 913 Basic Applied Math I *	3
	3	HVAC 100 EPA Refrigerant Handling, Preparation and Testing	1		
		HVAC 101 Basic Electrical Fundamentals			
		or ELOC 153 Fundamentals of Electricity	4		
		HVAC 103 Fundamentals of Air Conditioning I	4		
		HVAC 104 Print reading for HVAC	3		* May be replaced with a higher level MATH offering.
		HVAC 105 Fundamental of Air Conditioning II	4		
		HVAC 107 Fundamentals of Low and Medium Temperature Refrigeration	4		
		HVAC 109 Heating Systems	4		
		HVAC 110 Fundamentals of Air Conditioning and Heating System Design	3		
			28		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester	
HVAC 101		GTEC 105	1
or ELOC 153	4	HVAC 100	1
HVAC 103	4	HVAC 105	4
HVAC 104	3	HVAC 107	4
MATH 913	3	HVAC 109	4
ENGL 104	3	HVAC 110	3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Heating, Ventilation, and Air Conditioning – HVAC

HVAC, Diploma Program – 0280

Business, Hospitality, Engineering, and Technology Division

Students receive hands on training in electricity, refrigeration, air conditioning and heating systems. The program is held at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus. Students can attend full time during the day or part time during the evening.

Career Opportunities

Graduates find employment as HVAC service technicians, equipment installers, or HVAC maintenance technicians.

Competency Profile

This curriculum is designed to prepare students to:

- Understand and be knowledgeable in the basic skills of electricity, heating, refrigeration, and air conditioning technology
- Install, repair and maintain heating, air conditioning, and refrigeration systems
- Understand federal laws relevant to refrigerant recovery and recycling

PROGRAM REQUIREMENTS (TOTAL CREDITS = 25)

General Education	Major	Other Required Courses	
	HVAC 100 EPA Refrigerant Handling, Preparation, and Testing	ENGL 901 Basic Communication*	1
	HVAC 101 Basic Electrical Fundamentals	MATH 913 Basic Applied Math*	3
	or ELOC 153 Fundamentals of Electricity		4
	HVAC 103 Fundamentals of Air Conditioning I	*May be replaced with a higher level offering	4
	HVAC 105 Fundamentals of Air Conditioning II		4
	HVAC 107 Fundamentals of Low and Medium Temperature Refrigeration		4
	HVAC 109 Heating Systems		4
			<u>21</u>

Home and Building Remodeling

Associate in Applied Science Degree – 4790

Business, Hospitality, Engineering, and Technology Division

Students complete the Certificate in Home and Building Remodeling and then they continue their studies for an Associate in Applied Science degree. The degree program delivers advanced training in a wide variety of applications in home and building remodeling. At the same time, students engage in “live” work activities involving the demolition, remodeling, or restoration of existing structures in the community. To meet the unique career goals, students select advanced technical elective courses that develop specialized skills in such disciplines as exterior finishing, historic preservation, customer service, and air conditioning systems. All course work and laboratory practice will be held at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus.

Career Opportunities

Graduates of the program find employment with local remodeling and construction contractors as Carpenters, Finish Carpenters, Masonry Technicians, Demolition Technicians, HVAC Helpers, Roofers, Siding Installers, and Drywall Installers.

Competency Profile

This curriculum is designed to prepare students to:

- Use basic hand tools and equipment of the trade
- Build, restore, or demolish wooden structures in a home or building
- Read construction blueprints
- Apply proper construction materials and processes
- Prepare a work plan for building, restoring, or demolishing a building
- Demonstrate advanced specialty skills in home and building remodeling
- Work safely in a construction environment
- Demonstrate remodeling skills in “live” work application
- Write and speak effectively
- Solve math problems related to the trade
- Appreciate accomplishments in arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 67)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ARCH 110 Construction Print Reading	3	MATH 913 Basic Applied MATH III	3
ENGL 104 Report and Technical Writing	3	ARCH 130 Construction Materials and Methods	3	or higher level math	3
SPCH 104 Interpersonal Communication	3	GTEC 101 Safety in the Workplace	3		
Core A Elective	3	HBR 101 Intro to Home & Building Remodeling	3		
Core B Elective	3	HBR 110 Carpentry I	3		
Core C Elective	3	HBR 115 Carpentry II	3		
Free Elective	3	HBR 205 Field Work Practicum I	3		
Physical Education & Wellness	<u>1</u>	HBR 210 Field Work Practicum II	3		
	22	HBR 215 Field Work Practicum III	3		
		HBR 220 Field Work Practicum IV	3		
		Technical Electives*	<u>12</u>		
			42		

*Select technical electives from the following courses:
 CVTE 103; ELOC 157; GTEC 105; HBR 130, 135, 140, 150, 155, 160, 170, 291; HVAC 103, 109

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
HBR 101	3	HBR 115	3	HBR 215	3	HBR 220	3
HBR 110	3	HBR 210	3	Technical Electives	6	Technical Electives	6
HBR 205	3	ARCH 130	3	PE & W	1	Core C Elective	3
ARCH 110	3	ENGL 104	3	SPCH 104	3	Free Elective	3
ENGL 101	3	GTEC 101	3	Core B Elective	3		
MATH 913	3	Core A Elective	3				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Home and Building Remodeling Certificate Program – 4430

Business, Hospitality, Engineering, and Technology Division

Students complete the Diploma in Home and Building Remodeling and then they continue their studies for a Certificate. The Certificate program delivers advanced training in construction materials and processes, while providing for continued skills development in “live” work activities involving the demolition, remodeling, or restoration of existing structures in the community. In addition, students select advanced technical elective courses that develop specialized skills in such disciplines as concrete and masonry, plumbing, interior finishing, building demolition, and heating systems. All course work and laboratory practice will be held at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus.

Career Opportunities

Graduates of the program find employment with local remodeling and construction contractors as Carpenters, Finish Carpenters, Masonry Technicians, Demolition Technicians, HVAC Helpers, Roofers, Siding Installers, and Drywall Installers.

Competency Profile

This curriculum is designed to prepare students to:

- Use basic hand tools and equipment of the trade
- Build, restore, or demolish wooden structures in a home or building
- Read construction blueprints
- Apply proper construction materials and processes
- Demonstrate advanced specialty skills in home and building remodeling
- Work safely in a construction environment
- Demonstrate remodeling skills in “live” work application
- Communicate effectively with others
- Solve math problems related to the trade

PROGRAM REQUIREMENTS (TOTAL CREDITS = 35)

General Education	Major	Other Required Courses
ENGL 104 Report and Technical Writing 3	ARCH 110 Construction Print Reading 3	MATH 913 Basic Applied MATH III 3
	ARCH 130 Construction Materials and Methods 3	or higher level math 3
	GTEC 101 Safety in the Workplace 3	
	HBR 101 Intro to Home & Building Remodeling 3	
	HBR 110 Carpentry I 3	
	HBR 115 Carpentry II 3	
	HBR 205 Field Work Practicum I 3	
	HBR 210 Field Work Practicum II 3	
	Technical Electives* 5	
		29

*Select technical electives from the following courses:
ELOC 157; GTEC 105; HBR 130, 140, 150, 155, 160;
HVAC 103, 109

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Home and Building Remodeling

Diploma Program – 0290

Business, Hospitality, Engineering, and Technology Division

Students develop job-entry skills for the home and building remodeling industry. These include construction print reading, basic tools and equipment, carpentry, and workplace safety. Two days per week, students will work on “live” projects involving the demolition, remodeling, or restoration of existing structures in the community. All course work and laboratory practice will be held at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus.

Career Opportunities

Graduates of the program find employment with local remodeling and construction contractors as construction helpers, laborers, rough carpenters, and demolition helpers.

Competency Profile

This curriculum is designed to prepare students to:

- Use basic hand tools and equipment of the trade
- Build, restore, or demolish wooden structures in a home or building
- Read construction blueprints
- Work safely in a construction environment
- Demonstrate remodeling skills in “live” work application

PROGRAM REQUIREMENTS (TOTAL CREDITS = 24)

General Education	Major		Other Required Courses	
	ARCH 110 Construction Print Reading	3	MATH 913 Basic Applied MATH III	3
	GTEC 101 Safety in the Workplace	3	or higher level math	<u>3</u>
	HBR 101 Intro to Home & Building Remodeling	3		3
	HBR 110 Carpentry I	3		
	HBR 115 Carpentry II	3		
	HBR 205 Field Work Practicum I	3		
	HBR 210 Field Work Practicum II	<u>3</u>		
		21		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The hospitality industry offers many opportunities for employment. Whenever appropriate, the programs include supervised on-the-job experience; HACC has state-of-the-art on-campus facilities for food preparation, production, and service. The Hotel, Restaurant, and Institutional Management AA degree programs in Culinary Arts, Healthcare, and Restaurant and Food Service Management are accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. This program is designed to lead directly to employment and is not intended as a transfer program although students have transferred courses to other hospitality degree programs. This program includes specialized courses but also courses in related business areas and in general education. The complete program is available at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses and at other sites.

Career Opportunities

Graduates can be employed in entry level hotel or restaurant management positions in front offices, sales and marketing and restaurant front of the house positions.

Competency Profile

This curriculum is designed to prepare students to:

- Display knowledge of menu planning and basic quantity food preparation and production
- Estimate food production needs and requisition foodstuffs and supplies
- Implement sales promotions in institutional settings
- Prepare and use a budget
- Display a motivational supervisory style for effective supervision of employees
- Follow federal, state, and local regulations in the workplace
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 69)

General Education	Major	Other Required Courses
ENGL 101 English Composition I 3	HRIM 101 Introduction to Hospitality 3	CIS 105 Introduction to Software for Business 3
ENGL 102 English Composition II or	HRIM 103 Hospitality Marketing 3	Business Elective 3
ENGL 106 Written Business Comm. 3	HRIM 108 Food and Beverage 3	(Select from the following areas: ACCT, AOS, AUCT, BUSI, CIS, FIN, HM, HRIM, MGMT, MKTG, OIS, RE, TOUR, WEB)
SPCH 101 Effective Speaking 3	HRIM 113 Sanitation & Safety 2	Food Service Elective 3
Core A Elective 3	ACCT 101 Principles of Accounting I or	(Select one course: HRIM 104, 110 or 122)
Core B Elective 3	HRIM 114 Hospitality Accounting (4-3)	Hotel/Tourism Elective 3
Core C Elective 3	HRIM 221 Basic Foods 3	(Select one course: HM 203, 269, 270 or TOUR 201)
Free Elective 3	HRIM 231 Cost Control 3	12
Physical Education & Wellness $\frac{1}{22}$	HRIM 251 Development of Supervisory Personnel 3	
	HM 112 Front Office Operations 3	
	HM 154 Supervisory Housekeeping 3	
	HM 252 Resort Management 3	
	HRIM 265 Co-Op Seminar or	
	HM 278 Hotel/Motel Management Seminar $\frac{3}{35-36}$	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Fall Semester	Spring Semester	Summer Session
CIS 105 3	ENGL 102 or 106 3	HM 154 3	ACCT 101 or HRIM 114 (4-3)	HRIM 265 or HM 278 3
ENGL 101 3	PE & W 1	HM 252 3	HRIM 251 3	Hotel/Tourism Elect. 3
HRIM 101 3	HM 112 3	HRIM 108 3	SPCH 101 3	
HRIM 113 2	HRIM 103 3	HRIM 231 3	Food Service Elect. 3	
Core C Elective 3	Business Elective 3	HRIM 221 3	Core A Elective 3	
	Core B Elective 3	Free Elective 3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Hotel and Lodging Management

Associate in Arts Degree – 1741

Business, Hospitality, Engineering, and Technology Division

Students prepare for professional employment in varied segments of the Hospitality Industry to work in economy hotels, mid-market hotels, full-service hotels, resorts, and cruise ships as front-office managers, assistant managers or supervisors, convention and conference managers or coordinators, hospitality sales and marketing managers, and eventually resident and general managers. The Hotel and Lodging Management AA degree program is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. Courses are offered both day and evening. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Graduates find jobs in all segments of the hotel industry in a variety of management areas, including the room division, convention and conference services, meeting planning, sales and marketing, and other hotel auxiliary services.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate basic skills in general hotel management
- Display competency in business subjects required for solving management problems
- Exhibit skills necessary to perform the duties of meeting planners
- Demonstrate technical operations skills and management and supervisory skills
- Demonstrate competency in hotel computer information systems
- Understand front-office practice and housekeeping procedures
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 68)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	HRIM 101 Introduction to Hospitality Industry	3	CIS 105 Intro. to Software for Business	3
ENGL 106 Written Business Comm.	3	HRIM 103 Hospitality Marketing	3	MKTG 212 Personal Selling	3
SPCH 104 Interpersonal Communication	3	HRIM 114 Hospitality Accounting	3		6
Core A Elective	3	HRIM 125 Dining Room Management	4		
Core B Elective	3	HRIM 231 Cost Control Food and Labor	3		
Core C Elective	3	HRIM 251 Development of Supervisory Personnel	3		
Free Elective	3	HM 112 Front Office Operations & Management	3		
Physical Education & Wellness	1	HM 154 Supervisory Housekeeping	3		
	22	HM 203 Hospitality Law	3		
		HM 254 Hospitality Leadership and Management	3		
		HM 269 Hospitality Industry Computer Systems	3		
		HM 270 Convention/Conference Management	3		
		HM 278 Hotel/Motel Management Cooperative Seminar and Field Experience	3		
			40		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer Session		Fall Semester		Spring Semester	
CIS 105	3	ENGL 106	3	HM 278	3	HM 112	3	HRIM 103	3
ENGL 101	3	PE & W	1	Free Elective	3	HM 154	3	HM 254	3
HRIM 101	3	HM 203	3			HRIM 231	3	HM 269	3
HRIM 125	4	HRIM 114	3			MKTG 212	3	HM 270	3
Core C Elective	3	HRIM 251	3			Core A Elective	3	SPCH 104	3
		Core B Elective	3						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

This program prepares students to work as associate professionals in a variety of community social services agencies which offer direct service delivery. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

Graduates of the program receive the training and education for positions in a number of social service fields as social and human services assistants.

Competency Profile

This curriculum is designed to prepare students to:

- Conduct interviews for purposes of gathering information, assessment, and development of service plans
- Work effectively with clients and their families to plan treatment or service
- Write effective contact notes, social histories and maintain client files
- Make referrals and facilitate clients moving through the social service system
- Understand racially and culturally diverse populations
- Establish and maintain effective working relationships with clients and their families
- Perform case management responsibilities in a variety of settings
- Understand ethics and laws as they apply to the human service field
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education	3	Major	3	Other Required Courses
ENGL 101 English Composition I	3	HUMS 100 Introduction to Human Services	3	
ENGL 102 English Composition II	3	HUMS 120 Social Welfare Programs and Policies	3	
SPCH 101 Effective Speaking	3	HUMS 121 Skills and Methods in Human Services I	3	
Core A Elective	3	HUMS 122 Skills and Methods in Human Services II	3	
Core B Elective PSYC 101	3	HUMS 206 Human Development in a Social Environment (D)	3	
Core C Elective	3	HUMS 215 Fieldwork Practicum	4	
Free Electives	15	SOCI 201 Introduction to Sociology (D)	3	
Physical Education & Wellness	1	SOCI 205 Race and Cultural Relations (D)	3	
	34	SOCI 211 Group Dynamics	3	
			28	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	3	Spring Semester	3	Summer Semester	3	Fall Semester	3	Spring Semester	4
ENGL 101	3	ENGL 102	3	Free Elective	3	SOCI 211	3	HUMS 215	4
HUMS 100	3	HUMS 206 (D)	3	PE & W	1	SOCI 205 (D)	3	Free Electives	9
Core B (PSYC 101)	3	HUMS 121	3			HUMS 122	3		
Free Elective	3	SOCI 201 (D)	3			SPCH 101	3		
Core C Elective	3	HUMS 120	3			Core A Elective	3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Human Services

Certificate Program – 5430

Communications, Arts, and Social Sciences Division

Students learn the basic knowledge and skills needed to work with clients of social service agencies and organizations. This curriculum is designed to facilitate transfer into the Human Services degree program or the Social Service degree program. Evening courses are offered. The complete program is available at the Harrisburg, Lancaster, Lebanon, and Gettysburg Campuses.

Career Opportunities

Completion of a certificate allows the graduate to apply basic human services skills at the entry level. Opportunities exist in fields such as mental health, mental retardation, substance abuse, gerontology, women’s services and family services. Further education is required for higher positions within agencies.

Competency Profile

This curriculum is designed to prepare students to:

- Communicate effectively with clients and their families
- Disarm anger and resolve conflicts
- Establish rapport and an effective working relationship with clients and their families
- Empathize with a client’s feelings
- Understand ethics and laws as they apply to the human service field
- Assist with case management

PROGRAM REQUIREMENTS (TOTAL CREDITS = 31)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	HUMS 100 Introduction to Human Services	3	PSYC 101 General Psychology	3
	3	HUMS 121 Skills and Methods in Human Services I	3	Program Elective*	3
		HUMS 122 Skills and Methods in Human Services II	3		6
		HUMS 206 Human Development in a Social Environment	3		
		HUMS 215 Fieldwork Practicum I	4		
		SOCI 205 Racial and Cultural Relations	3		
		SOCI 211 Group Dynamics	3		
			22		
				*Select one of the following courses:	
				PSYC 212 Child Growth and Development	
				SOCI 201 Introduction to Sociology	
				SOCI 203 Marriage and Family	
				SOSC 108 Drugs and Alcohol: Use and Abuse	
				MATH 111 Principles of Mathematics	
				(another course may be approved by the advisor)	

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Humanities, Languages, and the Arts

Associate in Arts Degree – 2091

Communications, Arts, and Social Sciences Division

This is a general transfer program for the student who plans to seek a four-year degree in English language or literature, a foreign language, music, or philosophy. Since the requirements of senior institutions vary, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	Humanities Transfer Electives	12
ENGL 102 English Composition II	3	Select courses in Art, English, Foreign Languages, Humanities, Media Studies, Music, Philosophy, Speech, or Theatre	
SPCH 101 Effective Speaking	3	English Literature Elective	3
Core A Elective	3	Select one of the following: ENGL 201, 202, 203, 204, 205(D), 206(D), or 207	
Core B Elective SOCI 201 (D)	3	History Elective	3
Core B Elective	3	Select one of the following: HIST 101(D), 102(D), 201, or 202	
Core C Elective Math	3	GEOG 201 World Geography (D)	3
Core C Elective Science	3	Transfer Electives	6
Core C Elective	3	Computer Elective*	3
General Education Transfer Elective	3		30
Physical Education & Wellness	1		
	31		

*Choose any CIS course except CIS 100 (CIS 105 recommended)

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	Core C (Science)	3	History Elective	3
Core A Elective	3	Engl. Lit. Elective	3	Humanities Electives	6	Humanities Elective	3
Core B Elective	3	Core C Elective	3	GEOG 201 (D)	3	Transfer Electives	6
Core C (Math)	3	Core B SOCI 201 (D)	3	Computer Elective	3	GenEd Transfer Elec.	3
SPCH 101	3	Humanities Elective	3				
		PE & W	1				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Humanities, Languages, and the Arts Education

Associate in Arts Degree – 2101

Communications, Arts, and Social Sciences Division

The College’s education programs’ allow students planning a career in elementary or secondary teaching to complete the first two years of a transfer program and earn an associate in arts degree. All students should be aware of the standards of the Pennsylvania Department of Education and that they specify different preparations for elementary and secondary school teachers.

The PA State Board of Education passed new requirements for admission to, as well as exit from, professional education programs. On October 7, 2000, Title 22 of the PA School Code, Chapter 354, became law. This regulation affects every institution that prepares teachers in the Commonwealth of Pennsylvania. These requirements affect all (elementary and secondary) bachelor’s level-education programs for PA Teacher Certification. Students who complete 48 credit hours after August 15, 2002 but prior to August 15, 2003 must have a 2.8 GPA (3.0 GPA after August 15, 2003) to enter professional courses leading to initial teacher certification. They will also be required to attain a qualifying score on the PRAXIS-I Academic Skills Assessment test.

Each student will be required to have an Act 34 Criminal Background Investigation and an Act 151 Child Abuse Clearance prior to any practicum/student teaching experience and employment. The student should consider these factors prior to enrolling in this program.

Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college’s catalog. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	EDUC 101 Foundations of Education	3
ENGL 102 English Composition II	3	EDUC 203 Introduction to Classroom Instruction	3
SPCH 101 Effective Speaking	3	English Literature Elective	3
Core A Elective	3	Select one of the following courses: ENGL 201, 202, 203, 204, 205(D), 206(D), or 207	
Core B Elective PSYC 101	3	GEOG 201 World Geography (D)	3
Core B Elective SOCI 201 (D)	3	History Elective	3
Core C Elective Math	3	Select one of the following courses: HIST 101(D), 102(D), 201, or 202	
Core C Elective Science	3	Humanities Transfer Electives	6
Core C Elective (Recommend MATH)	3	Select courses in Art, English, Foreign Languages, Humanities, Media Studies, Music, Philosophy, Speech, or Theatre	
General Education Transfer Elective	3	Transfer Electives	6
Physical Education & Wellness	1	CIS 109 Integrating Technology K-12 Classroom	3
	31		30

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	EDUC 203	3	GEOG 201 (D)	3
Core A Elective	3	Core B SOCI 201(D)	3	Core C (Science)	3	History Elective	3
Core B (PSYC 101)	3	Core C (MATH)	3	Humanities Electives	3	Transfer Electives	6
Core C Math	3	Engl. Lit. Elective	3	GenEd Trans. Elec.	3	Humanities Elective	3
SPCH 101	3	EDUC 101	3	CIS 109	3		
		PE & W	1				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Independent Electrical Contractor Apprenticeship Training Certificate Program – 4390

Business, Hospitality, Engineering, and Technology Division

The Independent Electrical Contractors (IEC) Apprenticeship Training Certificate program provides comprehensive training in electrical technology. Students who aspire to become electricians are introduced to a wide variety of techniques and concepts to insure their safety and workplace success. Areas of study include first aid and safety, basic tools and materials, AC circuits, DC circuits, electrical blueprint reading, the National Electric Code, motors and transformers, conduits and bending, applied wiring, lighting, residential and commercial circuits, and Programmable Logic Controllers (PLC's). The IEC Apprenticeship program is offered only as a parallel to the IEC on-the-job training program, and therefore admission is restricted to students who are approved through the IEC Apprenticeship selection process.

Career Opportunities

Graduates of the program are employed as non-union general electricians, residential electricians, electrical service technicians, electric installers, and industrial maintenance electricians.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate a variety of technical skills in the electrical field
- Understand and practice safe and healthy work procedures
- Properly and safely handle electrical tools and materials
- Read and interpret blueprints necessary for specified installations
- Interpret the National Electric Code and use it in specific applications
- Analyze AC and DC circuits
- Demonstrate procedures used in residential, commercial, and industrial electrical construction
- Bend conduit and run electric lines
- Wire motors, transformers, and control circuits
- Troubleshoot equipment and demonstrate proper repair procedures

PROGRAM REQUIREMENTS (TOTAL CREDITS = 32)

General Education	Major	Other Required Courses
	IEC 110 Electrical Trade I	4
	IEC 120 Electrical Trade II	4
	IEC 130 Electrical Trade III	4
	IEC 140 Electrical Trade IV	4
	IEC 150 Electrical Trade V	4
	IEC 160 Electrical Trade VI	4
	IEC 170 Electrical Trade VII	4
	IEC 180 Electrical Trade VIII	4
		32

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Industrial Maintenance Technology – Mechatronics

Associate in Applied Science Degree – 4710

Business, Hospitality, Engineering, and Technology Division

Students receive theory and hands-on training in the electrical and mechanical trades in courses in industrial electricity, mechanical technology, power transmission and fluid power. Students completing the diploma program are prepared for positions as maintenance technicians in industry. Students continuing their studies in the certificate and/or associate degree receive advanced technical skills in power distribution systems, programmable logic controllers, advanced mechanical technology, welding, environmental compliance and project management. Degree students take 22 credits in general education requirements. Graduates are prepared for positions where troubleshooting and equipment and machine repair are required. The program is available full time days and part time evenings at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus.

Career Opportunities

Graduates find employment as multi-skilled electrical-mechanical maintenance technicians in an industrial or manufacturing setting.

Competency Profile

This curriculum is designed to prepare students to:

- Perform maintenance on electrical and mechanical equipment
- Interpret OSHA Standards
- Use hand and power tools
- Demonstrate knowledge in electrical fundamentals, motor controls, and instrumentation systems
- Demonstrate knowledge in mechanical systems, including drives, bearings, and seals
- Read electrical and mechanical blueprints
- Troubleshoot and repair electrical and mechanical equipment systems
- Perform mig and tig welding operations
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 65)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	GTEC 101 Safety in the Workplace	3	MATH 913 Basic Applied Mathematics III*	3
ENGL 104 Report and Technical Writing or		IMT 102 Industrial Electrical Systems	4		
ENGL 102 English Composition II	3	IMT 104 Instrumentation Systems	4		
SPCH 104 Interpersonal Communication or		IMT 106 Mechanical Technology I	3		
SPCH 101 Effective Speaking	3	IMT 108 Power Transmission	4		
Core A Elective	3	IMT 110 Fluid Power	4		
Core B Elective	3	Program Electives**	18		
Core C Elective	3		40		
Free Elective	3				
Physical Education & Wellness	1				
	22				

**Select from the following courses: CIS 105, ELOC 175; ENSP 220; HVAC 106; IA 201, 208; IMT 202, 204; MGMT 227; WELD 111

* May be replaced with a higher level MATH offering.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer Session		Fall Semester		Spring Semester	
IMT 102	4	IMT 104	4	Free Elective	3	Program Electives	9	Core A	3
ENGL 101	3	ENGL 104 or 102	3	PE & W	1	SPCH 104 or 101	3	Core B	3
IMT 106	3	IMT 108	4			Core C	3	Program Electives	9
IMT 110	4	MATH 913	3						
GTEC 101	3								

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Industrial Maintenance Technology – Mechatronics

Certificate Program – 4260

Business, Hospitality, Engineering, and Technology Division

Students receive theory and hands-on training in the electrical and mechanical trades in courses in industrial electricity, mechanical technology, power transmission and fluid power. Students completing the diploma program are prepared for positions as maintenance technicians in industry. Students continuing their studies in the certificate and/or associate degree receive advanced technical skills in power distribution systems, programmable logic controllers, advanced mechanical technology, welding, environmental compliance and project management. Degree students take 22 credits in general education requirements. Graduates are prepared for positions where troubleshooting and equipment and machine repair are required. The program is available full time days and part time evenings at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus.

Career Opportunities

Graduates find employment as multi-skilled electrical-mechanical maintenance technicians in an industrial or manufacturing setting.

Competency Profile

This curriculum is designed to prepare students to:

- Perform maintenance on electrical and mechanical equipment
- Interpret OSHA Standards
- Use hand and power tools
- Demonstrate knowledge in electrical fundamentals, motor controls, and instrumentation systems
- Demonstrate knowledge in mechanical systems, including drives, bearings, and seals
- Read electrical and mechanical blueprints
- Troubleshoot and repair electrical and mechanical equipment systems
- Perform mig and tig welding operations

PROGRAM REQUIREMENTS (TOTAL CREDITS =35)

General Education	Major	Other Required Courses
ENGL 101 English Composition I or	GTEC 101 Safety in the Workplace	MATH 913 Basic Applied Mathematics III* <u>3</u>
ENGL 104 Report and Technical Writing <u>3</u>	IMT 102 Industrial Electrical Systems	3
	IMT 104 Instrumentation Systems	
	IMT 106 Mechanical Technology I	*May be replaced with a higher level MATH offering.
	IMT 108 Power Transmission	
	IMT 110 Fluid Power	
	Program Electives**	
	<u>7</u>	
	29	

** Select from the following courses: ENSP 220; IA 208; IMT 202, 204; MGMT 227; WELD 111

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Industrial Maintenance Technology – Mechatronics

Diploma Program – 0460

Business, Hospitality, Engineering, and Technology Division

Students receive theory and hands-on training in the electrical and mechanical trades in courses in industrial electricity, mechanical technology, power transmission and fluid power. Students completing the diploma program are prepared for positions as maintenance technicians in industry. Students continuing their studies in the certificate and/or associate degree receive advanced technical skills in power distribution systems, programmable logic controllers, advanced mechanical technology, welding, environmental compliance and project management. Degree students take 22 credits in general education requirements. Graduates are prepared for positions where troubleshooting and equipment and machine repair are required. The program is available full time days and part time evenings at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus. The diploma program is offered evenings only in Gettysburg.

Career Opportunities

Graduates find employment as multi-skilled electrical-mechanical maintenance technicians in an industrial or manufacturing setting.

Competency Profile

This curriculum is designed to prepare students to:

- Perform maintenance on electrical and mechanical equipment
- Interpret OSHA Standards
- Use hand and power tools
- Demonstrate knowledge in electrical fundamentals, motor controls, and instrumentation systems
- Demonstrate knowledge in mechanical systems, including drives, bearings, and seals
- Read electrical and mechanical blueprints

PROGRAM REQUIREMENTS (TOTAL CREDITS = 25)

General Education	Major		Other Required Courses	
	GTEC 101 Safety in the Workplace	3	MATH 913 Applied Mathematics III*	<u>3</u>
	IMT 102 Industrial Electrical Systems	4		3
	IMT 104 Instrumentation Systems	4		
	IMT 106 Mechanical Technology I	3		
	IMT 108 Power Transmission	4		
	IMT 110 Fluid Power	<u>4</u>		
		22		

* May be replaced with higher level MATH offerings.

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The program provides a solid foundation for students who plan to major in international studies, international relations, or political science with a concentration in international relations or area studies. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available at the Harrisburg, Lancaster and York Campuses; some required courses are available at Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution. Such a major can lead to a career in the U.S. Foreign Service or in a wide range of international organizations.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	Computer Elective*	3
ENGL 102 English Composition II	3	GEOG 201 World Geography (D)	3
SPCH 101 Effective Speaking	3	GP 201 National Political System	3
Core A Elective	3	GP 205 International Relations	3
Core B ANTH 201 Introduction to Anthropology (D)	3	GP 208 Comparative Government	3
Core B ECON 202 Principles of Economics I: Macro	3	HIST 101 World History I (D) or	
Core C Elective Math	3	HIST 201 Western Civilization I	3
Core C Elective Science	3	HIST 102 World History II (D) or	
Core C Elective	3	HIST 202 Western Civilization II	3
General Education Transfer Elective	3	Language or Transfer Electives	9
Physical Education & Wellness	1	(Foreign language proficiency through intermediate level is required. If such proficiency can be demonstrated, the student may choose to replace the foreign language requirement with transfer electives.)	
	31		30

* Chose any CIS course except CIS 100 (CIS 105 recommended)

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	Core B ANTH 101(D)	3	CIS Elective	3
GP 201	3	GEOG 201 (D)	3	Core B ECON 201	3	SPCH 101	3
HIST 101(D) or 201	3	GP 205	3	GP 208	3	GenEd Trans. Elec.	3
Language or Transfer Elective	3	Language or Transfer Elective	3	Language or Transfer Elective	3	PE & W	1
Core C (Math)	3	HIST 102(D) or 202	3	Core C Elective	3	Core A Elective	3
						Core C (Science)	3

Foreign Study Option: Consult with advisor for special course sequencing.

Jewelry Repair

Diploma Program – 0610

Communications, Arts, and Social Sciences Division

The program is designed to prepare students to take the Jewelers of America Certified Bench Jewelry Technician examination and is intended for those interested in starting a career in the jewelry industry. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This program prepares students to take the first level Certified Bench Jewelry Technician examination. This program will teach skills necessary for entry-level jobs in the jewelry repair trade.

Competency Profile

This curriculum is designed to prepare students to:

- Repair and resolder chains and clasps
- Assemble, bail and bezel, and set oval stones
- Size rings
- Repair damaged box clasp tongues
- File, finish and size ring castings
- Solder and assemble earrings with stones
- Repair rings
- Assemble flexible bracelet links

PROGRAM REQUIREMENTS (TOTAL CREDITS = 18)

General Education

Major

ART 121 Drawing I	3
ART 171 Jewelry and Metal Design I	3
ART 172 Jewelry and Metal Design II	3
ART 177 Production Methods in Jewelry	3
ART 178 Bench Jeweler Basics	3
MKTG 212 Personal Selling	<u>3</u>
	18

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Kinsley Carpentry Apprenticeship Training Certificate Program – 4440

Business, Hospitality, Engineering, and Technology Division

The Kinsley Carpentry Apprenticeship Training program provides comprehensive training in construction carpentry. Students who aspire to become construction carpenters are introduced to a wide variety of techniques and concepts to insure their safety and success in the workplace. Areas of study include safety, hand and power tools, blueprint reading, rigging and a wide range of building materials with emphasis on their application. Concrete, interior and exterior construction and finishes including roofs, windows, doors, floors and walls are covered. The Kinsley Carpentry Apprenticeship program is offered only as a parallel to the Kinsley on-the-job training program and therefore admission is restricted to students who are employed by Kinsley Corporation.

Career Opportunities

Graduates of the program are employed as construction carpenters, form carpenters, concrete workers, and other related positions.

Competency Profile

This curriculum is designed to prepare students to:

- Describe the construction trade and its diversity of disciplines, technologies and employment opportunities
- Demonstrate a variety of technical skills in the carpentry field
- Apply safety standards and practices on the job
- Use trade-specific hand and power tools and equipment
- Read and interpret blueprints and construction specifications
- Perform basic cost estimating
- Utilize building materials appropriately
- Demonstrate techniques in building construction to include concrete and interior and exterior applications

PROGRAM REQUIREMENTS (TOTAL CREDITS = 40)

General Education	Major	Other Required Courses
	KCA 110 Kinsley Apprentice Level I-A	5
	KCA 120 Kinsley Apprentice Level I-B	5
	KCA 130 Kinsley Apprentice Level II-A	5
	KCA 140 Kinsley Apprentice Level II-B	5
	KCA 150 Kinsley Apprentice Level III-A	5
	KCA 160 Kinsley Apprentice Level III-B	5
	KCA 170 Kinsley Apprentice Level IV-A	5
	KCA 180 Kinsley Apprentice Level IV-B	5

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Management

Certificate Program – 1350

Business, Hospitality, Engineering, and Technology Division

Students prepare for entry-level employment in management-trainee and supervisory positions. The courses taken in this program may be used in the completion of the Business Management associate degree program. The complete program is available at the Harrisburg, Lancaster, Lebanon, Gettysburg and York Campuses.

Career Opportunities

Career opportunities include assistant manager, buyer, cashier, customer service representative, distribution supervisor, foreman or forewomen, general clerk, insurance claims processor, interviewer, inspector, mail clerk, office manager, new accounts representative, order filler, order taker, public relations manager, purchasing agent supervisor, teller and warehouse manager.

Competency Profile

This curriculum is designed to prepare students to:

- Use basic accounting data in their work
- Understand computer fundamentals as they relate to their work
- Communicate effectively with the public and employees
- Use basic management concepts

PROGRAM REQUIREMENTS (TOTAL CREDITS = 33)

General Education

ENGL 101 English Composition I	3
ENGL 102 English Composition II or	
ENGL 106 Written Business Communication	3
SPCH 101 Effective Speaking	<u>3</u>
	9

Major

ACCT 101 Principles of Accounting I	4
ACCT 200 Principles of Accounting II	4
CIS 105 Intro to Software for Business	3
CIS 108 Intro to Powerpoint	1
MGMT Electives*	<u>12</u>
	24

*See advisor for course selection options.

This program is designed for new students as well as those who are currently employed. Students currently employed in marketing may choose this option to apply formal course training to the jobs they already hold. Students select a specialty option for concentrated study in general marketing management, retailing, sales, or real estate. The Marketing AA degree program in General Marketing is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete program is available at the Harrisburg, Lancaster, and York Campuses. Some required courses are available at the Lebanon and Gettysburg Campuses.

Career Opportunities

Graduates of these programs gain the skills and knowledge needed to begin employment in a middle-management training program or a similar entry-level positions in sales, advertising, retailing, wholesaling, physical distribution, market research, marketing management, insurance, real estate, or a related field.

Competency Profile

This curriculum is designed to prepare students to:

- Qualify for a retail management training program
- Demonstrate the skills necessary to work successfully within a business enterprise and to present themselves as their product or service in a personal selling situation
- Prepare and manage an advertising campaign for a small retail business, including a window and interior displays as well as trade show displays
- Perform the basic functions of a buyer in selecting, purchasing, pricing, and selling merchandise for profit
- Develop and implement a plan for starting a new, small retail business, and eventually own and operate a small retail business
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education				Major				Other Required Courses																	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	MATH Elective*	3	ENGL 102 English Composition II or		BUSI 201 Business Law I	3	Program Specific Electives **	12	ENGL 106 Written Business Comm.	3	MGMT 201 Principles of Management	3	CIS 105-299 Elective	3	SPCH 101 Effective Speaking	3	MKTG 201 Principles of Marketing	3		18		
Core A Elective	3	MKTG 209 Marketing Internship or		MKTG 210 Marketing Application and		Core B PSYC 101 or SOCI 201 (D)	3	Analysis or higher level MKTG course	3	Free Elective (Recommend ACCT 200)	3	Physical Education & Wellness	1	MKTG 212 Personal Selling	3										
		MKTG 218 Advertising	3		3		22		22																

* Select from MATH 103, 104, 110, 121, 122, 125, 202
 **Select from the following courses: BUSI 230 (D); HRIM 103; MGMT 121, 203, 204, 206, 209, 210; MKTG 204, 205, 209, 210, 216, 217, 235, 245; RE 101, 102

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ACCT 101	4	ENGL 102 or 106	3	BUSI 201	3	Program Specific Electives	9
ENGL 101	3	MKTG 201	3	MGMT 201	3	Core C Elective	3
MATH Elective	3	SPCH 101	3	MKTG 209 or 210	3	Free Elective	3
MKTG 212	3	CIS Elective	3	Program Specific Electives	3		
MKTG 218	3	Core B Elective	3	Core A Elective	3		
		PE & W	1				

Marketing, Real Estate

Associate in Arts Degree – 1720

Business, Hospitality, Engineering, and Technology Division

Students gain extensive knowledge and understanding of real estate. The Marketing AA degree programs in General Marketing and Real Estate are accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete program is available only at the Harrisburg Campus; several required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Graduates of this program prepare to enter the real estate profession and take the Pennsylvania Real Estate Commission's examination for the Salesperson's License. To take the Broker's examination, a student must complete four credits beyond those required in the program and meet the other requirements of the Pennsylvania Licensing and Registration Act.

Competency Profile

This curriculum is designed to prepare students to:

- Meet requirements for the Pennsylvania licensing examination
- Understand the process and procedures of real estate transactions
- Work in real estate offices as a salesperson
- Write and Speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	MATH 100 College Mathematics for Business or higher	3
ENGL 102 English Composition II or		BUSI 201 Business Law I	3	Management Elective	3
ENGL 106 Written Business Comm.	3	MKTG 201 Principles of Marketing	3	CIS 105-299 Elective	3
SPCH 101 Effective Speaking	3	MKTG 212 Personal Selling	3		9
Core A Elective	3	RE 101 Real Estate Fundamentals	3		
Core B Elective	3	RE 102 Real Estate Practice	3		
Core C Elective	3	RE 108 Appraisal of Residential Property	3		
Free Elective	3	RE 201 Real Estate Finance	3		
Physical Education & Wellness	1	RE 203 Real Estate Law	3		
	22	RE 206 Non-Residential Property Management	3		
			3		
			31		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
BUSI 201	3	ACCT 101	4	RE 108	3	RE 203	3
ENGL 101	3	ENGL 102 or 106	3	RE 201	3	RE 206	3
MATH 100 or higher	3	MKTG 201	3	CIS Elective	3	Management Elective	3
MKTG 212	3	RE 102	3*	Core A Elective	3	Core C Elective	3
RE 101	3*	SPCH 101	3	Core B Elective	3	Free Elective	3
		PE & W	1				

*RE 101 and RE 102 may be taken sequentially in the Fall or Spring semesters.

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students interested in working in the retail industry or in opening their own store should consider the retailing program. Most students begin in the retail field and the move into the rewarding field of professional sales. Students select a specialty option for concentrated study in general marketing management, retailing, sales, or real estate. The Marketing AA degree programs in General Marketing, Retailing, and Real Estate are accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete program is available only at the Harrisburg Campus; several required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Graduates enter employment as retail management trainees, sales representatives, and assistant buyers.

Competency Profile

This curriculum is designed to prepare students to:

- Qualify for a retail management training program
- Demonstrate the skills necessary to work successfully within a business enterprise and to present themselves and their product or service in personal selling situations
- Prepare and manage an advertising campaign for a small retail business, including window and interior displays as well as trade show displays
- Perform the basic functions of a buyer in selecting, purchasing, pricing, and selling merchandise at a profit
- Develop and implement a plan for starting a new, small retail business, and eventually own and operate a small retail business
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	MATH 100 College Math for Business	3
ENGL 102 English Composition II <u>or</u>		BUSI 201 Business Law I	3	CIS 105-299 Elective	3
ENGL 106 Written Business Comm.	3	MKTG 201 Principles of Marketing	3	Management 100-299 Elective	<u>3</u>
SPCH 101 Effective Speaking	3	MKTG 205 Visual Merchandising	3		9
Core A Elective	3	MKTG 212 Personal Selling	3		
Core B PSYC 101 or SOCI 201 (D)	3	MKTG 216 Retail Merchandising	3		
Core C Elective	3	MKTG 217 Retail Management	3		
Free Elective	3	MKTG 218 Advertising	3		
Physical Education & Wellness	<u>1</u>	Program Electives *	<u>6</u>		
	22		31		

*Select two courses: BUSI 230(D), MKTG 204, 209, 210, 235, 245

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ACCT 101	4	ENGL 102 or 106	3	BUSI 201	3	Program Electives	6
ENGL 101	3	MKTG 201	3	MKTG 216	3	MKTG 217	3
MATH 100	3	MKTG 205	3	Management Elective	3	Free Elective	3
MKTG 212	3	SPCH 101	3	CIS Elective	3	Core B Elective	3
MKTG 218	3	Core C Elective	3	Core A Elective	3		
		PE & W	1				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Marketing, Sales

Diploma Program – 0180

Business, Hospitality, Engineering, and Technology Division

Students currently employed or considering the field of professional selling may choose this diploma program. The complete program is available only at the Harrisburg Campus.

Career Opportunities

Graduates of these programs gain the skills and knowledge needed to begin employment in entry-level positions in sales.

Competency Profile

This curriculum is designed to prepare students to:

- Understand and apply basic business and marketing principles
- Effectively use communication skills
- Work in a variety of sales positions

PROGRAM REQUIREMENTS (TOTAL CREDITS = 16)

General Education		Major		Other Required Courses	
ENGL 106 Written Business Communication	<u>3</u>	BUSI 200 American Business System	3	MATH 100 College Mathematics	
	3	MKTG 204 Sales Management	3	for Business	<u>3</u>
		MKTG 212 Personal Selling	3		3
		Program Specific Elective*	<u>1</u>		
			10		

*Select one program specific elective from the following:
CIS 105, 106, 107, 108

Massage Therapy is a healing art as well as a science. It requires a balance of academic and technical knowledge, clinical skills, manual dexterity, sensitivity, and awareness. It requires a sincere desire to help others, along with a commitment to the time, energy, and focus necessary for the training process in order to become a solid practitioner. Working alone, or in consultation with other health care professionals (physical therapists, physicians, chiropractors), Massage Therapists perform assessments and manipulation of soft tissues of the body to effect a therapeutic response in the treatment and prevention of physical dysfunction. It can be preventative or restorative, helping to maintain, rehabilitate, augment physical function and/or relieve pain. Applicants to the program will be carefully screened and interviewed prior to being accepted, including providing a criminal background check. This program is offered at the Penn Center in Harrisburg. Certificates are awarded upon successful completion of the program.

Career Opportunities

Graduates of this program are prepared to enter the healthcare profession as massage therapists in settings that include private or group massage practices, health clubs or fitness centers, chiropractic or medical offices, nursing homes, health spas and resorts, cruise ships, sports medicine facilities, and physical therapy centers. Some massage therapists have portable equipment and work at their clients' offices or homes.

Competency Profile

This curriculum is designed to prepare students to:

- Have a working knowledge of the structure and function of the human body and how it is affected by massage
- Take a client health history and determine an appropriate course of massage therapy treatment
- Perform relaxation massage
- Perform therapeutic massage
- Communicate effectively with clients and other healthcare providers
- Behave in an ethical manner
- Take the National Certification Exam for Therapeutic Massage

*Completion of this certificate program, National certification and employment in the massage therapy field may allow articulation of up to 27 credits towards an Associate Degree in Health Science.

PROGRAM REQUIREMENTS

Anatomy/Physiology/Kinesiology/Pathology
Swedish Massage
Chair Massage
Connective Tissue Therapy
Neuromuscular Therapy
Sports Massage

Awareness/Communication/Ethics
Reflexology
Business Practices
Integration
Spa/Aromatherapy
Student Clinic

RECOMMENDED SEQUENCE FOR STUDENTS

This program must be completed in sequence as part of a full –time day or part-time evening/weekend program.

Mathematics

Associate in Arts Degree – 4070

Mathematics, Science, and Allied Health Division

Students prepare to transfer to four-year institutions offering degrees in mathematics, operations research, and statistics. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major	
ENGL 101 English Composition I	3	CPS 135 C Programming or	
ENGL 102 English Composition II or		CPS 141 Pascal Programming or	
ENGL 104 Report and Technical Writing	3	CPS 161 Computer Science I	3
SPCH 101 Effective Speaking	3	MATH 125 Discrete Mathematics	3
Core A Elective	3	MATH 220 Linear Algebra	4
Core B Elective	3	MATH 221 Calculus III	4
Core B Elective	3	MATH 222 Differential Equations	4
Core C MATH 121 Calculus I	4	PHYS 212 Physics: Engineers/Scientists II	4
Core C MATH 122 Calculus II	4	Program Specific Electives*	6
Core C PHYS 211 Physics: Engineers/Scientists I	4		28
General Education Transfer Elective	3	*Select two courses from the following:	
Physical Education & Wellness	1	ASTR 103, 104; BIOL 101, 102, 201; CHEM 101, 102;	
	34	CPS 113, 115, 135, 141, 151; ENGR 213, 214;	
		GEOL 101, 102, 201; MATH 203,	
		METR 101; PHYS 215	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Fall Semester	Spring Semester
ENGL 101 3	CPS 135, 141, or	MATH 220 4	MATH 222 4
MATH 121 (Core C) 4	161 3	MATH 221 4	PHYS 212 4
SPCH 101 3	ENGL 102 or 104 3	PHYS 211 (Core C) 4	Core B Elective 3
Core A Elective 3	MATH 122 (Core C) 4	Core B Elective 3	GenEd Trans. Elec. 3
	MATH 125 3	PE & W 1	Program Specific
	Program Specific		Elective 3-4
	Elective 3-4		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Mathematics – Computer Science

Associate in Science Degree – 4030

Mathematics, Science, and Allied Health Division

This program focuses on computer design, algorithm design, programming techniques, data structures, and a variety of programming languages. Since mathematical background is essential to success in this program, students must complete College Algebra or its equivalent to begin the program. Requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education		Major	
ENGL 101 English Composition I	3	CPS 121 JAVA Programming	3
ENGL 102 English Composition II or		CPS 161 Computer Science I	3
ENGL 104 Report and Technical Writing	3	CPS 162 Computer Science II	3
SPCH 101 Effective Speaking	3	CPS 230 Object Oriented Programming	3
Core A Elective	3	MATH 125 Discrete Mathematics	3
Core B Elective	3	MATH 220 Linear Algebra	4
Core B Elective	3	Program Specific Electives	11
Core C MATH 121 Calculus I	4	(Select courses from the following, one must be	
Core C, MATH 122 Calculus II	4	a Core C Science: ASTR 103, 104;	
Core C Elective (Science)*	3	BIOL 101, 102, 121, 122, 130, 201, 202, 212, 221;	
General Education Transfer Elective	3	CHEM 101, 102, 202, 203, 204; CPS 115, 135;	
Physical Education & Wellness	1	ENGR 213, 214, 271; GEOL 101, 102, 201; MATH 202,	
	33	210, 221, 222; METR 101; PHYS 201, 202, 211, 212, 215)	

30

* Select a course from list of Program Specific Electives.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
CPS 121	3	CPS 161	3	CPS 162	3	CPS 230	3
ENGL 101	3	ENGL 102 or 104	3	MATH 220	4	Core B Elective	3
MATH 121 (Core C)	4	MATH 122 (Core C)	4	Core B Elective	3	Program Specific	
SPCH 101	3	MATH 125	3	Program Specific		Electives	4
GenEd Trans. Elec.	3	Core A Elective	3	Electives	7	Core C Elective	3
						PE & W	1

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Mathematics Education

Associate in Arts Degree – 4150

Mathematics, Science, and Allied Health Division

The College's range of education programs allows students planning a career in teaching to complete the first two years of a transfer program and earn an associate in arts degree whether they plan to teach in elementary or secondary schools. All students should be aware of the standards of the Pennsylvania Department of Education and that they specify different preparations for elementary and secondary school teachers.

The PA State Board of Education passed new requirements for admission to, as well as exit from, professional education programs. On October 7, 2000, Title 22 of the PA School Code, Chapter 354, became law. This regulation affects every institution that prepares teachers in the Commonwealth of Pennsylvania. These requirements affect all (elementary and secondary) bachelor's level-education programs for PA Teacher Certification. Students who complete 48 credit hours after August 15, 2002 but prior to August 15, 2003 must have a 2.8 GPA (3.0 GPA after August 15, 2003) to enter professional courses leading to initial teacher certification. They will also be required to attain a qualifying score on the PRAXIS-I Academic Skills Assessment test.

Each student will be required to have an Act 34 Criminal Background Investigation and an Act 151 Child Abuse Clearance prior to any practicum/student teaching experience and employment. The student should consider these factors prior to enrolling in this program.

Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The entire program is available at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer Pre-Teaching curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	CPS 113 Basic Programming or	
ENGL 102 English Composition II or		CPS 115 Visual Basic or	
ENGL 104 Report and Technical Writing	3	CPS 135 C Programming or	
SPCH 101 Effective Speaking	3	CPS 141 Pascal Programming	3
Core A Elective	3	EDUC 101 Foundations of Education	3
Core B Elective	3	EDUC 203 Introduction to Classroom Instruction	3
Core B Elective	3	MATH 125 Discrete Mathematics	3
Core C MATH 121 Calculus I	4	MATH 220 Linear Algebra	4
Core C MATH 122 Calculus II	4	MATH 221 Calculus III	4
Core C Elective Science	3	Program Specific Electives*	8
General Education Transfer Elective	3		28
Physical Education & Wellness	1		
	33		

*Select from the following courses: ASTR 103, 104; BIOL 101, 102, 201; CHEM 101, 102; CPS 113, 115, 135, 141; ENGR 213, 214; GEOL 101, 102, 201; MATH 203, 222; METR 101; PHYS 201, 202, 211, 212, 215

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
EDUC 101	3	ENGL 102/104	3	Program Elective	4	MATH 125	3
ENGL 101	3	MATH 122 (Core C)	4	MATH 220	4	Core C Elective	3
MATH 121 (Core C)	4	CPS 113/115/135/141	3	MATH 221	4	Core B Elective	3
SPCH 101	3	Program Elective	4	Core B Elective	3	GenEd Trans. Elec.	3
Core A Elective	3	EDUC 203	3			PE & W	1

2/1/2008

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Mechanical Engineering Technology

Associate in Science Degree – 4700

Business, Hospitality, Engineering, and Technology Division

The design option prepares students for employment in such areas as design/drafting, technical sales, and others. State-of-the-art drafting and design classes are supported by a CAD system. Students work with the sophisticated CNC and PLC programming systems. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster and Lebanon Campuses and at other sites.

Career Opportunities

Graduates have been prepared as technicians for the mechanical engineering field. Graduates are also prepared as technicians employable in the manufacturing industry.

Competency Profile

This curriculum is designed to prepare students to:

- Fabricate machine components using CNC and CAM
- Perform basic programming for CNC machine tools
- Design and develop mechanical devices
- Test complex machinery and components
- Prepare technical reports and write specifications and manuals
- Program machine tools using standard codes or through a CAD system
- Prepare technical reports and manuals
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS =63)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	CAD 154 Computer Aided Drafting & Design	3	MATH 103 College Algebra	3
ENGL 104 Report and Technical Writing <u>or</u>		CAD 164 Advanced Computer Aided Drafting		MATH104 Trigonometry	3
ENGL 102 English Composition II	3	and Design	2		6
SPCH 104 Interpersonal Communication <u>or</u>		CVTE 208 Strength of materials	3		
SPCH 101 Effective Speaking	3	ELEC 100 Fundamental of Electricity/Electronics	1		
Core A Elective	3	ENGR 271 Design for the Environment	3		
Core B Elective	3	GTEC 104 Engineering Materials and Processes	3		
Free Elective	3	GTEC 111 General Technology Orientation	1		
Physical Education & Wellness	1	GTEC 201 Statics	3		
	19	GTEC 202 Statistical Quality Control	3		
		GTEC 208 Strength Materials Lab	1		
		IA 205 Computer Numerical Control	3		
		IA 208 PLCs and Automation <u>or</u>	2		
		IA 213 Troubleshooting PLCs	(3)		
		MDES 201 Dynamics	3		
		MDES 204 Product Design	3		
		MDES 206 Fluid Flow	3		
		MDES 207 Machine Shop Theory and Practice	1		
			38		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer Session	Fall Semester	Spring Semester
CAD 154 3	CAD 164 2	Free Elective 3	CVTE 208 3	ENGR 271 3
ELEC 100 1	SPCH 104 <u>or</u> 101 3	Core B Elective 3	GTEC 202 3	GTEC 104 3
ENGL 101 3	ENGL 104 <u>or</u> 102 3		GTEC 208 1	IA 208 or 213 2
GTEC 111 1	GTEC 201 3		MDES 201 3	MDES 204 3
MATH 103 3	IA 205 3		MDES 206 3	PE & W 1
MDES 207 1	MATH 104 3			
Core A Elective 3				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Mechanical Technology

Certificate Program – 4350

Business, Hospitality, Engineering, and Technology Division

Students learn solids modeling as well as two-dimensional and three-dimensional drafting techniques. The sophisticated, high technology of CNC and PLC programming systems for computer-assisted manufacturing is included. The complete program is available only at the Harrisburg Campus.

Career Opportunities

Graduates are prepared for entry-level employment as drafters or technical assistants in government or industry.

Competency Profile

This curriculum is designed to prepare students to:

- Draft design details and production drawings for mechanical components using a CAD system
- Serve as entry-level programmers for NC/CNC equipment
- Install and test mechanical equipment
- Serve as aides to engineers and scientists
- Serve as apprentice machinists

PROGRAM REQUIREMENTS (TOTAL CREDITS = 31)

General Education	Major		Other Required Courses	
	CAD 154 Computer Aided Drafting and Design	3	MATH 103 College Algebra	3
	ELEC 100 Fundamentals of Electricity and Electronics	1	MATH 104 Trigonometry	3
	GTEC 104 Engineering Materials & Processes	3	Program Specific Electives*	8
	GTEC 111 Technology Orientation	1		14
	GTEC 201 Statics	3		
	IA 205 Computer Numerical Control	3	*Select from the options below:	
	IA 208 PLCs and Automation or	2	CAD 164; CVTE 208; ENGR 271; GTEC 202, 208;	
	IA 213 Troubleshooting PLCs	(3)	MDES 201, 206; MGMT 201	
	MDES 207 Machine Shop Theory and Practice	1		
		17		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The program focuses on the study of media in American culture. It combines general and technical education to prepare students for transfer to four-year institutions. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	MDST 101 Introduction to Mass Media and Society	3
ENGL 102 English Composition II	3	MDST 111 Introduction to News Writing & Reporting	3
SPCH 101 Effective Speaking	3	MDST 112 News Editing and Makeup	3
Core A Elective	3	PHIL 101 Introduction to Philosophy	3
Core B PSYC 101 General Psychology	3	SPCH 104 Interpersonal Communication	3
Core B GP 202 The Politics of States & Cities	3	C&A Elective	3
Core C MATH 202 Introduction to Statistics	3	Select from: ART, ENGL, FRCH, GRMN, HUM,	
Core C Elective (Science)	3	MCOM, MDST, MUS, PHIL, SPAN, THTR	
Core C Elective (Science)	3	Media Studies Elective	3
General Education Transfer Elective	3	Select from: ART 111; CIS 105; MKTG 218;	
Physical Education & Wellness	<u>1</u>	MDST 113, 114, 121, 213, 214	
	31	Social Science Elective	3
		Select from: ANTH, ECON, GEOG, GP, HIST,	
		PSYC, SOCL, SOSC	
		Foreign Language*	<u>6-8</u>
			30

*Foreign language at the Intermediate level is required.
If competency has been met the student can take any C&A electives.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	MDST 112	3	Core C Elective	3
C&A Elective	3	GP 202 (Core B)	3	Core A Elective	3	Media Studies Elective	3
MDST 101	3	Math 202 (Core C)	3	GenEd Trans. Elec.	3	Social Science Elective	3
PHIL 101	3	SPCH 101	3	Core C Elective	3	SPCH 104	3
PSYC 101 (Core B)	3	MDST 111	3	Foreign Language	3	Foreign Language	3
		PE & W	1				

Medical Assisting

Certificate Program – 3210

Mathematics, Science, and Allied Health Division

Medical Assisting is a multiskilled allied health profession with practitioners working primarily in ambulatory care settings such as medical offices and clinics. This program offers the student foundation skills in medical office administration and clinical patient care required for beginning practice in the field, as well as, grounding in the legal and ethical principles governing medical practice. The program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the American Association of Medical Assistants. The complete program is available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster, and Lebanon Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates find employment in various health care facilities as Medical Assistants.

Competency Profile

This curriculum is designed to prepare students to:

- Function effectively as members of the healthcare team
- Demonstrate the entry-level competencies prescribed by the American Medical Assistants Endowment
- Demonstrate effective oral and written communication skills

PROGRAM REQUIREMENTS (TOTAL CREDITS = 39)

General Education	Major	
	AH 140 Introduction to Allied Health	3
	AH 141 Patient Care Skills Laboratory	1
	AH 142 Introduction to Medical Laboratory Techniques	3
	AH 150 Introduction to Human Illness and Disease	3
	AH 209 Pharmacology for Allied Health	3
	AH 213 Introduction to Medical Insurance	3
	BIOL 105 Medical Terminology	3
	BIOL 111 Introduction to Human Biology	3
	CIS 105 Introduction to Software for Business	3
	MA 201 Pharmacology Laboratory	1
	MA 212 Ambulatory Care Clinical Procedures	4
	MA 220 Medical Office Administration I	3
	MA 221 Medical Office Administration II	3
	MA 230 Medical Assisting Externship	<u>3</u>
		39

*Program prerequisites: AOS 101, or satisfactory keyboarding ability; placement into English 101 and into MATH 051

Medical Assisting Ambulatory Care Technology

Associate in Science Degree – 3520

Mathematics, Science, and Allied Health Division

Medical Assisting is a multiskilled allied health profession with practitioners working primarily in ambulatory care settings such as medical offices and clinics. The program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the American Association of Medical Assistants. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates find employment in various health care facilities as Medical Assistants.

Competency Profile

This curriculum is designed to prepare students to:

- Function effectively as members of the healthcare team
- Demonstrate the entry-level competencies prescribed by the American Association of Medical Assistants Endowment
- Demonstrate effective oral and written communication skills
- Appreciate accomplishments in the arts and sciences
- Understand how specialized training fits into the healthcare delivery system
- Take national entry-level credentialing examination for phlebotomy administered by the certifying agency of the profession

PROGRAM REQUIREMENTS (TOTAL CREDITS = 66)

General Education	Major	Other Required Courses
ENGL 101 English Composition I 3	AH 140 Introduction to Allied Health 3	BIOL 105 Medical Terminology 3
ENGL 106 Written Business Communication or	AH 141 Patient Care Skills Laboratory 1	BIOL 111 Introduction to Human
ENGL 102 English Composition II 3	AH 142 Introduction to Medical Laboratory	Biology (Core C) 3
SPCH 104 Interpersonal Communication or	Techniques 3	PSYC 101 General Psychology
SPCH 101 Effective Speaking 3	AH 150 Human Illness and Disease 3	(Core B) 3
Core A Elective 3	AH 209 Pharmacology for Allied Health 3	Program Electives 3-6
Free Elective 3	AH 210 Health Care Law and Ethics 3	(Select from the following:
Physical Education & Wellness 1	AH 213 Introduction to Medical Insurance 3	HLTH 101; CVT 101, 102, 103;
16	CIS 105 Introduction to Software for Bus. 3	MGMT 119, 203, 204; PSYC 212, 213;
	MA 201 Medical Assisting Pharmacology	SOCI 226; PBT 100; SHC 100, 101, 102,
	Laboratory 1	103)
	MA 212 Ambulatory Care Clinical	
	Procedures 4	12
	MA 220 Medical Office Administration I 3	
	MA 221 Medical Office Administration II 3	
	MA 230 Medical Assisting Externship 3	
	PBT 102 Phlebotomy Clinical Experience 2	
	38	

* Program Prerequisites: AOS 101 or satisfactory keyboarding ability; placement into ENGL 101 and into MATH 051

RECOMMENDED SEQUENCE FOR FULL -TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer Semester
AH 140 3	SPCH 104 or 101 3	PSYC 101 3
BIOL 111 3	ENGL 106 or 102 3	PE & W 1
ENGL 101 3	AH 150 3	
Core A 3	AH 210 3	
CIS 105 3	BIOL 105 3	
Fall Semester	Spring Semester	Summer Semester
AH 142 3	MA 212 4	MA 230 3
AH 213 3	MA 221 3	
AH 209 3	PBT 102 2	

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Medical Coding Specialist

Certificate Program – Noncredit

College and Community Development

The Medical Coding Specialist is responsible for translating and sequencing medical documentation into formal standardized, numerical codes for diagnoses and procedures. Medical Coding is a vital behind-the-scenes activity that supports the billing process. The student may be required to submit to Act 33 Child Abuse and /or Act 34 Pennsylvania State Police Criminal Background Checks prior to obtaining employment. The student should consider this factor before enrolling in the program. The complete program is available at the Harrisburg and Lancaster Campuses; some required courses are available at the Gettysburg and Lebanon Campuses.

This program is designed for individuals who have professional healthcare billing experience in the past 5 years or have successfully completed the Medical Insurance Billing Certificate Program.

Career Opportunities

This program will prepare individuals for employment as a medical biller, medical coder, or billing specialist in the health industry. Various organizations in the community offer opportunities for employment including medical practices, hospitals, coding and billing services, insurance companies, government agencies and consulting firms.

Competency Profile

This curriculum is designed to prepare students to:

- Analyze health records and assign codes for diseases and procedures
- Abstract key information from health records for reimbursement, statistics, and research purposes
- Research and review health records for auditing purposes
- Monitoring compliance with policies and procedures relevant to clinical data management and making suggestions for improvements
- Take the national certification examination administered by the certifying agencies of the profession

PROGRAM REQUIREMENTS

Medical Terminology	30 hours
Introduction to Anatomy & Physiology	30 hours
Introduction to CPT Coding	33 hours
ICD-9 Coding	30 hours
Advanced Coding I	30 hours
Advanced Coding II	30 hours
Certification Preparation Class	6 hours

RECOMMENDED SEQUENCE FOR STUDENTS

Students can complete this program by taking one or more courses each semester.

Medical Terminology
 Introduction to Anatomy & Physiology
 Introduction to CPT Coding
 ICD-9 Coding
 Advanced Coding I
 Advanced Coding II
 Certification Preparation Class

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Medical Insurance Billing Technician Certificate Program – Noncredit

College and Community Development

This Medical Insurance Billing Technician Certificate Program is designed to prepare the student to perform a variety of billing functions in a healthcare setting. The student may be required to submit to Act 33 Child Abuse and /or Act 34 Pennsylvania State Police Criminal Background Checks prior to obtaining employment. The student should consider this factor before enrolling in this program. The complete program is available at the Harrisburg and Lancaster Campuses. Courses in this program may also be available at the Gettysburg and Lebanon Campuses.

Career Opportunities

This program will prepare individuals for employment as a medical biller, medical coder, or billing specialist in the health industry. Various organizations in the community offer opportunities for employment including hospital billing departments, private medical offices, insurance companies, and many other medical facilities.

Competency Profile

This curriculum is designed to prepare students to:

- Code professional medical services and diagnosis
- Carry out collection procedures
- Create reports for management tools
- Research and review insurance claims
- Maintain patients' financial/accounting records
- Data entry payment information/adjustments/balances into computer software programs
- Take the national certification examination administered by the certifying agencies of the profession

PROGRAM REQUIREMENTS

This program was academically designed to be completed within in 1-2 years.

Medical Terminology	30 hours
Introduction to Anatomy & Physiology	30 hours
Introduction to Medical Insurance	24 hours
Introduction to CPT Coding	33 hours
ICD-9 Coding	30 hours
Insurance Reimbursement Calculations	15 hours
Medical Office Computer Applications	15 hours
One Elective*	6 hours

* Select one course from the following: Medical Claims Filing or Appeals or Fair Hearings and Collections

RECOMMENDED SEQUENCE FOR STUDENTS

Students can complete this program by taking one or more courses each semester.

Medical Terminology
Introduction to Anatomy & Physiology
Introduction to Medical Insurance
Introduction to CPT Coding
ICD-9 Coding
Insurance Reimbursement Calculations
Medical Office Computer Applications
Elective

Medical Laboratory Technician – Clinical Laboratory Technician

Associate in Arts Degree – 3580

Mathematics, Science, and Allied Health Division

The Medical Laboratory Technician/Clinical Laboratory Technician Program is designed to prepare a student for a career as a medical laboratory professional. The student will acquire the technical expertise to perform a wide variety of laboratory tests that aid physicians in the diagnosis and treatment of disease. The program is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). This program may require the student to complete a Pennsylvania Child Abuse History Clearance and/or State Police Criminal Record Check prior to enrollment, prior to the start of a clinical experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean. The complete program is available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster, and Lebanon Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates of this program obtain positions as Medical Laboratory Technicians/Clinical Laboratory Technicians in acute care facilities, physician office laboratories, clinics, independent laboratories, business, industry, and veterinary offices.

Competency Profile

This curriculum is designed to prepare students to:

- Work effectively with other hospital personnel
- Demonstrate the skills prescribed by the National Accrediting Agency for Clinical Laboratory Sciences
- Take the national entry-level credentialing examination administered by certifying agencies of the profession
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Understand how specialized training fits into the health care delivery system

PROGRAM REQUIREMENTS (TOTAL CREDITS = 75)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	MLT 100 Orientation to MLT	3	BIOL 121 Anatomy & Physiology I	4
ENGL 102 English Composition II	3	MLT 120 Hematology and Coagulation	4	BIOL 122 Anatomy & Physiology II	4
SPCH 101 Effective Speaking	3	MLT 122 Immunology	2	BIOL 221 Microbiology	4
Core A Elective	3	MLT 124 Immunohematology	3	CHEM 101 General Inorganic Chemistry I	4
Core B Elective	3	MLT 220 Clinical Microbiology	4	CHEM 102 General Inorganic Chemistry II <i>or</i>	
Free Elective	3	MLT 222 Clinical Chemistry	4	CHEM 200 Principles of Organic &	
Physical Education & Wellness	1	MLT 224 Urine Analysis	2	Biological Chemistry	4
	19	MLT 226 Clinical Experience I	3		20
		MLT 228 Clinical Experience II	3		
		MLT 230 Parasitology and Mycology	1		
		MLT 232 Clinical Experience III	3		
		MLT 234 Clinical Experience IV	3		
		MLT 236 Clinical Laboratory Management I	1		
			36		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Summer Session		Fall Semester		Spring Semester	
BIOL 121	4	CHEM 101	4	MLT 120	4
ENGL 101	3	BIOL 122	4	MLT 122	2
Core A	3	ENGL 102	3	MLT 124	3
		MLT 100	3	BIOL 221	4
		PE & W	1	CHEM 102 or 200	4
Summer Session		Fall Semester		Spring Semester	
MLT 220	4	MLT 226	3	MLT 232	3
MLT 222	4	MLT 228	3	MLT 234	3
MLT 224	2	MLT 230	1	MLT 236	1
		Core B	3	Free Elective	3
		SPCH 101	3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The medical transcriptionist is a key component to the healthcare team. Medical transcription is the act of translating from oral to written form (on paper or electronically) the record of a person's medical history, diagnosis, treatment, prognosis, and outcome. The primary skills necessary for performance of quality medical transcription are extensive medical knowledge and understanding, sound judgment, deductive reasoning, and the ability to detect medical inconsistencies in dictation. Additionally, a PA Child Abuse History Clearance and/or State Police Criminal Record Check may be required for employment. A certificate is awarded upon successful completion of this program. The complete program is available at the Harrisburg Campus; several required courses are available at the Gettysburg, Lancaster and Lebanon Campuses.

Career Opportunities

This program will prepare the individual for a career as a medical transcriptionist in a variety of positions within the medical field including medical offices, health clinics, hospitals, laboratories, private transcription companies, pharmaceutical companies, medical supply houses, and insurance companies.

Competency Profile

This curriculum is designed to prepare students to:

- Exhibit extensive medical knowledge and understanding
- Exhibit sound judgment and deductive reasoning
- Demonstrate proficiency in machine transcription
- Demonstrate good writing skills
- Assume responsibility without direct supervision
- Make decisions within the scope of assigned authority

PROGRAM REQUIREMENTS

Medical Terminology	30 hours	Intro to Anatomy & Physiology	30 hours
English for Transcription	30 hours	MS Word, Basic	9 hours
MS Word, Intermediate	9 hours	MS Word, Advanced	9 hours
Pharmacy Science	18 hours	Healthcare Law & Ethics	12 hours
Medical Transcription I	30 hours	Medical Transcription II	30 hours

RECOMMENDED SEQUENCE FOR STUDENTS

Students can complete this program by taking one or more courses each semester.

Medical Terminology
Intro to Anatomy & Physiology
English for Transcription
MS Word, Basic
MS Word, Intermediate
MS Word, Advanced
Pharmacy Science
Healthcare Law & Ethics
Medical Transcription I
Medical Transcription II

Municipal Police Academy Program

Certificate Program – Noncredit

John J. Shumaker Public Safety Center

As the need for educational and training of municipal police officers increases, the Senator John J. Shumaker Public Safety Center at HACC – Central Pennsylvania’s Community College continues to meet this need as a certified police training center under the Municipal Police officers’ Education and training Commission (MPOETC).

In-service cadets are those individuals employed by a municipal police department or other law enforcement agency. These individuals are enrolled by the employing agency. Pre-service cadets are those cadets who attend on their own and are responsible for tuition and other expenses.

Career Opportunities

Municipal police officers and county detectives are required to complete this 20-week police academy in order to attain certification which is mandated by the Municipal Police Officer’s Education and Training Commission.

Competency Profile

This curriculum is designed to prepare students to:

- Enforce criminal and traffic laws
- Develop proficiency in investigative techniques, verbal and writing skills
- Develop proficiency in use of firearms and defense tactics
- Meet established standards of physical fitness
- Develop proficiency in operation of police patrol vehicles
- Develop skills in human relations and community oriented policing
- Develop skills in Patrol procedures and operations
- Develop skills in crisis management
- Receive certification in first aid and CPR

*Upon successful completion of the Municipal Police Academy the student is eligible to receive 21 credits upon enrolling in the Criminal Justice Associate degree. (Courses: CJ 104, CJ 201, CJ 205, Criminal Justice Electives, and Physical Education Electives)

PROGRAM ENTRANCE REQUIREMENTS (Pre-service cadets)

- Must be a U.S. Citizen
- Required to be a minimum of 21 years of age by the last date of the training program
- Possess a valid operators license
- High school diploma or G.E.D (transcript required)
- Submit college transcripts if applicable
- A \$15.00 fee is required to take the Nelson-Denny Reading Test (a test on reading comprehension and spelling)
- A \$25.00 fee is required to take the MPOETC Fitness Standard Test
- The MPOETC Fitness Test consists of a 300 meter timed run, bench press, one-minute sit-ups, and 1 ½ mile run
- Provide proof of medical insurance
- Complete physical examination
- Complete psychological examination (MMPI and a clinical interview with the psychologist)
- Obtain a Criminal History Check through the PA State Police (online at <https://epatch.state.pa.us/Home.jsp>)
- Obtain a 10-year Department of Transportation driving record check (online at www.dmv.state.pa.us)
- If applicable, submit a copy of military discharge document (DD214)
- A letter of endorsement from a Chief of Police to be submitted to the Director of Law Enforcement Training
- Three letters of reference from non-relatives
- Three letters of reference from present or former employers
- Successful completion of an oral interview
- Agree in writing to abide by the Academy Rules and Regulations
- Pre-service cadets are not permitted to be employed during their attendance

(Note: In-service cadets are enrolled through a similar process and requirements with their employing agency)

RECOMMENDED SEQUENCE FOR STUDENTS

Students must successfully complete the entire 20-week police academy.

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

This diploma program supports interest in music performance and marketing music talents. The program is designed for students interested in advancing their musical knowledge relating to various music styles, history, theory and performance. Music knowledge is combined with interests in music marketing. Students may wish to further their education in an associate program in music industry, retailing or marketing. The complete program is available at the Harrisburg Campus.

Career Opportunities

Graduates of this program seek entrepreneurial employment as a music performer, performance critic, private music teacher, or in music marketing.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate an understanding of how music is created and the highlights of its historical development from ancient times to present
- Understand the basics of music theory, music notation, and basic music composition
- Complete private instruction in voice, piano, or guitar
- Promote their talent through marketing practices
- Effectively communicate with professionals in both the business and music industries

PROGRAM REQUIREMENTS (TOTAL CREDITS = 18)

General Education	Major	Other Required Courses
	MUS 102 Intro to Music or	
	MUS 104 Intro to World Music	3
	MUS 119 Intro to Music Theory or	
	MUS 120 Music Theory I	3
	MUS Electives 100-299	6
	Program Specific Electives *	6
		18

*Select two program specific electives from the following:
BUSI 214; MKTG 111, 201, 209, 212, 216, 225, 226, 230

Music Industry, The

Associate in Arts Degree – 1801

Business, Hospitality, Engineering, and Technology Division

The program provides students with experiences in the classroom, MIDI computer lab (Harrisburg Campus), professional studio production at off-campus locations, and internships. This program is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete program is available only at the Harrisburg Campus; several required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Graduates of the program are prepared for careers in music marketing, retailing, wholesaling, music publishing, licensing, concert promotion, arts promotion, recording production and distribution technology in the entertainment field.

Competency Profile

This curriculum is designed to prepare students to:

- Fulfill the entry-level requirements to prepare for advancement in careers in music merchandising, music retailing, music recording, music promotion, and arts administration fields
- Manage a personal career in entertainment
- Communicate effectively with professionals from both the business and music industries
- Understand the theoretical, practical, legal, and business aspects of the entertainment industry

PROGRAM REQUIREMENTS (TOTAL CREDITS = 65)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	ACCT 101 Principles of Accounting I	4	MATH 100 College Mathematics for	
ENGL 102 English Composition II <u>or</u>		BUSI 201 Business Law I	3	Business or higher	3
ENGL 106 Written Business Comm.	3	BUSI 214 Music Business Studies	3	CIS Elective	3
SPCH 101 Effective Speaking	3	MKTG 201 Principles of Marketing	3	Management Elective	3
Core A Elective	3	MKTG 212 Personal Selling	3	Music Electives (MUS 100-299)	6
Core B Elective	3	MKTG 217 Retail Management <u>or</u>			15
Core C Elective	3	MKTG 218 Advertising	3		
Free Elective	3	MKTG 225 Music Merchandising	3		
Physical Education & Wellness	1	Marketing Electives			
	22	(Select 6 credits from the following:			
		MKTG 111, 209, 226, 227, 228, 230)	6		
			28		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
BUSI 214	3	ENGL 102 or 106	3	ACCT 101	4	MKTG Elective	3
ENGL 101	3	MATH 100 or higher	3	BUSI 201	3	Management Elective	3
MKTG 212	3	MKTG 201	3	MKTG 217 or 218	3	Core B Elective	3
Core C Elective	3	MKTG 225	3	SPCH 101	3	Free Elective	3
CIS Elective	3	Core A Elective	3	Music Electives	2-4	PE & W	1
Music Electives	1-4	Music Electives	1-4	MKTG Elective	3	Music Electives	2-4

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

This diploma program focuses on music product sales, music retailing, music store management, music wholesale and distribution systems (web design and marketing). Course work completed in this diploma program provides a strong foundation for entrepreneurial music business practice and management. Students may wish to further their education in an associate program in the music industry, retailing or marketing. The complete program is available at the Harrisburg Campus.

Career Opportunities

Graduates of this program find employment as product sales specialists in music retail, music wholesale or music distribution.

Competency Profile

This curriculum is designed to prepare students to:

- Use the internet as a tool to market recordings and performances
- Demonstrate an understanding of how E-commerce is applied to music recording
- Gain a greater understanding of buyer-seller relationships and personal approaches to selling
- Develop music product knowledge
- Understand the concepts and practices of successful retail management
- Explore marketing and sales techniques as applicable to the music product industry

PROGRAM REQUIREMENTS (TOTAL CREDITS = 18)

General Education	Major	Other Required Courses
	MKTG 111 Music Business and the Internet	3
	MKTG 212 Personal Selling	3
	MKTG 217 Retail Management	3
	MKTG 225 Music Merchandising	3
	Program Specific Electives*	<u>6</u>
		18

*Select two program specific electives from the following:
BUSI 214; MGMT 121; MKTG 201, 209, 216, 230, 235

Music Technology and Marketing

Diploma Program – 0160

Business, Hospitality, Engineering, and Technology Division

Students learn technical skills necessary to participate in studio production and performance sound management as well as in CD production, distribution and marketing. The complete program is available only at the Harrisburg Campus.

Career Opportunities

Students who complete the program can be employed by sound production companies or recording studios as technicians.

Competency Profile

This curriculum is designed to prepare students to:

- Provide engineering assistance in recording studios and at concerts
- Understand the use of the Internet in the promotion and sale of music productions
- Apply recording and audio production skills both in recording and performance environments

PROGRAM REQUIREMENTS (TOTAL CREDITS =20)

General Education	Major	
	MKTG 111 Music Business and the Internet	3
	MKTG 226 MIDI and Computer Applications	3
	MKTG 227 Studio and Performance Production Operations	4
	MKTG 228 Audio Technology	4
	Program Specific Electives*	6
		20

*Select two program specific electives from the following:
BUSI 214; MKTG 201,209, 212, 218, 225, 230

Nanofabrication Manufacturing Technology

Associate in Applied Science Degree – 4690

Business, Hospitality, Engineering, and Technology Division

The skills learned in this program are used in chip manufacturing, pharmaceuticals, micro-electromechanical systems, sensors, biomedicine, opto-electronics, and cutting-edge computer displays. Students gain those hands-on skills in the laboratory at HACC and the Pennsylvania State University. The Nanofabrication Manufacturing Technology program uses a resource-sharing approach to “high-tech” workforce development. After successfully completing three semesters of background work with a minimum 3.0 GPA and a letter of recommendation from a HACC electronics faculty, students go to the PSU Electronic Materials and Processing Research Laboratory (EMPRL), located in State College, Pa. The complete three semesters are available only at the Harrisburg Campus; several courses are available at the Lancaster and Lebanon Campuses.

Career Opportunities

Graduates of the program enter the job market as clean-room technicians in the semiconductor manufacturing industry.

Competency Profile

This curriculum is designed to prepare students to:

- Assist a technical team in the clean-room environment
- Operate and maintain clean-room equipment
- Work in a micro- or Nanofabrication environment
- Demonstrate proper safety when working in a chemical environment
- Demonstrate knowledge of clean-room procedures
- Write and speak effectively
- Appreciate accomplishment in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 71)

General Education	Major	Other Required Courses
ENGL 101 English Composition I 3	CAD 154 Computer Aided Drafting and Design 2	CHEM 100 Principles of Chemistry <u>or</u> 3 (4)
ENGL 104 Report and Technical Writing 3	ELEC 101 Equipment Utilization 1	CHEM 101 General Chemistry I 3
SPCH 104 Interpersonal Communication 3	ELEC 106 Fundamental of Electronics 4	MATH 103 College Algebra 3
Core A Elective 3	ELEC 111 AC/DC Circuits I 4	MATH 104 Trigonometry 3
Core B Elective 3	ELEC 125 Introduction to PC Technology 3	MATH 202 Statistics (Core C Elective) 3
Free Elective 3	ELEC 213 Digital Electronics 4	PHSC 113 Introduction to Physical Science 3
Physical Education & Wellness 1	ELEC 216 Characterization, Packaging and Testing 3	
	GTEC 111 General Technology Orientation 1	
	NFAB 211 Material, Safety & Equipment Overview 3	
	NFAB 212 Basic Nanofabrication Procedures 3	
	NFAB 213 Thin Films 3	
	NFAB 214 Lithography 3	
	NFAB 215 Materials Modification 3	
	NFAB 216 Characterization, Packaging and Testing 3	
		15
		37

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer Session	Fall Semester	Spring Semester
ELEC 101 1	ELEC 111 4	Core A Elective 3	CHEM 100 or 101 3 (4)	(Capstone Semester at EMPRL)
CAD 154 2	SPCH 104 3	Core B Elective 3	ELEC 106 4	NFAB 211 3
ELEC 125 3	MATH 104 3	PE & W 1	MATH 202 3	NFAB 212 3
GTEC 111 1	ENGL 104 3		PHSC 113 3	NFAB 213 3
MATH 103 3	ELEC 213 4		Free Elective 3	NFAB 214 3
ENGL 101 3				NFAB 215 3
				NFAB 216 3

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Nuclear Medicine Technology

Associate in Arts Degree – 3630

Mathematics, Science, and Allied Health Division

Students learn how to perform diagnostic and therapeutic procedures involving radioactive materials and techniques for safe storage and disposal of these materials. This program is offered in cooperation with Lancaster General College of Nursing and Health Sciences. The complete program is available at the Harrisburg and Lancaster Campuses. Some required courses are available at the Gettysburg, Lebanon and York Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates are prepared for employment as nuclear medicine technologists in hospitals.

Competency Profile

This curriculum is designed to prepare students to:

- Work effectively with other hospital personnel
- Demonstrate the skills prescribed by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology
- Take the national entry-level credentialing examination administered by the Nuclear Medicine Technology Certification Board (NMTCB) or the American Registry of Radiologic Technologists (ARRT)
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Understand how specialized training fits into the health care delivery system

PROGRAM REQUIREMENTS (TOTAL CREDITS = 79)

General Education		Major	
ENGL 101 English Composition I	3	AH 140 Introduction to Allied Health	3
ENGL 102 English Composition II	3	AH 141 Patient Care Skills Laboratory	1
SPCH 101 Effective Speaking	3	BIOL 121 Anatomy & Physiology I	4
Core A Elective	3	BIOL 122 Anatomy & Physiology II	4
Core B Elective	3	CHEM 101 General Inorganic Chemistry I	4
Free Elective	3	CHEM 102 General Inorganic Chemistry II	4
Physical Education & Wellness	<u>1</u>	CPS 113 Basic Programming	3
	19	MATH 103 College Algebra	3
		PHYS 151 Physics for Technicians or	
		PHYS 201 General Physics I	4
		Clinical Rotation	<u>30</u>
			60

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Summer Session		Fall Semester		Spring Semester		Summer Session	
AH 140	4	BIOL 121	4	BIOL 122	4	ENGL 102	3
AH 141	1	CHEM 101	4	CHEM 102	4	Core A Elective	3
MATH 103	3	ENGL 101	3	CPS 113	3	Core B Elective	3
		PHYS 151 or 201	4	SPCH 101	3	Free Elective	3
				PE & W	1		

Fall and Spring Semesters and Summer Session

Clinical Rotation	30
-------------------	----

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

This program is designed to develop sensitivity and competence in the basic tasks required to care for patients or residents in a variety of healthcare facilities. The purpose of this program is to provide the student with a basic level of knowledge and skills needed to care for patients, residents, or clients as set forth by the profession of nursing and regulated by the Commonwealth of Pennsylvania. This program is offered throughout the state of Pennsylvania at select sites. This program requires students to submit to Criminal History Record Information checks prior to entry. This program is offered at numerous training locations and clinical settings throughout the state.

Selective Program

Specific admission criteria must be met prior to start of the program. Call (717) 221-1352 or email nat@hacc.edu for specific program entry requirements.

Career Opportunities

This program will prepare individuals for employment as nurse aides in long term care facilities, hospitals, rehabilitation centers and other healthcare facilities.

Competency Profile

This curriculum is designed to prepare students to:

- Take the PA State Certification Exam for Nurse Aides.

*Completion of this certificate program, Nurse Aide Certification and work experience may allow articulation of up to 6 credits to the Senior Health Care Diploma Program.

PROGRAM REQUIREMENTS

Long-Term Care and the Nursing Assistant's Role
Foundations of Resident Care
Understanding Your Residents
Body Systems
Personal Care Skills
Basic Nursing Skills
Nutrition and Hydration
Common, Chronic, and Acute Conditions
Rehabilitation and Restorative Services
Caring for Yourself

RECOMMENDED SEQUENCE FOR STUDENTS

Students must successfully complete the entire 104 hour class.

Nursing

Associate in Arts Degree – 3680

Mathematics, Science, and Allied Health Division

The program is approved by the Pennsylvania State Board of Nursing and accredited by the National League for Nursing Accreditation Commission. This program requires the student to complete a Pennsylvania Child Abuse History Clearance and a State Police Criminal Record Check prior to the start of the clinical experience. Competence in dosage calculation must be demonstrated on admission to and for progression in the nursing program. A dosage calculation course is offered for students who do not meet this requirement. The student should consider these factors before enrolling in this program. If the student has any questions regarding this, he or she should contact the Program Director at the campus of his/her choice. Pennsylvania law states that the State Board of Nursing may refuse to license a person who has been convicted of a felony. The complete program is available at the Harrisburg, Gettysburg and Lancaster Campuses and York Campus. Some required courses are available at the Lebanon Campus and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates of the program are prepared for employment as registered nurses caring for patients in hospitals and extended-care facilities.

Competency Profile

This curriculum is designed to prepare students to:

- Use the nursing process as a basis for decision-making in nursing
- Implement nursing skills appropriate to the assessed stage of growth and development of the individual
- Demonstrate sensitivity to cultural differences
- Demonstrate effective verbal and written communication skills
- Demonstrate accountability in nursing practices
- Function in a variety of settings as a member of the health care team
- Assume responsibility for personal continuing education
- Participate in community and professional activities
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Qualify for RN Licensure examination

PROGRAM REQUIREMENTS (TOTAL CREDITS = 72)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	NURS 103 Nursing/Family Health (D) or		BIOL 121 Anatomy & Physiology I	4
ENGL 102 English Composition II	3	NURS 103A Nursing/Family Health I (D)		BIOL 122 Anatomy & Physiology II	4
SPCH 101 Effective Speaking	3	and		BIOL 221 Microbiology	4
Core A Elective	3	NURS 103B Nursing/Family Health II (D)	7	PSYC 101 General Psychology	3
Free Elective	3	NURS 104 Nursing/Common Life Exper. or		PSYC 213 Abnormal Psychology	3
Physical Education & Wellness	1	NURS 104A Nursing/ Common Life I		SOCI 201 Introduction to Sociology (D)	3
	16	and			21
		NURS 104B Nursing/Common Life II	8		
		NURS 203 Nursing in Society I	1		
		NURS 204 Nursing in Society II	1		
		NURS 205 Nursing/Common Health I (D) or			
		NURS 205A Nursing/Common Health 1A (D)			
		and			
		NURS 205B Nursing/Common Health 1B (D)	9		
		NURS 206 Nursing/Common Health II or			
		NURS 206A Nursing/Common Health IIA			
		and			
		NURS 206B Nursing/Common Health IIB	9		
			35		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Summer Session		Fall Semester		Spring Semester		Fall Semester		Spring Semester	
BIOL 121	4	BIOL 221	4	BIOL 122	4	NURS 203	1	NURS 204	1
		ENGL 101	3	ENGL 102	3	NURS 205 (D)	9	NURS 206	9
		NURS 103 (D)	7	NURS 104	8	PSYC 213	3	SPCH 101	3
		PSYC 101	3	SOCI 201 (D)	3	Free Elective	3	Core A Elective	3
						PE & W	1		

Option for Licensed Practical Nurses: Students who have graduated as Practical Nurses and have a Practical Nursing License in good standing from the PA State Board of Nursing can receive advanced standing in the Associate Degree Nursing Program when they continue their education at Harrisburg Area Community College. Students should contact their advisor about this option.

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Ornamental Horticulture

Associate in Applied Science Degree – 4810

Business, Hospitality, Engineering, and Technology Division

Students develop skills to enter a variety of positions in the green industry. Greenhouse production, landscape design, maintenance, and construction are covered. Extensive identification of herbaceous and woody plants is studied. Hands-on practical skills are developed at HACC's living laboratories with over 200 acres of display gardens and greenhouse facilities where students will complete 240 hours (20 hours a week) of practicum experience. The entire program is offered at the Harrisburg Campus only.

Career Opportunities

Graduates of the program are employed as professional gardeners, greenhouse production managers, nursery production managers, landscape foreman, and landscape designers.

Competency Profile

This curriculum is designed to prepare students to:

- Learn proper growing techniques
- Design landscape and garden plans
- Identify a wide range of landscape and ornamental plants
- Plan, install, and maintain gardens and landscapes
- Apply customer service skills
- Supervise production and landscape maintenance crews
- Apply entrepreneurial and business skills
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 66)

General Education	Major	Other Required Courses	
ENGL 101 English Composition I	3	HORT 101 Introduction to Horticulture	3
ENGL 106 Written Business Comm.	3	HORT 102 Integrated Pest Management	1
SPCH 104 Interpersonal Communication	3	HORT 110 Greenhouse Production I	3
Core A Elective (Recommend SPAN 101)	3	HORT 120 Landscape Design I	3
Core B Elective	3	HORT 130 Nursery Management	3
Core C Elective (Recommend BIOL 101)	3	HORT 140 Landscape Construction	2
Free Elective	3	HORT 150 Landscape Maintenance	2
Physical Education & Wellness	1	HORT 161 Woody Plants I	3
	22	HORT 163 Woody Plants II	3
		HORT 165 Herbaceous Plants I	3
		HORT 167 Herbaceous Plants II	3
		HORT 210 Greenhouse Production II	3
		HORT 220 Landscape Design II	3
		HORT 291 Horticulture Practicum	3
			38
		Program Electives*	6
			6

*Select two from the following courses:
MKTG 212; MGMT 119; MGMT 121

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer	
ENGL 101	ENGL 106	HORT 140	2
HORT 101	SPCH 104	HORT 150	2
HORT 110	HORT 210		
HORT 161	HORT 165		
PE & W	Core C		
Fall Semester	Spring Semester	Summer	
HORT 120	HORT 220	HORT 291	3
HORT 130	HORT 163	HORT 102	1
HORT 167	Core B		
Core A	Free Elective		
Program Elective	Program Elective		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Ornamental Horticulture

Certificate Program – 4450

Business, Hospitality, Engineering, and Technology Division

Students develop skills to enter a variety of positions in the green industry. Greenhouse production, landscape design, maintenance, and construction are covered. Extensive identification of herbaceous and woody plants is studied. Hands-on practical skills are developed at HACC’s living laboratories with over 200 acres of display gardens and greenhouse facilities where students will complete 240 hours (20 hours a week) of practicum experience. The entire program is offered at the Harrisburg Campus only.

Career Opportunities

Graduates of the program are employed as professional gardeners, greenhouse production managers, nursery production managers, landscape foreman, and landscape designers.

Competency Profile

This curriculum is designed to prepare students to:

- Learn proper growing techniques
- Design landscape and garden plans
- Identify a wide range of landscape and ornamental plants
- Plan, install, and maintain gardens and landscapes
- Apply customer service skills
- Supervise production and landscape maintenance crews
- Apply entrepreneurial and business skills

PROGRAM REQUIREMENTS (TOTAL CREDITS = 44)

General Education	Major		Other Required Courses
	HORT 101 Introduction to Horticulture	3	Program Electives* <u>6</u>
	HORT 102 Integrated Pest Management	1	6
	HORT 110 Greenhouse Production I	3	
	HORT 120 Landscape Design I	3	*Select two from the following courses:
	HORT 130 Nursery Management	3	MKTG 212; MGMT 119; MGMT 121
	HORT 140 Landscape Construction	2	
	HORT 150 Landscape Maintenance	2	
	HORT 161 Woody Plants I	3	
	HORT 163 Woody Plants II	3	
	HORT 165 Herbaceous Plants I	3	
	HORT 167 Herbaceous Plants II	3	
	HORT 210 Greenhouse Production II	3	
	HORT 220 Landscape Design II	3	
	HORT 291 Horticulture Practicum	<u>3</u>	
		38	

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students prepare for employment as assistants to attorneys in law-related occupations, including private, corporate, and governmental law practice. The program is approved by the American Bar Association (ABA). The complete program is available at the Harrisburg Campus. Most courses are available at the Lancaster Campus; however it may be necessary to take courses at the Harrisburg Campus to complete the degree.

Paralegals may not provide legal services directly to the public, except as permitted by law.

Career Opportunities

Graduates are employed as paralegals in private, corporate and governmental law practices, title insurance companies, and as assistants in law libraries.

Competency Profile

This curriculum is designed to prepare students to:

- Conduct research and prepare legal memoranda and briefs
- Conduct computer-assisted legal research
- Prepare and draft litigation documents (complaints, answers, motions, discovery documents)
- Perform administrative tasks in a legal office
- Prepare and draft legal documents related to estates (wills, trusts), bankruptcy (petitions, schedules), domestic relations (support/property settlement agreements), real estate law (deeds, settlement sheets)
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education	3	Major	3	Other Required Courses	3
ENGL 101 English Composition I	3	PLGL 101 Introduction to Paralegal Studies	3	BUSI 201 Business Law I	3
ENGL 102 English Composition II	3	PLGL 102 Legal Research and Writing I	3	CIS 105 Introduction to Software for Business	3
SPCH 101 Effective Speaking	3	PLGL 104 Legal Research and Writing II	3	Program Specific Electives**	15
Core A Elective	3	PLGL 201 Civil Litigation I	3		21
Core B Elective	3	PLGL 202 Civil Litigation II	3	**Select five courses from the following:	
Core C Elective*	3	PLGL 210 Paralegal Ethics and Professionalism	3	PLGL 203 Family Law	
Free Elective	3		3	PLGL 204 Estate Planning and Administration	
Physical Education & Wellness	1		18	PLGL 205 Business Organizations	
	22			PLGL 206 Employment Law	
				PLGL 207 Bankruptcy Law	
				PLGL 209 Real Estate Law for Paralegals	
				PLGL 251 Paralegal Internship I	
				PLGL 252 Paralegal Internship II	
				BUSI 202 Business Law II	
				CJ 203 Criminal Evidence	
				CJ 212 Criminal Law and Procedure	

*Any Core C Elective except MATH 100

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	3	Spring Semester	3	Fall Semester	3	Spring Semester	3
BUSI 201	3	CIS 105	3	PLGL 104	3	PLGL 210	3
ENGL 101	3	ENGL 102	3	PLGL 202	3	Free Elective	3
PLGL 101	3	PLGL 102	3	Core C Elective	3	Program Specific Electives	9
SPCH 101	3	PLGL 201	3	Program Specific Electives	6		
Core B Elective	3	Core A Elective	3				
		PE & W	1				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Paralegal Studies

Certificate Program – 5301

Communications, Arts, and Social Sciences Division

Admission to the certificate program requires program coordinator review of an official college transcript with 30 credit hours of American Bar Association (ABA) approved general education college courses. Students prepare for employment as assistants to attorneys in law-related occupations, including private, corporate, and governmental law practice. The program is approved by the American Bar Association (ABA). The complete program is available at the Harrisburg Campus. Most courses are available at the Lancaster Campus; however it may be necessary to take courses at the Harrisburg Campus to complete the certificate. Due to course sequencing, a minimum of three semesters is required to complete the certificate program.

Paralegals may not provide legal services directly to the public, except as permitted by law.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Contact the program coordinator for specific program entry requirements.

Career Opportunities

Graduates are employed as paralegals in private, corporate and governmental law practices, title insurance companies, and as assistants in law libraries.

Competency Profile

This curriculum is designed to prepare students to:

- Conduct research and prepare legal memoranda and briefs
- Conduct computer-assisted legal research
- Prepare and draft litigation documents (complaints, answers, motions, discovery documents)
- Perform administrative tasks in a legal office
- Prepare and draft legal documents related to estates (wills, trusts), bankruptcy (petitions, schedules), domestic relations (support/property settlement agreements), real estate law (deeds, settlement sheets)

PROGRAM REQUIREMENTS (TOTAL CREDITS = 39)

General Education	Major	Other Required Courses	
	PLGL 101 Introduction to Paralegal Studies	BUSI 201 Business Law I	3
	PLGL 102 Legal Research and Writing I	CIS 105 Introduction to Software for Business	3
	PLGL 104 Legal Research and Writing II	Program Specific Electives*	<u>15</u>
	PLGL 201 Civil Litigation I		21
	PLGL 202 Civil Litigation II		
	PLGL 210 Paralegal Ethics and Professionalism	*Select five courses from the following:	
	<u>3</u>	PLGL 203 Family Law	
	18	PLGL 204 Estate Planning & Administration	
		PLGL 205 Business Organizations	
		PLGL 206 Employment Law	
		PLGL 207 Bankruptcy Law	
		PLGL 209 Real Estate Law for Paralegals	
		PLGL 251 Paralegal Internship I	
		PLGL 252 Paralegal Internship II	
		BUSI 202 Business Law II	
		CJ 203 Criminal Evidence	
		CJ 212 Criminal Law and Procedure	

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Paramedic – Emergency Medical Technician

Associate in Arts Degree – 3690

Mathematics, Science, and Allied Health Division

Students are prepared to deliver therapy to patients prior to their arrival in hospital emergency rooms. Students are trained in life-support procedures performed by following orders of physicians sent by radio or by following standard medical protocols. Students must have had a PA EMT certificate for at least six months and at least one year's experience with a basic life-support ambulance service. This program may require the student to complete a Pennsylvania Child Abuse History Clearance and/or State Police Criminal Record Check prior to enrollment, prior to the start of a clinical experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean. The program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions.

The complete program is available at the Harrisburg Campus. Some courses in the degree program are also available at the Gettysburg, Lancaster and Lebanon Campuses, and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates are employed as emergency medical technicians-paramedics by hospitals and independent emergency service organizations.

Competency Profile

This curriculum is designed to prepare students to:

- Administer standard emergency treatments
- Work effectively with other healthcare professionals
- Demonstrate the skills prescribed by the Joint Committee for EMT-Paramedics and the A.M.A. Committee on Allied Health Education and Accreditation
- Take the paramedic certification examination administered by the Pennsylvania Department of Health
- Understand how their specialized training fits into the healthcare delivery system
- Possess a broad background in the sciences of the human body
- Understand the principles of management
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS =78)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	EMS 131 EMT: Basic Life Support*		BIOL 105 Medical Terminology	3
ENGL 102 English Composition II	3	EMS 132 EMT: Field Experience*		BIOL 121 Anatomy & Physiology I	4
SPCH 101 Effective Speaking or		*(Non Credit courses)		BIOL 122 Anatomy & Physiology II	4
SPCH 104 Interpersonal Communications	3			CHEM 100 Principles of Chemistry	3
Core A Elective	3	EMS 231 Advanced Life Support I	5	MGMT 201 Principles of Management	3
Core B Elective	3	EMS 232 ALS Hospital Experience I	1	PSYC 101 General Psychology	3
Core C Elective	3	EMS 233 Advanced Life Support II	6	PSYC 209 Life Cycle Development or	
Free Elective	3	EMS 234 ALS Hospital Experience II	1	SOCI 226 Perspectives on Aging or	
Physical Education & Wellness	<u>1</u>	EMS 235 Advanced Life Support III	3	PSYC 213 Abnormal Psychology	<u>3</u>
	22	EMS 236 ALS Hospital Experience III	1		23
		EMS 237 ALS Field Experience	3		
		EMS 238 Rescue	3		
		EMS 240 EMS: Introduction	3		
		EMS 241 EMS: Externship	3		
		EMS 243 Advanced Life Support	2		
		EMS 244 ALS Special Topics	1		
		EMS 245 ALS Summative Evaluation	<u>1</u>		
			33		

(continued next page)

Paramedic – Emergency Medical Technician**Associate in Arts Degree – 3690** *(continued)**Mathematics, Science, and Allied Health Division***RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS**

Part time students can complete this program by taking one or more courses each semester.

Summer Session		Fall Semester		Spring Semester	
EMS 131		BIOL 121	4	BIOL 122	4
EMS 132		EMS 231	5	EMS 233	6
Core A Elective	3	EMS 232	1	EMS 234	1
Free Elective	3	PE & W	1	EMS 237	3
				PSYC 101	3
Summer Session		Fall Semester		Spring Semester	
EMS 235	3	EMS 240	3	BIOL 105	3
EMS 236	1	EMS 243	2	EMS 241	3
EMS 238	3	EMS 244	1	MGMT 201	3
ENGL 101	3	PSYC 209 /SOC1 226		SPCH 101	3
Core B Elective	3	or PSYC 213	3	Core C Elective	3
		ENGL 102	3	EMS 245	1
		CHEM 100	3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Paramedic – Emergency Medical Technician Certificate Program – 3330

Mathematics, Science, and Allied Health Division

Students are prepared to deliver therapy to patients prior to their arrival in hospital emergency rooms. Students are trained in life-support procedures performed by following orders of physicians sent by radio or by following standard medical protocols. Students must have had a PA EMT certificate for at least six months and at least one year's experience with a basic life-support ambulance service. This program may require the student to complete a Pennsylvania Child Abuse History Clearance and/or State Police Criminal Record Check prior to enrollment, prior to the start of a clinical experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean. The program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions. The complete program is available at the Harrisburg and Lancaster Campuses. Some courses in the program are available at the Gettysburg and Lebanon Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates are employed as emergency medical technicians-paramedics by hospitals and independent emergency service organizations.

Competency Profile

This curriculum is designed to prepare students to:

- Administer standard emergency treatments
- Work effectively with other healthcare professionals
- Demonstrate the skills prescribed by the Joint Committee for EMT-Paramedics and the A.M.A. Committee on Allied Health Education and Accreditation
- Take the paramedic certification examination administered by the Pennsylvania Department of Health
- Understand how their specialized training fits into the healthcare delivery system

PROGRAM REQUIREMENTS (TOTAL CREDITS = 33)

General Education	Major		Other Required Courses	
	EMS 133 EMT: Instructor (optional)	(1)	BIOL 111 Introduction to Human Biology	3
	EMS 231 Advanced Life Support I	5	AH 150 Introduction to Human Illness & Disease	<u>3</u>
	EMS 232 ALS Hospital Experience I	1		6
	EMS 233 Advanced Life Support II	6		
	EMS 234 ALS Hospital Experience II	1		
	EMS 235 Advanced Life Support III	3		
	EMS 236 ALS Hospital Experience III	1		
	EMS 237 ALS Field Experience	3		
	EMS 238 Introduction to Rescue	3		
	EMS 243 Advanced Life Support	2		
	EMS 244 ALS Special Topics	1		
	EMS 245 ALS Summative Evaluation	<u>1</u>		
		27		

In addition to the above requirements credit is awarded through Non credit for the following courses: EMS 131 and EMS 132

Personal Care Home/Assisted Living Administrator's Training Program

Certificate Program – Noncredit

College and Community Development

This 100 hour certificate program will prepare the student to assume the responsibilities involved in the administration of a Personal Care Home/Assisted Living Facility. Personal Care Homes are residences that provide shelter, meals, supervision and assistance with personal care tasks, typically for older people, or people with physical, behavioral health, or cognitive disabilities who are unable to care for themselves but do not need nursing home or medical care. Personal Care Homes are inspected and licensed by the Pennsylvania Department of Public Welfare. Administrators are responsible for the administration and management of the home, including the health, safety and well-being of the residents, implementation of policies and procedures, and compliance with state regulations. This program is approved by the PA Department of Public Welfare to meet the requirements set forth in the new regulations, effective October 2005. Administrators must meet the following qualifications: an existing Nursing Home Administrator's License, or a current RN or LPN license with 1 year of work experience in a related field, or an Associate's Degree or 60 credit hours from an accredited college or university, or a High School Diploma or GED. The program is currently offered at Penn Center in Harrisburg.

Career Opportunities

This program will prepare individuals for employment as an administrator for a Personal Care Home or Assisted Living Facility.

Competency Profile

This curriculum is designed to prepare students to:

- Meet the state defined qualifications required prior to certification as a PCH Administrator.

PROGRAM REQUIREMENTS

Abuse/Neglect Prevention & Reporting	6 hours	Resident Home Contracts	3 hours
CPR/First Aid	7 hours	Dementia	8 hours
Mental Illness	7 hours	Mental Retardation	2 hours
Recreation	4 hours	Fire Prevention/Emergency Preparedness	4 hours
Writing, Completing Assessments	7 hours	Budgeting/Financial Record	4 hours
Cultural Competency	3 hours	Gerontology	5 hours
Local, State, & Federal Laws	2 hours	Resident Rights	3 hours
Nutrition/Food Handling	5 hours	Personal Care/Hygiene	9 hours
Staff Supervision & Training	8 hours	Medications	7 hours
Community Resources	6 hours		

RECOMMENDED SEQUENCE FOR STUDENTS

Students must complete the full 100 hour course to qualify for certificate of completion.

A pharmacy technician, under the direct supervision of a registered pharmacist, assists in the various activities of a pharmacy department not requiring the professional training of a pharmacist. The student may be required to submit Act 33 Child Abuse and /or Act 34 Pennsylvania State Police Criminal Background Checks prior to taking national certification exam and/or obtaining employment. The student should consider this factor before enrolling in this program. The complete program is available at the Harrisburg and Lancaster campuses.

Career Opportunities

This program will prepare individuals for employment as a pharmacy technician in a variety of settings, including: hospital pharmacy, retail pharmacy, extended-care facilities, home healthcare agencies, and mail-order pharmacy distributors under the direct supervision of a registered pharmacist.

Competency Profile

This curriculum is designed to prepare students to:

- Compound and dispense pharmaceutical preparations
- Prepare admixtures
- Participate in quality control processes
- Perform insurance billing
- Maintain drug inventory quality and levels
- Take the national certification examination administered by the Pharmacy Technician Certification Board (PTCB)

PROGRAM REQUIREMENTS

This program was academically designed to be completed within a year.

Pharmacy Practice	30 hours
Pharmacy Law and Ethics	9 hours
Pharmacy Technician Math	15 hours
Pharmacy Science	18 hours

RECOMMENDED SEQUENCE FOR STUDENTS

Students can complete this program by taking one or more courses each semester.

Pharmacy Practice
Pharmacy Science
Pharmacy Technician Math
Pharmacy Law and Ethics

Phlebotomy Technician

Diploma Program – 0390

Mathematics, Science, and Allied Health Division

This program is designed to prepare a student for a career as a medical laboratory professional. The student will acquire the technical expertise to perform the duties of a Phlebotomy Technician/Phlebotomist. Phlebotomy Technicians are vital members of the health care team and should demonstrate qualities of accuracy, dependability, responsibility, and self-motivation. They must like working directly with patients and must be committed to quality health care. Phlebotomy Technicians must be able to work well under pressure and have excellent oral communication skills. This program may require the student to complete a Pennsylvania Child Abuse History Clearance and/or State Police Criminal Record Check prior to enrollment, prior to the start of a clinical experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean. The complete program is available at the Harrisburg, Gettysburg, Lancaster and York Campuses. Some required courses are available at the Lebanon Campus and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates of this program can obtain positions as phlebotomists in acute care facilities, physician office laboratories, health maintenance organizations, long-term care facilities, clinics, and independent laboratories.

Competency Profile

This curriculum is designed to prepare students to:

- Obtain blood specimens skillfully and safely
- Understand the legal and ethical implications of phlebotomy procedures
- Function well as members of a medical laboratory team
- Take the national entry-level credentialing examination administered by certifying agencies of the profession

PROGRAM REQUIREMENTS (TOTAL CREDITS = 18)

General Education

BIOL 111 Introduction to Human Biology	3
CIS 105 Introduction to Software for Business	3
SPCH 104 Interpersonal Communication	$\frac{3}{9}$

Major

AH 140 Introduction to Allied Health	3
PBT 101 Phlebotomy	4
PBT 102 Phlebotomy Clinical Experience	$\frac{2}{9}$

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The program serves as a foundation for students who plan to transfer to professional photography and professional art schools. The College has transfer agreements with the Rochester Institute of Technology and other leading schools, although portfolio reviews are usually required. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Studies prepare the student for transfer to a professional photography or professional art school. Training is provided in both the aesthetic and technical principles of photography for artistic and commercial application.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	ART 105 Two – Dimensional Design	3
ENGL 102 English Composition II	3	ART 107 Three – Dimensional Design	3
SPCH 101 Effective Speaking	3	ART 111 Black and White Photography I	3
Core A ART 181 Art through the Ages I (D)	3	ART 112 Black and White Photography II	3
Core B Elective	3	ART 121 Drawing I	3
Core B Elective	3	ART 122 Drawing II	3
Core C Elective	3	ART 182 Art through the Ages II (D)	3
General Education Transfer Elective	3	ART 186 History/Aesthetics of Photography	3
Physical Education & Wellness	<u>1</u>	ART 201 Color Photography I	3
	25	ART 202 Materials/Processes of Photography	3
		ART 205 Color Photography II	3
		ART 206 Studio Photography	<u>3</u>
			36

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ART 105	3	ART 107	3	ART 186	3	ART 205	3
ART 111	3	ART 112	3	ART 201	3	ART 206	3
ENGL 101	3	ENGL 102	3	ART 202	3	SPCH 101	3
ART 121	3	ART 122	3	GenEd Trans. Elec.	3	Core B Elective	3
Core A ART 181(D)	3	ART 182(D)	3	Core B Elective	3	Core C Elective	3
PE & W	1						

Physical Education – Exercise Science

Associate in Arts Degree – 3120

Mathematics, Science, and Allied Health Division

The College's range of education programs allows students planning a career in teaching to complete the first two years of a transfer program and earn an associate in arts degree whether they plan to teach in elementary or secondary schools. All students should be aware of the standards of the Pennsylvania Department of Education and that they specify different preparations for elementary and secondary school teachers.

The PA State Board of Education passed new requirements for admission to, as well as exit from, professional education programs. On October 7, 2000, Title 22 of the PA School Code, Chapter 354, became law. This regulation affects every institution that prepares teachers in the Commonwealth of Pennsylvania. These requirements affect all (elementary and secondary) bachelor's level-education programs for PA Teacher Certification. Students who complete 48 credit hours after August 15, 2002 but prior to August 15, 2003 must have a 2.8 GPA (3.0 GPA after August 15, 2003) to enter professional courses leading to initial teacher certification. They will also be required to attain a qualifying score on the PRAXIS-I Academic Skills Assessment test.

Each student will be required to have an Act 34 Criminal Background Investigation and an Act 151 Child Abuse Clearance prior to any practicum/student teaching experience and employment. The student should consider these factors prior to enrolling in this program.

Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The entire program is available at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon and Gettysburg Campuses and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	EDUC 101 Foundations of Education	3
ENGL 102 English Composition II	3	Transfer Electives	<u>27</u>
SPCH 101 Effective Speaking	3		30
Core A Elective	3		
Core B Elective	3		
Core B Elective	3		
Core C Elective Math	3		
Core C Elective Science	3		
Core C Elective	3		
General Education Transfer Elective	3		
Physical Education & Wellness	<u>1</u>		
	31		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	SPCH 101	3	Transfer Elective	12
Core B Elective	3	Transfer Elective	6	Transfer Elective	6	Core B Elective	3
Core C Science	3	GenEd Trans. Elec.	3	Core A Elective	3	PE & W	1
Core C Math	3	Core C Elective	3	EDUC 101	3		
Transfer Elective	3						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

As preparation for transfer to a four-year institution offering the bachelor's degree in astronomy, chemistry, geology, meteorology, or physics, this program offers lower division courses in physical sciences. The forensic science program option is designed for students desiring a challenging and intriguing career in government (at the local, state or federal level) or in private forensic laboratories working as consultants or in the insurance industry. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major	
ENGL 101 English Composition I	3	CHEM 102 General Inorganic Chemistry/Qual. Analysis	4
ENGL 102 English Composition II	3	PHYS 202 General Physics II or	
SPCH 101 Effective Speaking	3	PHYS 212 Physics: Engineers/Scientists II	4
Core A Elective	3	Science Sequence	8
Core B Elective	3	(Select from the following: CHEM 203-204 or GEOL 101-102)	
Core B Elective	3	Transfer Electives*	<u>12-16</u>
Core C CHEM 101 General Inorganic I	4		28
Core C PHYS 201 or 211	4		
Core C MATH 121 Calculus I or higher	4	*Physical Science Suggested Transfer Electives: ASTR 103; BIOL 101, 102;	
General Education Transfer Elective	3	CHEM 202; CPS 135 or higher; GEOL 201; MATH 122 or higher; PHYS 215	
Physical Education & Wellness	<u>1</u>		
	34	*Forensic Science Suggested Transfer Electives: BIOL 101; CHEM 202; CJ 101, 108, 201, 203, 206	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Fall Semester	Spring Semester
CHEM 101 (Core C) 4	ENGL 102 3	PHYS 201 or 211 4	PHYS 202 or 212 4
ENGL 101 3	CHEM 102 4	(Core C)	Science Sequence 4
MATH 121 or higher (Core C) 4	GenEd Trans. Elec. 3	SPCH 101 3	Transfer Electives 6
Core B Elective 3	Core B Elective 3	Core A Elective 3	
PE & W 1	Transfer Elective 3	Science Sequence 4	
		Transfer Elective 3	

Physical Science Education

Associate in Arts Degree – 3130

Mathematics, Science, and Allied Health Division

The College's range of education programs allows students planning a career in teaching to complete the first two years of a transfer program and earn an associate in arts degree whether they plan to teach in elementary or secondary schools. All students should be aware of the standards of the Pennsylvania Department of Education and that they specify different preparations for elementary and secondary school teachers.

The PA State Board of Education passed new requirements for admission to, as well as exit from, professional education programs. On October 7, 2000, Title 22 of the PA School Code, Chapter 354, became law. This regulation affects every institution that prepares teachers in the Commonwealth of Pennsylvania. These requirements affect all (elementary and secondary) bachelor's level-education programs for PA Teacher Certification. Students who complete 48 credit hours after August 15, 2002 but prior to August 15, 2003 must have a 2.8 GPA (3.0 GPA after August 15, 2003) to enter professional courses leading to initial teacher certification. They will also be required to attain a qualifying score on the PRAXIS-I Academic Skills Assessment test.

Each student will be required to have an Act 34 Criminal Background Investigation and an Act 151 Child Abuse Clearance prior to any practicum/student teaching experience and employment. The student should consider these factors prior to enrolling in this program.

Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is at the Harrisburg and York Campuses; some required courses are available at the Lancaster, Lebanon and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 64)

General Education

ENGL 101 English Composition I	3
ENGL 102 English Composition II	3
SPCH 101 Effective Speaking	3
Core A Elective	3
Core B Elective	3
Core B Elective	3
Core C BIOL 101 General Biology I	4
Core C CHEM 101 General Inorganic I	4
Core C MATH 103 College Algebra or higher	3
General Education Transfer Elective	3
Physical Education & Wellness	1
	33

Major

EDUC 101 Foundations of Education	3
BIOL 102 General Biology II	4
CHEM 102 General Inorganic Chemistry/Qual. Analysis	4
MATH 104 Trigonometry or higher	3
Biology Electives*	8
Transfer Electives**	9
	31

*Select two of the following courses: BIOL 121, 122, 201, 202, 212, 215, 221, 225;

BTC 201; ENVS 201; 4 of the 8 credits may be selected from the following:

BIOL 103, 130; BTC 101

** Suggested Transfer Electives: CHEM 203, 204, 221; GEOL 101, 102, 201; MATH 121, 122, 202; PHYS 201, 202

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester

ENGL 101	3
BIOL 101 (Core C)	4
CHEM 101 (Core C)	4
MATH 103 (Core C)	3
Core B Elective	3

Spring Semester

BIOL 102	4
CHEM 102	4
ENGL 102	3
MATH 104	3
GenEd Trans. Elec.	3

Fall Semester

SPCH 101	3
Biology Elective	4
Core A Elective	3
Transfer Elective	3
EDUC 101	3

Spring Semester

Biology Elective	4
Core B Elective	3
Transfer Electives	6
PE & W	1

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students obtain practical experience in the HACC Criminalistics Laboratory, one of the best-equipped crime laboratories in Pennsylvania. The complete program is available only at the Harrisburg Campus; many required courses are also available at the Lancaster, Lebanon, and Gettysburg Campuses and at other sites. This program may require the student to submit to an Act 34 Pennsylvania State Police Criminal Background Check prior to enrollment, prior to the start of a field experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean.

Career Opportunities

Graduates are employed locally and nationally as municipal or state police officers, agents for specialized law-enforcement agencies, private investigators, private security supervisors, and evidence technicians.

Competency Profile

This curriculum is designed to prepare students to:

- Write and speak effectively
- Understand the history, philosophy, and organization of law enforcement and criminal justice systems
- Understand and apply principles of police management and operations, the collection and preservation of evidence, and the technologies used by police departments
- Understand traffic engineering, enactment, enforcement, and traffic safety education
- Understand and practice the management and techniques of patrol operations
- Understand theories of the causes of criminal behavior, and the history, theory, and application of criminal law
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education	Major	Other Required Courses
ENGL 101 English Composition I 3	CJ 101 Introduction to Criminal Justice 3	Criminal Justice Elective <u>3</u>
ENGL 102 English Composition II or	CJ 104 Police Operations 3	
ENGL 104 Report and Technical Writing 3	CJ 108 Criminology 3	
SPCH 101 Effective Speaking 3	CJ 109 Instrumentation and Technologies 3	
Core A Elective 3	CJ 201 Criminal Investigation 3	
Core B Elective 3	CJ 203 Criminal Evidence 3	
Core C Elective 3	CJ 205 Traffic Administration 3	
Free Electives 6	CJ 206 Criminalistics 4	
Physical Education & Wellness <u>1</u>	CJ 208 Intermediate Criminalistics 4	
	CJ 212 Criminal Law and Procedure 3	
	CJ 240 Ethics and Diverse Cultures (D) <u>3</u>	
	35	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Fall Semester	Spring Semester
CJ 101 3	CJ 104 3	CJ 206 4	CJ 205 3
CJ 108 3	CJ 109 3	CJ 240 (D) 3	CJ 208 4
CJ 212 3	CJ 201 3	Core A Elective 3	Core C Elective 3
ENGL 101 3	CJ 203 3	Core B Elective 3	Free Elective 3
SPCH 101 3	ENGL 102 or 104 3	Free Elective 3	Criminal Justice Elective 3
PE & W 1			

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Police Science

Certificate Program – 6380

Communications, Arts, and Social Sciences Division

Students obtain practical experience in the HACC Criminalistics Laboratory, one of the best equipped crime laboratories in Pennsylvania. The complete program is available only at the Harrisburg Campus; many required courses are also available at the Lancaster, Lebanon, and Gettysburg Campuses and at other sites. This program may require the student to submit to an Act 34 Pennsylvania State Police Criminal Background Check prior to enrollment, prior to the start of a field experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean.

Career Opportunities

Graduates are employed locally and nationally as municipal or state police officers, agents for specialized law-enforcement agencies, private investigators, private security supervisors, and evidence technicians.

Competency Profile

This curriculum is designed to prepare students to:

- Write and speak effectively
- Understand the history, philosophy, and organization of law enforcement and criminal justice systems
- Understand and apply principles of police management and operations, the collection and preservation of evidence, and the technologies used by police departments
- Understand traffic engineering, enactment, enforcement, and traffic safety education
- Understand and practice the management and techniques of patrol operations
- Understand theories of the causes of criminal behavior, and the history, theory, and application of criminal law

PROGRAM REQUIREMENTS (TOTAL CREDITS = 30)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	CJ 101 Introduction to Criminal Justice	3	Criminal Justice Electives*	<u>9</u>
SPCH 101 Effective Speaking	<u>3</u>	CJ 104 Police Operations	3		9
	6	CJ 108 Criminology	3	*Select three courses from the following:	
		CJ 212 Criminal Law and Procedure	3	CJ 109 Instrumentation and Procedures	
		CJ 240 Ethics and Diverse Cultures	<u>3</u>	CJ 201 Criminal Investigation	
			15	CJ 203 Criminal Evidence	
				CJ 205 Traffic Administration	
				CJ 206 Criminalistics	
				CJ 207 Community Policing and Crime Prevention	
				CJ 208 Intermediate Criminalistics	
				CJ 211 Juvenile Delinquency	
				CJ 213 Advanced Criminology	
				CJ 215 Criminal Justice Organization and Administration	
				CJ 245 Criminal Justice Seminar in London	
				CJ 251 Criminal Justice Internship	
				CIS 105 Introduction to Software for Business	

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students are prepared for employment as practical nurses. The program is approved by the Pennsylvania State Board of Nursing and accredited by the National League for Nursing Accreditation Commission. This program requires the student to complete a Pennsylvania Child Abuse History Clearance and State Police Criminal Record Check prior to the start of the clinical experience. Pennsylvania law states that the State Board of Nursing may refuse to license a person who has been convicted of a felony. This program also requires the student to submit to a drug screen prior to admission into the program. The complete program is available at the Gettysburg, Harrisburg and Lancaster Campuses. Some required courses are available at the Lebanon Campus, York Campus and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates of the program are employed as practical nurses caring for patients in hospitals, extended care facilities, and health care delivery settings.

Competency Profile

- This curriculum is designed to prepare students to:
- Give consistently, safe nursing care to clients within a variety of settings using the nursing process and basic scientific knowledge as an approach for providing care
- Implement nursing care appropriate to the assessed stage of growth and development of the client under the direction of a licensed physician, dentist, or professional nurse
- Participate as an effective member of the health care team by reporting and recording significant observations based on nursing assessment skills
- Participate in personal and professional continuing education
- Participate in community and professional activities
- Identify the need for accountability in nursing practice
- Be eligible for the NCLEX-PN licensure examination

PROGRAM REQUIREMENTS (TOTAL CREDITS = 43)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	BIOL 100 Basic Microbiology or		1	PSYC 101 General Psychology
	3	BIOL 221 Microbiology	(4)		SOCI 201 Introduction to Sociology
		BIOL 111 Introduction to Human Biology or	3		6
		BIOL 121 Anatomy and Physiology I (4)			
		NURS 100 Fundamentals of Practical Nursing	10		
		NURS 101 Concepts in Practical Nursing I	10		
		NURS 102 Concepts in Practical Nursing II	10		
			34		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Spring Semester		Summer Session		Fall Semester	
BIOL 100 or BIOL 221	1 (4)	NURS 101	10	NURS 102	10
BIOL 111 or BIOL 121	3 (4)	PSYC 101	3	SOCI 201	3
ENGL 101	3				
NURS 100	10				

Pre-Chiropractic

Associate in Arts Degree – 3140

Mathematics, Science, and Allied Health Division

Students prepare for transfer to school of chiropractic. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education		Major	
ENGL 101 English Composition I	3	BIOL 121 Anatomy and Physiology I	4
ENGL 102 English Composition II	3	BIOL 122 Anatomy and Physiology II	4
SPCH 101 Effective Speaking	3	CHEM 102 General Inorganic Chemistry II and Qualitative Analysis	4
Core A Elective	3	CHEM 203 Organic Chemistry I	4
Core B PSYC 101 General Psychology	3	CHEM 204 Organic Chemistry II	4
Core B Elective	3	MATH 104 Trigonometry <u>or</u> higher	3-4
Core C CHEM 101 General Inorganic Chemistry I	4	PHYS 202 General Physics II	4
Core C MATH 103 College Algebra <u>or</u> higher	3	CIS 105 or higher	<u>3</u> 30
Core C PHYS 201, General Physics I	4		
General Education Transfer Elective	3		
Physical Education & Wellness	<u>1</u>		
	33		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
BIOL 121	4	BIOL 122	4	CHEM 203	4	CHEM 204	4
CHEM 101 (Core C)	4	CHEM 102	4	PHYS 201 (Core C)	4	PHYS 202	4
ENGL 101	3	ENGL 102	3	Core A Elective	3	CIS 105 or higher	3
MATH 103 <u>or</u> higher (Core C)	3-4	MATH 104 <u>or</u> higher	3-4	Core B Elective	3	GenEd Trans. Elec.	3
PSYC 101 (Core B)	3	SPCH 101	3	PE & W	1		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Precision Metalworking Technology

Certificate Program – 4210

Business, Hospitality, Engineering, and Technology Division

Students prepare for careers in the precision metalworking trades and are also prepared for the National Institute of Metalworking Skills (NIMS) tests. The NIMS certification documents specific skills and is nationally recognized. The program is available at the Community Center for Technology and Arts (CCTA) of the Harrisburg Campus.

Career Opportunities

Graduates find employment in entry level positions as machine operators in manufacturing working or turning, milling, grinding, and CNC and other machine operations.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate skills for entry-level positions in the precision metalworking industry
- Interpret mechanical blueprints
- Demonstrate competence in basic layout and shop safety
- Understand the proper and safe use of hand and power tools
- Demonstrate competence in the use of milling, turning, and grinding machinery
- Understand CNC programming and applications
- Demonstrate competence in the use of shop measuring instruments
- Understand a variety of manufacturing processes

PROGRAM REQUIREMENTS (TOTAL CREDITS = 36)

General Education	Major		Other Required Courses	
	GTEC 104 Engineering Materials & Processes	3	ENGL 901 Basic Communication Skills	1
	GTEC 111 General Technology Orientation	1	MATH 174 Applied Math for Machinists	3
	GTEC 202 Statistical Quality Control	3		4
	IA 204 Numerical Control	2		
	MDRF 103 Geometric Tolerancing	1		
	MWT 102 Blueprint Reading: Metalworking	2		
	MWT 111 Introduction to Metalworking	3		
	MWT 112 Basic Power Tools	1		
	MWT 212 Turning Technology	2		
	MWT 213 Milling Technology	3		
	MWT 214 Metrology	2		
	MWT 215 Grinding Technology	3		
	MWT 216 Specialized Industrial Processes	3		
	MWT 217 Advanced CNC Programming	2		
	MWT 218 Manufacturing Seminar	1		
		<u>32</u>		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Pre-Dietetics

Associate in Arts Degree – 3050

Mathematics, Science, and Allied Health Division

Students complete the science courses and other general education requirements that are commonly required for transfer to schools offering baccalaureate degrees in dietetics. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 69)

General Education		Major	
ENGL 101 English Composition I	3	BIOL 121 Anatomy and Physiology I	4
ENGL 102 English Composition II	3	BIOL 122 Anatomy and Physiology II	4
SPCH 101 Effective Speaking	3	BIOL 221 Microbiology	4
Core A Elective	3	CHEM 102 General Inorganic Chemistry/Qualitative Analysis	4
Core B Elective	3	CHEM 203 Organic Chemistry I	4
Core B SOCI 201 Intro to Sociology (D)	3	CHEM 204 Organic Chemistry II	4
Core C CHEM 101 General Inorganic Chemistry I	4	CIS 105 Introduction to Software for Business	3
Core C MATH 202 Introduction to Statistics	3	HRIM 221 Basic Foods: Preparation and Production	4
Core C MATH 103 recommended	3	NUTR 104 Nutrition	3
General Education Transfer Elective	3	PSYC 101 General Psychology	3
Physical Education & Wellness	1		37
	32		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester	Spring Semester	Summer Session	Fall Semester	Spring Semester
CHEM 101 (Core C) 4	CHEM 102 4	SPCH 101 3	BIOL 121 4	BIOL 122 4
CIS 105 3	ENGL 102 3	Core A Elective 3	CHEM 203 4	BIOL 221 4
ENGL 101 3	NUTR 104 3	GenEd Trans. Elec. 3	HRIM 221 4	CHEM 204 4
Core C (MATH 103) 3	Core B SOCI 201 (D) 3		Core C (MATH 202) 3	PSYC 101 3
PE & W 1	Core B Elective 3			

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 63)

General Education		Major	
ENGL 101 English Composition I	3	PSYC 241 Research Design and Analysis I	4
ENGL 102 English Composition II or		PSYC 242 Research Design and Analysis II	4
ENGL 104 Report and Technical Writing	3	CIS or CPS Elective	3
SPCH 101 Effective Speaking	3	PHIL 102 Logic or	
Core A Elective	3	PHIL 101 Introduction to Philosophy or	
Core B PSYC 101 General Psychology	3	PHIL 215 Philosophy of Science	3
Core B Elective	3	BIOL 101 General Biology I or	
Core C (MATH 103, 119 or 121)	3	BIOL 111 Introduction to Human Biology	4-3
Core C Elective Science	3	Psychology Elective	3
Core C Elective	3	Select one course from the following:	
General Education Transfer Elective	3	PSYC 209 Life Cycle Development	
Physical Education & Wellness	<u>1</u>	PSYC 212 Child Growth and Development	
	31	PSYC 213 Abnormal Psychology	
		PSYC 221 Social Psychology	
		Transfer Electives	<u>12</u>
			32

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102 or 104	3	PSYC 241	4	PSYC 242	4
MATH Elective	3	PHIL Elective	3	Core C (Science)	3	Core A Elective	3
PSYC 101 (Core B)	3	SPCH 101	3	Core C Elective	3	Transfer Electives	9
CIS or CPS Elec	3	BIOL 101 or 111	4-3	Core B Elective	3		
GenEd Trans. Elec	3	PSYC Elective	3	Transfer Elective	3		
PE & W	1						

Radiologic Technology

Associate in Arts Degree – 3750

Mathematics, Science, and Allied Health Division

Students learn how to perform radiographic studies, including preparation and positioning of patients and exposure and development of radiographic films. The program is offered in cooperation with affiliated hospitals; the College provides classroom instruction, and the hospitals provide the clinical experience along with specialized classroom instruction. Graduates are eligible to take the national certifying examination given by the American Registry of Radiologic Technologists (ARRT). Previous conviction of a crime, including felony, gross misdemeanor, or misdemeanor, with the sole exceptions of speeding or parking violations, may result in denial to sit for the ARRT national registry examination. Therefore, any person interested in pursuing an education in Radiologic Technology who has any questions pertaining to his/her potential eligibility to qualify for taking the examination should seek guidance from: Department of Regulatory Services, ARRT, 1255 Northland Drive, St. Paul, Minnesota 55120, 651-687-0048, before commencing coursework. This program may require the student to complete a Pennsylvania Child Abuse History Clearance and/or State Police Criminal Record Check prior to clinical experience and/or employment. The complete program is available at the Harrisburg Campus. Some required courses are available at the Gettysburg, Lancaster and Lebanon Campuses and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates find employment as radiologic technologists or radiographers in hospital radiology departments and in independent medical imaging centers.

Competency Profile

This curriculum is designed to prepare students to:

- Work effectively with other healthcare personnel
- Demonstrate the skills prescribed by the Joint Review Committee on Education in Radiologic Technology
- Take the entry-level certification examination administered by the American Registry of Radiologic Technologists
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Understand how specialized training fits into the health care delivery system

PROGRAM REQUIREMENTS (TOTAL CREDITS = 80)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	AH 140 Introduction to Allied Health	4	CPS 113 Basic Programming or	
ENGL 102 English Composition II	3	BIOL 121 Anatomy & Physiology I	4	CIS 105 Introduction to Software for	
SPCH 101 Effective Speaking	3	BIOL 122 Anatomy & Physiology II	4	Business	3
Core A Elective	3	PHYS 151 Physics for Technicians	4		3
Core B, PSYC 101 General Psychology	3	PHYS 152 Physics for Radiographers	4		
Core C, MATH 103 College Algebra	3	Clinical Rotation	35		
Free Elective	3		55		
Physical Education & Wellness	1				
	22				

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Summer Session	Fall Semester	Spring Semester	Summer Session
AH 140 4	BIOL 121 4	BIOL 122 4	ENGL 101 3
MATH 103 (Core C) 3	PHYS 151 4	PHYS 152 4	Core A Elective 3
Clinical Rotation 6	Clinical Rotation 4	Clinical Rotation 4	Clinical Rotation 6
Fall Semester	Spring Semester	Summer Session	
CPS 113 or CIS 105 3	PSYC 101 (Core B) 3	SPCH 101 3	
ENGL 102 3	Free Elective 3	Clinical Rotation 5	
Clinical Rotation 5	Clinical Rotation 5		
PE & W 1			

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Radiologic Technology – College Based Program

Associate in Science Degree – 3760

Mathematics, Science, and Allied Health Division

Students learn to perform radiographic studies, including preparation and positioning of patients, and exposure and development of radiographic films. Graduates are eligible to take the national certifying examination given by the American Registry of Radiologic Technologists (ARRT). Previous conviction of a crime, including felony, gross misdemeanor, or misdemeanor, with the sole exceptions of speeding or parking violations, may result in denial to sit for the ARRT national registry examination. Therefore, any person interested in pursuing an education in Radiologic Technology who has any questions pertaining to his/her potential eligibility to qualify for taking the examination should seek guidance from: Department of Regulatory Services, ARRT, 1255 Northland Drive, St. Paul, Minnesota 55120, 651-687-0048, before commencing coursework. This program may require the student to complete a Pennsylvania Child Abuse History Clearance and/or State Police Criminal Record Check prior to clinical experience and/or employment. The complete program is available only at the Lancaster Campus. Some required courses are available at the Harrisburg, Lebanon and Gettysburg Campuses.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates find employment as radiologic technologists or radiographers in hospital radiology departments and independent medical-imaging centers.

Competency Profile

This curriculum is designed to prepare students to:

- Work effectively with other healthcare personnel
- Demonstrate the skills prescribed by the Joint Review Committee on Education in Radiologic Technology
- Take the entry level certification examination administered by the American Registry of Radiologic Technologists
- Write and speak effectively
- Appreciate the accomplishments in the arts and sciences
- Understand how specialized training fits into the healthcare delivery system

PROGRAM REQUIREMENTS (TOTAL CREDITS =78)

General Education	Major	Other Required Courses
ENGL 101 English Composition I	RADT 100 Intro to Radiologic Proc	AH 140 Introduction to Allied Health
ENGL 102 English Composition II	RADT 101 Imaging Equipment	AH 141 Patient Care Skills Laboratory
SPCH 101 Effective Speaking or	RADT 103 Imaging and Processing	AH 209 Pharmacology for Allied Health
SPCH 104 Interpersonal Communication	RADT 105 Radiation Protection and Biol.	BIOL 121 Anatomy and Physiology I
Core A Elective	RADT 106 Radiologic Tech Clinical Intro	BIOL 122 Anatomy and Physiology II
Core B, PSYC 101 or SOCI 201(D)	RADT 107 Radiographic Procedures I	BIOL 230 Physiological Pathology
Core C, MATH 103	RADT 109 Radiologic Tech Clinical I	PBT 100 Intro to Phlebotomy for AH
Free Elective	RADT 201 Radiographic Procedures II	PHYS 151 Physics for Technicians
Physical Education & Wellness	RADT 203 Radiologic Tech Clinical II	PHYS 152 Physics for Radiographers
	RADT 205 Radiographic Pathology	
	RADT 207 Radiologic Tech Clinical III	
	RADT 209 Image Analysis	
	RADT 211 Radiologic Tech Clinical IV	
	29	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Fall Semester	Spring Semester	Summer Session
AH 140	BIOL 122	PHYS 152
ENGL 101	PHYS 151	RADT 107
MATH 103	RADT 100	RADT 109
BIOL 121	RADT 101	
AH 141	RADT 103	
	RADT 105	
	RADT 106	
Fall Semester	Spring Semester	Summer Session
RADT 201	AH 209	Core B
RADT 203	BIOL 230	Free Elective
RADT 205	RADT 207	RADT 211
PBT 100	RADT 209	PE & W
ENGL 102	Core A	
SPCH 101 or 104		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Real Estate

Diploma Program – 0170

Business, Hospitality, Engineering, and Technology Division

Students gain a basic knowledge of real estate and its operations. This is a specialty option for concentrated study in real estate.

Career Opportunities

Graduates of this program prepare to enter the real estate profession and take the Pennsylvania Real Estate Commission's examination for the Salesperson's License. To take the Broker's examination to obtain a Broker's License, a student must complete sixteen additional credits beyond those required in the program and meet the other requirements of the Pennsylvania Licensing and Registration Act.

Competency Profile

This curriculum is designed to prepare students to:

- Sit for the Pennsylvania salesperson licensing examination
- Understand the procedures of real estate transactions
- Find employment with a real estate firm

PROGRAM REQUIREMENTS (TOTAL CREDITS = 18)

General Education		Major	
ENGL 106 Written Business Communication	<u>3</u>	BUSI 200 The American Business System	3
	3	MKTG 212 Personal Selling	3
		RE 101 Real Estate Fundamentals	3
		RE 102 Real Estate Practice	3
		RE 203 Real Estate Law	<u>3</u>
			15

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Respiratory Therapist

Associate in Science Degree – 3920

Mathematics, Science, and Allied Health Division

Students are prepared as entry level and advanced respiratory care practitioners. The program is offered in cooperation with American Home Patient, HealthSouth of Mechanicsburg, Hershey Medical Center, Holy Spirit Hospital, Pinnacle Health System, Young’s Medical Equipment, and Select Specialty Hospital. The program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation for Respiratory Care. Continuation in this program requires that the student receive a grade of C or higher in each course pursued. Graduation requirements include Advanced Cardiac Life Support (ACLS) certification, professional development, and satisfactory performance on comprehensive written, laboratory, and oral examinations. These examinations will be administered within five weeks prior to completion of RESP 235, Clinical Practice III. Further, all graduation requirements must be met within one semester after completion of RESP 235. Membership in the American Association for Respiratory Care (AARC) is required by the start of the second semester of the Respiratory Therapist program (#3920). This program requires the student to complete a Pennsylvania Child Abuse History Clearance and/or State Police Criminal Background Check prior to enrollment, prior to the start of a clinical experience, prior to testing and/or obtaining employment. This program also requires the student to submit to a drug screen prior to admission into the program. The student should consider these factors before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean. The complete program is available at the Harrisburg Campus. Some required courses are available at Gettysburg, Lancaster and Lebanon Campuses and at other sites. In addition to tuition and fees, students must purchase uniforms, supplies, liability insurance and clinical parking fees.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates find employment as respiratory therapists in hospitals, nursing homes, rehabilitation centers, home healthcare companies, and as pharmaceutical sales representatives.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate proficiency as respiratory care practitioners as described by the National Board for Respiratory Care
- Assist physicians in the diagnosis, management, and treatment of patients afflicted with cardiopulmonary disorders
- Function effectively as members of the healthcare team
- Think critically
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS – Certified Respiratory Therapist (TOTAL CREDITS = 76)

General Education	Major	Other Required Courses
ENGL 101 English Composition I	RESP 100 Introduction to RC	CHEM 100 Fundamentals of Chemistry
ENGL 102 English Composition II	RESP 110 Medical Terminology	BIOL 121 Anatomy & Physiology I
SPCH 101 Effective Speaking	RESP 120 Cardiopulmonary Anatomy	BIOL 122 Anatomy & Physiology II
Core A Elective	and Physiology	BIOL 221 Microbiology
Core B Elective	RESP 130 Hospital Orientation	15
Free Elective	RESP 140 Oxygen Administration	
Physical Education & Wellness	RESP 150 Pharmacology	
19	RESP 160 Patient Assessment	
	RESP 170 Therapeutics	
	RESP 175 Clinical Practice I	
	RESP 181 Cardiopulmonary Diseases I	
	RESP 190 Acid-Base Physiology	
	RESP 200 Cardiopulmonary Diseases II	
	RESP 205 Clinical Practice II	
	RESP 210 Critical Care	
	RESP 230 Cardiopulmonary Laboratory	
	Procedures	
	RESP 235 Clinical Practice III	
	RESP 250 Pulmonary Rehabilitation and	
	Home Care	
	42	
	Registered Respiratory Therapist Curriculum (TOTAL CREDITS = 84)	
	RESP 240 Current Topics	
	RESP 245 Clinical Practice IV	
	RESP 260 Education and Management	
	Techniques	
	RESP 270 Neonatal and Pediatric	
	Respiratory Care	
	8	

(continued next page)

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Respiratory Therapist

Associate in Science Degree – 3920 (continued)

Mathematics, Science, and Allied Health Division

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

The program is offered during the day and students may enroll either full-time or part-time. General education courses are offered during the day and evening. Evening clinical rotations may be possible.

Summer Session		Fall Semester		Spring Semester		Summer Session		Fall Semester	
BIOL 121	4	RESP 100	2	RESP 130	2	RESP 170	4	RESP 190	2
ENGL 101	3	RESP 110	1	RESP 140	5	RESP 175	2	RESP 200	1
CHEM 100	3	RESP 120	3	RESP 150	3	RESP 181	1	RESP 205	2
		BIOL 122	4	RESP 160	2			RESP 210	5
		ENGL 102	3	Core A Elective	3			BIOL 221	4
		SPCH 101	3					PE & W	1
Spring Semester									
RESP 230	2								
RESP 235	3								
RESP 250	2								
Core B Elective	3								
Free Elective	3								

Registered Respiratory Therapist Curriculum = 8

Summer Session		Fall Semester	
RESP 270	3	RESP 245	3
RESP 240	1		
RESP 260	1		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Restaurant – Food Service Management

Associate in Arts Degree – 1621

Business, Hospitality, Engineering, and Technology Division

The hospitality industry offers many opportunities for employment and as a result learning experiences are varied. The program provides students with instruction in the supervision and management of food preparation, production and service in the classroom and in on campus labs. Students gain supervised concentrated front-of-the-house industry experience and exposure to food preparation and production in an off campus commercial restaurant operation which is open to the public and located in downtown Harrisburg. Students are exposed to food preparation and production in back-of-the-house experiences.

The Restaurant and Food Service Management program is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. HACC is also a ProMgmt Partner with the National Restaurant Association Educational Foundation which affords students the opportunity to earn scholarships and a special professional certificate upon graduation.

This program requires daytime, evening and weekend restaurant operations experiences which make it difficult to have paid employment while attending classes. In addition, the program requires the student to submit to a drug screen prior to Restaurant Operations courses. The student should consider this before enrolling in the program. In addition to tuition and fees, students must purchase a uniform.

This program is designed to lead directly to employment and is not intended as a transfer program, although students have transferred courses to other hospitality degree programs. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon and Gettysburg Campuses and at other sites. All classes are available during the daytime. Some evening classes are available on a rotating basis.

Career Opportunities

Students prepare for employment in an entry-level supervisory or management position, including kitchen, catering or dining-room supervisor, food and beverage manager, assistant manager, cook, or food sales and marketing.

Competency Profile

This curriculum is designed to prepare students to:

- Display knowledge of dining-room service and front-of-the house management techniques
- Develop an appropriate supervisory style
- Apply financial information to internal control and operational decision making
- Display knowledge of basic and quantity food preparation and production
- Apply nutritional principles to menus and food preparation methods
- Display knowledge of menu design and marketing techniques
- Use computers for management activities
- Apply federal, state, and local regulations and laws specific to the industry
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 73)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	HRIM 100 World of Wine <u>or</u>		CIS 105 Intro to Software for Business	3
ENGL 102 English Composition II <u>or</u>		HRIM 106 Professional Bartending	1	Business Elective*	<u>3</u>
ENGL 106 Written Business Comm.	3	HRIM 101 Introduction to Hospitality Industry	3		6
SPCH 101 Effective Speaking	3	HRIM 102 Applied Hospitality Math	2		
Core A Elective	3	HRIM 103 Hospitality Marketing	3	*Select from the following areas: ACCT;	
Core B Elective	3	HRIM 104 Nutrition for Food Service	3	AOS; BUSI; CIS; FIN; HM; HRIM;	
Core C Elective	3	HRIM 110 Menu Design and Marketing	3	MGMT; MKTG; TOUR; WEB	
Free Elective	3	HRIM 113 Sanitation and Safety	2		
Physical Education & Wellness	1	HRIM 122 Food Purchasing, Receiving, & Storing	3		
	22	HRIM 125 Dining Room Management	3		
		HRIM 131 Culinary Fundamentals I	3		
		HRIM 132 Culinary Techniques I	2		
		HRIM 141 Culinary Fundamentals II	3		
		HRIM 142 Culinary Techniques II	2		
		HRIM 205 Restaurant Operations I	2		
		HRIM 206 Restaurant Operations II	2		
		HRIM 208 Restaurant Operations III: Management	2		
		HRIM 231 Cost Control: Food and Labor	3		
		HRIM 251 Hospitality Supervision	<u>3</u>		
			45		

(continued next page)

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Restaurant – Food Service Management

Associate in Arts Degree – 1621 (continued)

Business, Hospitality, Engineering, and Technology Division

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Semester I		Semester II		Semester III		Semester IV		Semester V	
ENGL 101	3	ENGL 102 or 106	3	HRIM 125	3	HRIM 104	3	HRIM 103	3
HRIM 101	3	PE & W	1	CIS 105	3	HRIM 110	3	HRIM 208	2
HRIM 102	2	HRIM 100 or 106	1	Business Elective	3	HRIM 231	3	HRIM 251	3
HRIM 113	2	HRIM 122	3	Core C Elective	3	HRIM 206	2	Core B Elective	3
HRIM 131	3	HRIM 141	3			SPCH 101	3	Free Elective	3
HRIM 132	2	HRIM 142	2			Core A Elective	3		
		HRIM 205	2						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Restaurant – Food Service Management Certificate Program – 1421

Business, Hospitality, Engineering, and Technology Division

The hospitality industry offers many opportunities for employment and as a result learning experiences are varied. The program provides students with instruction in management of food preparation, production and service in the classroom and in on campus labs. Students gain supervised concentrated front-of-the-house industry experience and exposure to food preparation and production in an off campus commercial restaurant operation which is open to the public and located in downtown Harrisburg. This certificate program concentrates on specialized career courses. The Restaurant and Food Service Management program is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. This program requires the student to submit to a drug screen prior to enrollment in Restaurant Operations courses. The student should consider this before enrolling in the program. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon and Gettysburg Campuses and at other sites.

Career Opportunities

Students prepare for employment in an entry-level supervisory or management position, including kitchen catering or dining-room supervisor, food and beverage manager, assistant manager, or cook.

Competency Profile

This curriculum is designed to prepare students to:

- Display knowledge of dining-room service and front-of-the-house management techniques
- Display knowledge of basic and quantity food preparation and production
- Develop an appropriate supervisory style
- Apply nutritional principles to menus and food preparation methods
- Apply federal, state, and local regulations and laws specific to the industry

PROGRAM REQUIREMENTS (TOTAL CREDITS = 39)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I <u>or</u>		HRIM 101 Introduction to Hospitality Industry	3	Program Specific Elective*	$\frac{3}{3}$
ENGL 106 Written Business Comm.	$\frac{3}{3}$	HRIM 102 Applied Hospitality Math	2		
		HRIM 104 Nutrition for Food Service	3	*Select one course from the following:	
		HRIM 113 Sanitation & Safety	2	ACCT 101; BUSI 200; ENGL 106;	
		HRIM 122 Food Purchasing, Receiving, & Storing	3	HRIM 103, 110, 114, 231; PSYC 101;	
		HRIM 125 Dining Room Management	3	SPCH 101	
		HRIM 131 Culinary Fundamentals I	3		
		HRIM 132 Culinary Techniques I	2		
		HRIM 141 Culinary Fundamentals II	3		
		HRIM 142 Culinary Techniques II	2		
		HRIM 205 Restaurant Operations I	2		
		HRIM 206 Restaurant Operations II	2		
		HRIM 251 Hospitality Supervision	$\frac{3}{33}$		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Security Administration

Certificate Program – 6210

Communications, Arts, and Social Sciences Division

This program is designed to provide entry-level security and loss-prevention officers with the basic theoretical framework and practical knowledge necessary to begin careers in the private security field. It is also designed to allow those who have higher educational endeavors a solid foundation for entering into the Security Administration track of the Criminal Justice transfer degree program. This program may require the student to submit to an Act 34 Pennsylvania State Police Criminal Background Check prior to enrollment, prior to the start of a field experience, prior to testing and/or obtaining employment. The student should consider this factor before enrolling in this program. If the student has any questions regarding this, he or she should contact the Division Dean.

Career Opportunities

Career opportunities are available as personnel in security, crisis management, executive protection, contingency planning and security design. Additional education may be required for some positions.

Competency Profile

This curriculum is designed to prepare students to:

- Understand and apply the principles of security management as it applies to retail, industrial, and corporate settings

PROGRAM REQUIREMENTS (TOTAL CREDITS = 30)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	CJ 101 Introduction to Criminal Justice	3	Program Specific Electives*	<u>9</u>
SPCH 101 Effective Speaking	<u>3</u>	CJ 103 Principles of Security and Loss Prevention	3		9
	6	CJ 108 Criminology	3	*Select three of the following courses:	
		CJ 212 Criminal Law and Procedure	3	CJ 201 Criminal Investigation	
		CJ 240 Ethics and Diverse Cultures	<u>3</u>	CJ 203 Criminal Evidence	
			15	CJ 215 Criminal Justice Organization and Administration	
				CJ 220 Physical Safety and Security	
				CJ 221 Retail Security and Safety	
				CJ 222 Industrial Security and Safety	
				CJ 223 Loss Prevention Issues	
				CJ 245 Criminal Justice Seminar in London	
				CJ 251 Criminal Justice Internship	
				ACCT 101 Principles of Accounting I	
				BUSI 200 The American Business System	
				BUSI 201 Business Law I	
				CIS 105 Introduction to Software for Business	

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Senior Healthcare – Workplace Assistant Diploma Program – 0240

Mathematics, Science, and Allied Health Division

The Senior Healthcare Diploma-Workplace Assistant program is designed to develop sensitivity and competence for those individuals in allied health, social services, activities professional, business, marketing and administrative fields who work with the aging population. The course content includes basic principles and issues in gerontology, allied health, social service, mental health, psychosocial and wellness as well as 20 hours of service learning volunteering. The course content also includes basic mathematics and English skills related to the workplace. The complete program is available at the Lebanon Campus. Some courses in the program are available at the Lancaster, Harrisburg and Gettysburg Campuses.

Career Opportunities

This diploma program is designed to enhance the knowledge and effectiveness of personnel currently employed in senior healthcare facilities and to provide college credit for already completed Nursing Assistant training. Graduates may pursue further study in a number of HACC programs, such as LPN, RN and other allied health professions in institutions, assisted living, home health, and a variety of other settings. Graduates pursue employment as Home Healthcare Aides and Attendants, Senior Healthcare Aides, and Nursing Assistants in senior healthcare-related agencies.

Competency Profile

This curriculum is designed to prepare students to:

- Understand basic demographics of aging
- Apply basic principles of gerontology to social and health issues
- Recognize differences between normal aging and disease-related aging
- Understand physical, mental, social, and psychological aspects of aging
- Develop an empathetic relationship with an aging person
- Identify the need for teamwork to provide optimal care for the aging population
- Explore opportunities for further study and workforce development in gerontology fields

PROGRAM REQUIREMENTS (TOTAL CREDITS = 16)

General Education	Major		Other Required Courses	
	GERT 100 Gerontology Overview	1	AH 140 Into to Allied Health or	
	GERT 101 Social Services	1	BIOL 105 Medical Terminology	3 (4)
	GERT 102 Allied Health	1	ENGL 901 Basic Communication Skills	1
	GERT 103 Psychosocial Issues	1	MATH 911 Basic Applied Mathematics I	$\frac{1}{5}$
	GERT 104 Service Learning	1		
	SHC 900 or other electives*	$\frac{6}{11}$		

* Credits are awarded based on work experience or Nursing Assistant Certification. The exact course and/or credits are determined by the advisor of this program or the Dean of Mathematics, Science, and Allied Health Division.

Social Sciences

Associate in Arts Degree – 5090

Communications, Arts, and Social Sciences Division

TRANSFER PROGRAM

This is a general transfer program for a student who plans to seek a four-year degree in anthropology, economics, geography, government and politics, history, public administration, sociology, or related field. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	Social Science Electives	15
ENGL 102 English Composition II	3	(Select transfer courses from Anthropology, Economics, Geography, Government and Politics, History, Psychology, Sociology, Social Science)	
SPCH 101 Effective Speaking	3	Computer Elective*	3
Core A Elective	3	ENGL 201-279 English Literature Elective	3
Core B Elective	3	PHIL 100-299 Philosophy Elective	3
Core B Elective	3	Transfer Electives	6
Core C Elective Math	3		30
Core C Elective Science	3		
Core C Elective	3		
General Education Transfer Elective	3		
Physical Education & Wellness	1		
	31		

* Choose any CIS course except CIS 100 (CIS 105 is recommended)

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	Social Science		Social Science	
Core A Elective	3	SPCH 101	3	Transfer Electives	6	Transfer Electives	6
Core B Elective	3	Core B Elective	3	Philosophy Transfer		Transfer Electives	6
Core C (Math)	3	Core C Elective	3	Elective	3	Core C (Science)	3
Social Science		English Literature		Computer Elective	3		
Transfer Elective	3	Transfer Elective	3	GenEd Trans. Elec.	3		
PE & W	1						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The College's range of education programs allows students planning a career in teaching to complete the first two years of a transfer program and earn an associate in arts degree whether they plan to teach in elementary or secondary schools. All students should be aware of the standards of the Pennsylvania Department of Education and that they specify different preparations for elementary and secondary school teachers.

The PA State Board of Education passed new requirements for admission to, as well as exit from, professional education programs. On October 7, 2000, Title 22 of the PA School Code, Chapter 354, became law. This regulation affects every institution that prepares teachers in the Commonwealth of Pennsylvania. These requirements affect all (elementary and secondary) bachelor's level-education programs for PA Teacher Certification. Students who complete 48 credit hours after August 15, 2002 but prior to August 15, 2003 must have a 2.8 GPA (3.0 GPA after August 15, 2003) to enter professional courses leading to initial teacher certification. They will also be required to attain a qualifying score on the PRAXIS-I Academic Skills Assessment test.

Each student will be required to have an Act 34 Criminal Background Investigation and an Act 151 Child Abuse Clearance prior to any practicum/student teaching experience and employment. The student should consider these factors prior to enrolling in this program.

Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The entire program is available at the Harrisburg, Lancaster, Lebanon and Gettysburg Campuses.

Career Opportunities

This transfer Pre-Teaching curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	EDUC 101 Foundations of Education	3
ENGL 102 English Composition II	3	History Electives	6
SPCH 101 Effective Speaking	3	Select two history courses from the following:	
Core A Elective	3	HIST 103 History of the United States I	
Core B Elective	3	HIST 104 History of the United States II	
Core B Elective	3	HIST 107 The United States Since 1918	
Core C Elective Math	3	HIST 201 Western Civilization I	
Core C Elective Science	3	HIST 202 Western Civilization II	
Core C Elective	3	English Literature Transfer Elective	3
General Education Transfer Elective	3	Philosophy Transfer Elective	3
Physical Education & Wellness	1	Social Science Transfer Electives	12
	31	CIS 109 Integrating Technology K-12 Classroom	3
			30

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	EDUC 101	3	Social Science	
Core A Elective	3	SPCH 101	3	Social Science		Transfer Electives	6
Core B Elective	3	Core B Elective	3	Transfer Elective	3	History Elective	3
Core C (Math)	3	Core C Elective	3	Philosophy Transfer		Core C (Science)	3
Social Science		English Literature		Transfer Elective	3	GenEd Trans. Elec.	3
Transfer Elective	3	Transfer Elective	3	History Elective	3		
PE & W	1			CIS 109	3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Social Services

Associate in Arts Degree – 5060

Communications, Arts, and Social Sciences Division

TRANSFER PROGRAM

This program prepares students for transfer to four-year colleges and universities offering baccalaureate degrees in social work, psychology, human services, or other social service professions. The degree also prepares students for work in the field of human services. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available at the Harrisburg, Lancaster, Lebanon, and Gettysburg Campuses.

Career Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution. Transfer students may continue their education in a wide variety of social services field such as mental health, mental retardation, substance abuse, gerontology, women's services and family services.

Graduates of the program receive the training and education for positions in a number of social service fields as social and human services assistants.

Competency Profile

This curriculum is designed to prepare students to:

- Take advanced academic work at a four-year institution in one of the helping professions
- Conduct interviews for purposes of gathering information, assessment, and development of service plans
- Work effectively with clients and their families to plan treatment or service
- Write effective contact notes, social histories and maintain client files
- Make referrals and facilitate clients moving through the social service system
- Understand racially and culturally diverse populations
- Establish and maintain effective working relationships with clients and their families
- Perform case management responsibilities in a variety of settings
- Understand ethics and laws as they apply to the human service field
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 62)

General Education		Major	
ENGL 101 English Composition I	3	HUMS 100 Introduction to Human Services	3
ENGL 102 English Composition II	3	HUMS 120 Social Welfare Programs and Policies	3
SPCH 101 Effective Speaking	3	HUMS 121 Skills and Methods in Human Services I	3
Core A Elective	3	HUMS 122 Skills and Methods in Human Services II	3
Core B PSYC 101 General Psychology	3	HUMS 206 Human Development in a Social Environment (D)	3
Core B SOCI 201 Intro to Sociology (D)	3	HUMS 215 Fieldwork Practicum	4
Core C Elective Math	3	SOCI 211 Group Dynamics	3
Core C Elective Science	3	Transfer Electives	9
Core C Elective	3		31
General Education Transfer Elective	3		
Physical Education & Wellness	1		
	31		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer Session		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	Transfer Elective	3	SOCI 211	3	Core C (Science)	3
HUMS 100	3	HUMS 120	3	PE & W	1	HUMS 122	3	Gen Ed Trans. Elect.	3
Core B PSYC 101	3	HUMS 121	3			Core A	3	Transfer Elective	3
Transfer Elective	3	Core B SOCI 201 (D)	3			SPCH 101	3	HUMS 215	4
Core C (Math)	3	HUMS 206 (D)	3			Core C Elective	3		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Surgical Technology

Associate in Science Degree – 3620

Mathematics, Science, and Allied Health Division

The Surgical Technology curriculum prepares an individual to assist in caring for the surgical patient in the operating room and to function as a member of the surgical team. Students apply theoretical knowledge to the care of patients undergoing surgery and develop the skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations. The program provides supervised clinical experience that enables students to develop surgical skills required for entry into practice. Students complete the corresponding certificate program with an option to complete this associate degree program.

Graduates of the certificate program are eligible to take the Liaison Council's Certification Examination for Surgical Technologists. The associate degree option allows graduates to prepare for additional responsibilities in surgical services.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Accreditation Review Committee on Education in Surgical Technology. The complete program is available at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates of this program prepare for employment as surgical technologists in hospital operating rooms, outpatient surgery centers, clinics, and physician's offices.

Competency Profile

This curriculum is designed to prepare students to:

- Identify the roles and responsibilities of all surgical team members
- Demonstrate the ability to anticipate the needs of surgical patients by properly preparing the operating room suite, equipment, and instrumentation required for surgical interventions
- Display empathy for surgical patients and their significant others
- Demonstrate a professional demeanor when communicating with patients and fellow team members
- Demonstrate a surgical conscience
- Participate as an effective member of the surgical team throughout the preoperative, intraoperative, and immediate postoperative periods
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 68)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	SURG 110 Introduction to Surgical Tech.	4	BIOL 100 Basic Microbiology	1
ENGL 102 English Composition II or		SURG 111 Surgical Procedures I	4	BIOL 121 Anatomy and Physiology I	4
ENGL 104 Report and Technical Writing	3	SURG 112 Surgical Procedures II	4	BIOL 122 Anatomy and Physiology II	4
SPCH 101 Effective Speaking or		SURG 210 Surgical Clinical Externship I	4	BIOL 230 Physiological Pathology	3
SPCH 104 Interpersonal Communication	3	SURG 220 Surgical Clinical Externship II	6	CIS 105 Introduction to Software	3
Core A Elective	3	SURG 230 Surgical Clinical Externship III	9	AH 209 Pharmacology for Allied Health	3
Core B, PSYC 101 General Psychology	3		31		18
Free Elective	3				
Physical Education & Wellness	1				
	19				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Surgical Technology

Certificate Program – 3220

Mathematics, Science, and Allied Health Division

The Surgical Technology curriculum prepares an individual to assist in caring for the surgical patient in the operating room and to function as a member of the surgical team. Students apply theoretical knowledge to the care of patients undergoing surgery and develop the skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations. The program provides supervised clinical experience that enables students to develop surgical skills required for entry into practice. Graduates of the program are eligible to take the Liaison Council's Certification Examination for Surgical Technologists. The program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Accreditation Review Committee on Education in Surgical Technology. The complete program is available at the Harrisburg Campus; some required courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Selective Program: Entry into this program is not guaranteed with admission to the College; specific admissions criteria must be met. Go to the Health Careers website (www.hacc.edu/healthcareers), email healthcareers@hacc.edu or call (717) 780-1988 or (800) 222-4222 extension 1988 for specific program entry requirements.

Career Opportunities

Graduates of this program prepare for employment as surgical technologists in hospital operating rooms, outpatient surgery centers, clinics, and physician's offices.

Competency Profile

This curriculum is designed to prepare students to:

- Identify the roles and responsibilities of all surgical team members
- Demonstrate the ability to anticipate the needs of surgical patients by properly preparing the operating room suite, equipment, and instrumentation required for surgical interventions
- Display empathy for surgical patients and their significant others
- Demonstrate a professional demeanor when communicating with patients and fellow team members
- Demonstrate a surgical conscience
- Participate as an effective member of the surgical team throughout the preoperative, intraoperative, and immediate postoperative periods

PROGRAM REQUIREMENTS (TOTAL CREDITS = 43)

General Education	Major		Other Required Courses	
	SURG 110 Introduction to Surgical Tech.	4	BIOL 100 Basic Microbiology	1
	SURG 111 Surgical Procedures I	4	BIOL 121 Anatomy and Physiology I	4
	SURG 112 Surgical Procedures II	4	BIOL 122 Anatomy and Physiology II	4
	SURG 210 Surgical Clinical Externship I	4	AH 209 Pharmacology for Allied Health	<u>3</u>
	SURG 220 Surgical Clinical Externship II	6		12
	SURG 230 Surgical Clinical Externship III	<u>9</u>		
		31		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Semester I	Semester II	Semester III	Semester IV	Semester V
SURG 110 4	SURG 111 4	SURG 112 4	SURG 220 6	SURG 230 9
BIOL 100 1	SURG 210 4			
BIOL 121 4	BIOL 122 4			
AH 209 3				

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students prepare for job advancement in technology-dependent fields such as computer technology, automobile repair, building construction, building codes, electronics, heating, ventilating and air conditioning, electrical, civil engineering, municipal engineering, automated systems maintenance and manufacturing, machine design, and water resources. The program is flexible, allowing construction of a program tailored to the student's occupational goal. The complete program is available at the Harrisburg Campus; the programs may be started (and depending on the field of concentration, in some cases, completed) at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Advancement in technology-dependent fields related to the plan of study.

Competency Profile

This curriculum is designed to prepare students to:

- Utilize computer programs and understand the importance of computers in today's technology
- Demonstrate specialized vocation skills in the chosen specialty area
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	CIS 105 Introduction to Software for Business or higher	3
ENGL 102 English Composition II or		MATH 103 or higher or MATH 913*	3
ENGL 104 Report and Technical Writing or		Program Specific Electives**	<u>33</u>
ENGL 106 Written Business Comm.	3		39
SPCH 101 Effective Speaking or			
SPCH 104 Interpersonal Communication	3		
Core A Elective	3		
Core B Elective	3		
Core C Elective	3		
Free Elective	3		
Physical Education & Wellness	<u>1</u>		
	22		

* Students taking MATH 913 are required to take 3 extra credits in program specific electives.
 **Select program specific electives from the following: ARCH; AUTO; BCT; BLDC; CAD; CBNT; CIS; CISE; CNT; CPS; CVTE; ELEC; ELOC; ENGR 271; GIS; GTEC; HBR; HVAC; IA; IMT; MDES; MDRF; MWT; WEB; WELD

Technology Studies

Certificate Program – 4400

Business, Hospitality, Engineering, and Technology Division

Students prepare for job advancement in technology-dependent fields such as computer technology, automobile repair, building construction, building codes, electronics, heating, ventilating and air conditioning, electrical, civil engineering, municipal engineering, automated systems maintenance and manufacturing, machine design, and water resources. The program is flexible, allowing construction of a program tailored to the student's occupational goal. The complete program is available at the Harrisburg Campus; the programs may be started (and depending on the field of concentration, in some cases, completed) at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Advancement in technology-dependent fields related to the plan of study.

Competency Profile

This curriculum is designed to prepare students to:

- Utilize computer programs and understand the importance of computers in today's technology
- Demonstrate specialized vocation skills in the chosen specialty area

PROGRAM REQUIREMENTS (TOTAL CREDITS = 30)

General Education	Major	
	CIS 105 Introduction to Software for Business or higher	3
	MATH 103 or higher or MATH 913*	3
	Program Specific Electives**	<u>24</u>
		30

*Students taking MATH 913 are required to take 3 extra credits in a program specific elective.

** Select program specific electives from the following: ARCH; AUTO; BCT; BLDC; CAD; CBNT; CIS; CISE; CNT; CPS; CVTE; ELEC; ELOC; ENGR 271; GIS; GTEC; HBR; HVAC; IA; IMT; MDES; MDFR; MWT; WEB; WELD

Theatre Arts – Performing Arts

Associate in Arts Degree – 2080

Communications, Arts, and Social Sciences Division

The Theatre Program offers a broad range of courses that allow for transfer to either professional theatre schools or four-year colleges. All students in the program are required to audition for both HACC Theatreworks and the Theatre for Young People productions. Since the requirements of senior institutions vary, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. The complete program is available only during the day at the Harrisburg Campus; some courses are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Professional positions in the Theatre Arts may be limited without pursuit of further professional training in either performance or technical theatre.

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	THTR 110 Acting I	3
ENGL 102 English Composition II	3	THTR 111 Acting II	3
SPCH 101 Effective Speaking	3	THTR 120 Theatre Voice I	1
Core A THTR 101 Introduction to Theatre	3	THTR 121 Theatre Voice II	2
Core B Elective	3	THTR 130 Theatre Movement I	1
Core B Elective	3	THTR 131 Theatre Movement II	2
Core C Elective	3	THTR 142 Scenography	3
General Education Transfer Elective	3	THTR 143 Makeup for the Theatre	3
Physical Education & Wellness	1	THTR 144 Costuming for the Theatre	3
	25	THTR 210 Acting III	3
		THTR 224 Theatre for Social and Cultural Awareness (D)	3
		ENGL 246 Shakespeare	3
		Transfer Electives	6
			36

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ENGL 101	3	ENGL 102	3	THTR 210	3	THTR 224 (D)	3
THTR 110	3	THTR 101 (Core A)	3	Core B Elective	3	SPCH 101	3
THTR 120	1	THTR 111	3	Transfer Elective	3	Transfer Elective	3
THTR 130	1	THTR 121	2	GenEd Trans. Elec.	3	Core B Elective	3
THTR 142	3	THTR 131	2	ENGL 246	3	Core C Elective	3
THTR 143	3	THTR 144	3				
PE & W	1						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Transmission and Distribution Technology

Associate in Applied Science Degree – 4770

Business, Hospitality, Engineering, and Technology Division

Transmission and Distribution Technology is a two-year Associate in Applied Science degree program designed to prepare future employees in the electric service industry, cable and phone industry, and other public utility industries. Students complete extensive hands-on training at PPL educational sites. A summer internship provides the intensive “live work” experience that is demanded by employers.

Selective Program: Program admission is restricted to PPL apprentices and PPL apprenticeship graduates.

Career Opportunities

Graduates of the program find employment as a utility line worker, transmission system installer, transmission system maintenance technician, or electric substation maintenance technician.

Competency Profile

This curriculum is designed to prepare students to:

- Develop and apply skills in the transmission and distribution of electric power
- Install electric power devices
- Troubleshoot, repair, and maintain transmission and distribution equipment
- Work safely under adverse conditions
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 66)

General Education		Major	
ENGL 101 English Composition I	3	TDT 101 Safety Awareness and Compliance	3
ENGL 104 Report and Technical Writing	3	TDT 103 Pole Climbing and Groundhandling	3
SPCH 101 Effective Speaking <u>or</u>		TDT 104 Pole and Anchor Installation	2
SPCH 104 Effective Speaking	3	TDT 120 Summer Internship	6
Core A Elective	3	TDT 200 Power Equipment Operation	3
Core B Elective	3	TDT 201 Service Installation	4
Core C Elective	3	TDT 202 Overhead Line Construction	6
Free Elective	3	TDT 203 Overhead Transformer Installation	4
Physical Education & Wellness	<u>1</u>	TDT 204 Underground Distribution Systems	4
	22	CIS 105 Introduction to Software for Business	3
		ELOC 153 Fundamentals of Electricity	4
		GTEC 130 Electrical Blueprint Reading	<u>2</u>
			44

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Fall Semester		Spring Semester		Summer Session		Fall Semester		Spring Semester	
TDT 101	3	TDT 103	3	TDT 120	6	TDT 200	3	TDT 202	6
ELOC 153	4	TDT 104	2			TDT 201	4	TDT 203	4
ENGL 101	3	GTEC 130	2			SPCH 101 <u>or</u> 104	3	TDT 204	4
Core A	3	ENGL 104	3			Core C	3		
CIS 105	3	Core B	3			PE & W	1		
		Free Elective	3						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students prepare for jobs in the travel industry. The Travel and Tourism AA degree is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete programs are available only at the Harrisburg Campus, and full-time students are advised to take all of their classes at that campus. Some required courses in the degree program are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Graduates find jobs in the travel industry in starting positions as travel agents, ticket agents, or reservationists. Degree graduates are also given the training needed for careers as convention center managers, destination development specialists, incentive travel specialists, in-transit attendants, tour escorts, corporate travel managers, and tour operators.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate competency in travel computer information systems
- Understand computer systems for airline ticketing and other reservations
- Understand tourism concepts and trends
- Demonstrate knowledge of world geography
- Display competency in business subjects required for solving management problems
- Understand computer systems for meeting planning and convention management
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 68)

General Education		Major		Other Required Courses	
ENGL 101 English Composition I	3	HRIM 101 Introduction to Hospitality	3	CIS 105 Introduction to Software for Business	3
ENGL 106 Written Business Comm.	3	HRIM 103 Hospitality Marketing	3		3
SPCH 101 Effective Speaking	3	HRIM 114 Hospitality Accounting	3		
Core A Elective	3	HRIM 251 Development of Supervisory Personnel	3		
Core B Elective	3	HM 203 Hospitality Law	3		
Core C Elective	3	HM 269 Hospitality Industry Computer Systems	3		
Free Elective	3	HM 270 Convention/Conference	3		
Physical Education & Wellness	1	MKTG 212 Personal Selling	3		
	22	MGMT 204 Human Relations or			
		MGMT 121 Sm. Business Management	3		
		TOUR 102 Principles of Travel Selling	3		
		TOUR 125 Destination Geography	3		
		TOUR 201 Tourism Theory & Practices	3		
		TOUR 203 Group Travel Planning	3		
		TOUR 279 Travel Reservation Systems	4		
			43		

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Summer Session		Fall Semester		Spring Semester	
CIS 105	3	ENGL 106	3	TOUR 102	3	HRIM 103	3	MGMT 204 or 121	3
ENGL 101	3	HM 203	3	Core A Elective	3	SPCH 101	3	HM 270	3
HRIM 101	3	HM 269	3	Free Elective	3	TOUR 203	3	HRIM 251	3
TOUR 125	3	HRIM 114	3			TOUR 201	3	TOUR 279	4
Core C Elective	3	MKTG 212	3			Core B Elective	3		
PE & W	1								

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Travel and Tourism

Certificate Program – 1280

Business, Hospitality, Engineering, and Technology Division

Students prepare for jobs in the travel industry. The Travel and Tourism AA degree is accredited by the Association of Collegiate Business Schools and Programs. Since 1992, ACBSP is the only nationally recognized organization that grants regional accreditation to two- and four-year colleges and universities. The complete programs are available only at the Harrisburg Campus, and full-time students are advised to take all of their classes at that campus. Some required courses in the degree program are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Graduates find jobs in the travel industry in starting positions as travel agents, ticket agents, or reservationists. Degree graduates are also given the training needed for careers as convention center managers, destination development specialists, incentive travel specialists, in-transit attendants, tour escorts, corporate travel managers, and tour operators.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate competency in travel computer information systems
- Understand computer systems for airline ticketing and other reservations
- Understand tourism concepts and trends
- Demonstrate knowledge of world geography

PROGRAM REQUIREMENTS (TOTAL CREDITS = 37)

General Education		Major		Other Required Courses	
ENGL 106 Written Business Communication	3	HRIM 101 Introduction to Hospitality	3	CIS 105 Introduction to Software	
	3	HRIM 103 Hospitality Marketing	3	for Business	3
		HRIM 251 Development of Supervisory Personnel	3		3
		HM 269 Hospitality Industry Computer Systems	3		
		HM 270 Convention/Conference Management	3		
		TOUR 102 Principles of Travel Selling	3		
		TOUR 125 Destination Geography	3		
		TOUR 201 Tourism Theories & Practices	3		
		TOUR 203 Group Travel Planning	3		
		TOUR 279 Travel Reservation Systems	4		
			31		

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Students are prepared for entry-level employment in photography. The programs are offered part-time in the evenings and weekends and both part-time and full-time during the day. The complete programs are available only at the Harrisburg Campus; some courses in the program are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Training is provided in both the aesthetic and technical principles of photography for entry-level job opportunities of artistic and commercial photographic application. In addition, the program may be taken for personal growth or for advancement by those already employed in some phase of photography or graphic arts. Students should understand that this field often requires an apprenticeship (photographic “assisting”) of several years after graduation before higher level jobs are secured.

Competency Profile

This curriculum is designed to prepare students to:

- Understand the basic craft and aesthetic principles of photography
- Apply acquired skills to both art and commercial photography
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major	
ENGL 101 English Composition I	3	ART 105 Fundamentals of Two-Dimensional Design	3
ENGL 102 English Composition II or		ART 107 Fundamentals of Three-Dimensional Design	3
ENGL 104 Report and Technical Writing or		ART 111 Black and White Photography I	3
ENGL 106 Written Business Communication	3	ART 112 Black and White Photography II	3
SPCH 101 Effective Speaking	3	ART 121 Drawing I	3
Core A Elective	3	ART 122 Drawing II	3
Core B Elective	3	ART 181 Art Through the Ages I (D)	3
Core C Elective	3	ART 182 Art Through the Ages II (D)	3
Free Elective	3	ART 186 History and Aesthetics of Photography	3
Physical Education & Wellness	1	ART 201 Color Photography I	3
	22	ART 202 Materials and Processes of Photography	3
		ART 205 Color Photography I	3
		ART 206 Studio Photography	<u>3</u>
			39

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester		Spring Semester		Fall Semester		Spring Semester	
ART 105	3	ART 107	3	ART 186	3	ART 205	3
ART 111	3	ART 112	3	ART 201	3	ART 206	3
ART 121	3	ART 182 (D)	3	ART 202	3	SPCH 101	3
ART 181 (D)	3	ENGL 102, 104		Core B Elective	3	Core A Elective	3
ENGL 101	3	or 106	3	Core C Elective	3	Free Elective	3
PE & W	1	ART122	3				

Visual Arts – Photography

Certificate Program – 2400

Communications, Arts, and Social Sciences Division

Students are prepared for entry-level employment in photography. The programs are offered part-time in the evenings and weekends and both part-time and full-time during the day. The complete programs are available only at the Harrisburg Campus; some courses in the program are available at the Lancaster, Lebanon, and Gettysburg Campuses, and at other sites.

Career Opportunities

Training is provided in both the aesthetic and technical principles of photography for entry-level job opportunities of artistic and commercial photographic application. In addition, the program may be taken for personal growth or for advancement by those already employed in some phase of photography or graphic arts. Students should understand that this field often requires an apprenticeship (photographic “assisting”) of several years after graduation before higher level jobs are secured.

Competency Profile

This curriculum is designed to prepare students to:

- Understand the basic craft and aesthetic principles of photography
- Apply acquired skills to both art and commercial photography

PROGRAM REQUIREMENTS (TOTAL CREDITS = 30)

General Education	Major	
	ART 105 Fundamentals of Two-Dimensional Design	3
	ART 111 Black and White Photography I	3
	ART 112 Black and White Photography II	3
	ART 121 Drawing I	3
	ART 182 Art Through the Ages II	3
	ART 186 History and Aesthetics of Photography	3
	ART 201 Color Photography I	3
	ART 202 Materials and Processes of Photography	3
	ART 205 Color Photography II	3
	ART 206 Studio Photography	<u>3</u>
		30

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Web Development and Design

Associate in Arts Degree – 1810

Business, Hospitality, Engineering, and Technology Division

The Web Development and Design A.A. career degree provides skills and knowledge needed for a rewarding career designing and developing enterprise level web sites and applications. All students gain a foundation in web site development and design, various web technologies, web marketing, and effective communication. Students then choose either a developer or designer option. Developer graduates focus on programming to build and maintain interactive, data driven web applications. Designer graduates focus on making creative content using rich media.

Career Opportunities

Graduates may obtain positions with many different businesses, government agencies, and web consulting firms as Web developers, Web designers, Webmasters, Web architects, programmers, and other related positions.

Competency Profile

This curriculum is designed to prepare students to:

- Design high quality web pages for a variety of uses
- Develop web applications that integrate programming, databases, and markup languages for business and electronic commerce
- Implement and maintain web sites that are effective in terms of cost, security, and reliability
- Configure web servers and operating systems
- Publish information on the Internet and Intranets
- Create interactive and multimedia content for marketing
- Manage Internet communication for organizations
- Make cost-effective decisions regarding Internet technology, software, and hardware
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Understand how their specialized training fits into the larger management and societal contexts

PROGRAM REQUIREMENTS (TOTAL CREDITS = 64)

General Education		Major	
ENGL 101 English Composition I	3	AOS 202 Project Management or	
ENGL 102 English Composition II or		MGMT 227 Project Management	3
ENGL 104 Report & Technical Writing or		WEB 110 Web Site Publishing	3
ENGL 106 Written Business Comm.	3	WEB 125 HTML, XML, and JavaScript	3
SPCH 101 Effective Speaking or		WEB 130 Web Design and Multimedia	3
SPCH 104 Interpersonal Communication	3	WEB 143 Web Application Development	3
Core A Elective	3	WEB 268 Capstone Web Project	3
Core B Elective	3	Computer Elective*	3
Core C Elective	3	Major Elective**	<u>3</u>
Free Elective	3		24
Physical Education & Wellness	<u>1</u>		
	22		

*Computer Elective: Any WEB, CIS, CISE, CPS, CNT or GIS course
 ** Major Elective- 3 credits from the following courses: ART 105, MKTG 201, MKTG 235, MGMT 121 or MGMT 201

Developer Option

CIS 245 Database Programming	3
WEB 126 XML eXtensible Markup Language	3
WEB 240 JavaScript Programming	3
WEB 253 ASP.NET Active Server Pages	3
WEB 260 Web Server Administration or	
CIS 223 Intermediate Windows Servers or	
CIS 264 Fundamentals of LINUX Administration or	
CIS 265 Fundamentals of UNIX Administration	3
Programming Elective+	<u>3</u>
	18

Designer Option

WEB 133 Web Design Theory or	
ART 105 Fundamentals of Two-Dimensional Design	3
WEB 135 Web Design with Raster Images or	
ART 176 Digital Photo Imaging	3
WEB 138 Web Design with Vector Images or	
ART 108 Fundamentals of Computer Art	3
WEB 230 Web Design Animation or	
WEB 233 Web Multimedia Production	3
WEB 121 Electronic Commerce or	
MKTG 235 Internet Marketing or	
MKTG 201 Principles of Marketing	3
Design Elective (Any Web course)	<u>3</u>
	18

+ Select from: WEB 247, 255, 256; CIS 238, or CPS 121

(continued next page)

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Web Development and Design

Associate in Arts Degree – 1810 (continued)

Business, Hospitality, Engineering, and Technology Division

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Developer Option

Semester I		Semester II		Summer		Semester III		Semester IV	
WEB 110	3	ENGL 102/104/106	3	Core B Elective	3	Core A Elective	3	WEB 268	3
WEB 125	3	WEB 126	3	PE & W	1	SPCH 101 or 104	3	Computer Elective	3
WEB 130	3	WEB 240	3			WEB 253	3	Major Elective	3
WEB 143	3	Programming Elect.	3			WEB 260 or		Core C Elective	3
ENGL 101	3	AOS 202 or				CIS 223/264/265	3	Free Elective	3
		MGMT 227	3			CIS 245	3		

Designer Option

Semester I		Semester II		Summer		Semester III		Semester IV	
WEB 110	3	ENGL 102/104/106	3	Core B Elective	3	Core A Elective	3	WEB 268	3
WEB 125	3	WEB 133 or		PE & W	1	SPCH 101 or 104	3	Computer Elective	3
WEB 130	3	ART 105	3			WEB 230 or 233	3	Major Elective	3
WEB 143	3	WEB 135 or				Design Elective	3	Core C Elective	3
ENGL 101	3	ART 176	3			WEB 138 or		Free Elective	3
		WEB 121 or				ART 108	3		
		MKTG 235/201	3						
		AOS 202 or							
		MGMT 227	3						

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Web Development and Design Certificate Program – 1450

Business, Hospitality, Engineering, and Technology Division

The Web Development and Design certificate program provides skills and knowledge needed for a rewarding career designing and developing enterprise level web sites and applications. All students gain a foundation in web site development and design, various web technologies, and web marketing. Students then choose either a developer or designer option. Developer graduates focus on programming to build and maintain interactive, data driven web applications. Designer graduates focus on making creative content using rich media.

Career Opportunities

Graduates may obtain positions with many different businesses, government agencies, and web consulting firms as Web developers, Web designers, Webmasters, Web architects, programmers, and other related positions.

Competency Profile

This curriculum is designed to prepare students to:

- Design high quality web pages for a variety of uses
- Develop web applications that integrate programming, databases, and markup languages for business and electronic commerce
- Implement and maintain web sites that are effective in terms of cost, security, and reliability
- Configure web servers and operating systems
- Publish information on the Internet and Intranets
- Create interactive and multimedia content for marketing
- Manage Internet communication for organizations
- Make cost-effective decisions regarding Internet technology, software, and hardware

PROGRAM REQUIREMENTS (TOTAL CREDITS = 36)

General Education	Major	Other Required Courses
	AOS 202 Project Management or	
	MGMT 227 Project Management	3
	WEB 110 Web Site Publishing	3
	WEB 125 HTML, XML, and JavaScript	3
	WEB 130 Web Design and Multimedia	3
	WEB 143 Web Application Development	3
	WEB 268 Capstone Web Project	<u>3</u>
		18
Developer Option		Designer Option
CIS 245 Database Programming	3	WEB 133 Web Design Theory or
WEB 126 XML eXtensible Markup Language	3	ART 105 Fundamentals of Two-Dimensional Design
WEB 240 JavaScript Programming	3	WEB 135 Web Design with Raster Images or
WEB 253 ASP.NET Active Server Pages	3	ART 176 Digital Photo Imaging
WEB 260 Web Server Administration or		WEB 138 Web Design with Vector Images or
CIS 223 Intermediate Windows Servers or		ART 108 Fundamentals of Computer Art
CIS 264 Fundamentals of LINUX Administration or		WEB 230 Web Design Animation or
CIS 265 Fundamentals of UNIX Administration	3	WEB 233 Web Multimedia Production
Programming Elective*	<u>3</u>	WEB 121 Electronic Commerce or
	18	MKTG 235 Internet Marketing or
		MKTG 201 Principles of Marketing
		Design Elective (Any Web course)
		<u>3</u>
		18

*Select from: WEB 247, 255, 256; CIS 238, or CPS 121

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

Welding Technology

Certificate Program – 4161

Business, Hospitality, Engineering, and Technology Division

The Welding Technology Certificate program prepares students for employment in the welding industry as a qualified welder. Advanced skills are developed in blueprint reading, oxy fuel welding, shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, flux cored and subarc welding, and testing and inspection. The practice that is provided through laboratory training prepares the student for AWS certification tests. The Certificate program is offered at the Community Center for Technology and Art at the Harrisburg campus. Some courses are available through the Lebanon campus.

Career Opportunities:

Graduates are employed as assemblers, maintenance mechanics, welders (with AWS certification), welders helpers, repair technicians, machine operators, and welding sales and service representatives.

Competency Profile:

The program is designed to prepare students to:

- Interpret welding blueprints
- Weld carbon steel, aluminum and stainless steel in all positions with the oxy fuel welding process
- Weld carbon steel in all positions with the shielded metal arc welding process
- Weld carbon steel, aluminum and stainless steel in all positions with the gas metal arc welding process
- Weld carbon steel, aluminum and stainless steel in all positions with the gas tungsten arc welding process
- Weld carbon steel, aluminum, and stainless steel in all positions with the flux cored arc welding process
- Weld carbon steel with the subarc welding process
- Weld pipe with oxy fuel, SMAW, GMAW, and GTAW welding processes
- Test and inspect weldments with destructive and nondestructive examination processes

PROGRAM REQUIREMENTS (TOTAL CREDITS = 35)

General Education	Major	Other Required Courses	
ENGL 104 Technical and Report Writing <u>or</u>	GTEC 101 Safety and Health in the	MATH 913 Applied Math III	<u>3</u>
ENGL 101 English Composition I	Workplace		3
	WELD 101 Blueprint Reading		2
	WELD 102 Oxy Fuel Welding & Cutting		3
	WELD 103 Shielded Metal Arc Welding I		3
	WELD 105 Shielded Metal Arc Welding II		3
	WELD 120 Gas Metal Arc Welding I		3
	WELD 130 Gas Tungsten Arc Welding I		3
	WELD 205 Testing and Inspection		3
	WELD 210 Flux Cored & SubArc Welding		3
	WELD 240 Pipe Welding		<u>3</u>
			29

Effective Fall 2008, all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements. See page 30 for more information.

The Welding Technology Diploma program prepares students with the knowledge and skills needed for immediate job entry. Emphasis is placed on the basic techniques of blueprint reading, oxy fuel welding, shielded metal arc welding, gas metal arc welding, and gas tungsten arc welding. Students weld on carbon steel, aluminum, and stainless steel. The Diploma program is offered at the Community Center for Technology and Art at the Harrisburg campus, and through the Lebanon campus at the Lebanon County Career and Technology Center in Lebanon.

Career Opportunities

Graduates are employed as entry level maintenance workers, basic assembly welders, and welders' helpers in industry.

Competency Profile

This curriculum is designed to prepare students to:

- Interpret welding blueprints
- Weld carbon steel, aluminum and stainless steel in various positions with the oxy fuel welding process
- Weld carbon steel in various positions with the shielded metal arc welding process
- Weld carbon steel, aluminum and stainless steel in various positions with the gas metal arc welding process
- Weld carbon steel, aluminum and stainless steel in various positions with the gas tungsten arc welding process

PROGRAM REQUIREMENTS (TOTAL CREDITS = 24)

General Education

Major

Other Required Courses

GTEC 101 Safety and Health in the Workplace	3	ENGL 901 Basic Communication Skills*	1
WELD 101 Blueprint Reading	2	MATH 913 Applied Math III*	3
WELD 102 Oxy Fuel Welding & Cutting	3		4
WELD 103 Shielded Metal Arc Welding I	3		
WELD 105 Shielded Metal Arc Welding II	3		
WELD 120 Gas Metal Arc Welding I	3		
WELD 130 Gas Tungsten Arc Welding I	3		
	20		

*May be replaced with higher level ENGL and MATH offerings.

Accounting – Administrative Office Specialist

Courses are offered through five academic divisions of the College: Adult Basic Education and Developmental Studies (**ABEDS**); Business, Hospitality, Engineering, and Technology (**BHET**); Communications, Arts, and Social Sciences (**CASS**); Mathematics, Science, and Allied Health (**MSAH**); and Library and Information Resources (**LIRD**). The Division offering each course category listed below is indicated using these abbreviations.

The numbers separated by colons following the title of a course indicate, respectively, the number of credits awarded for completion of the course, the number of lecture hours per week, and the number of laboratory hours per week. The course description states corequisites or prerequisites, if any. Courses that meet Diversity (**D**) and Physical Education and Wellness (**W**) requirements are indicated following the course description. Unless the description uses a restrictive phrase, the college usually will offer the course at least once each year at the Harrisburg Campus. Variations may occur at the campuses in Gettysburg, Lancaster, Lebanon and York, and at other sites. Information about course offerings is printed in the Credit Course Schedule for each term. Copies are available by phoning the Admissions Office at the Gettysburg, Harrisburg, Lancaster, Lebanon and York campuses.

Accounting • BHET Division

ACCT 101 – Principles of Accounting I 4:4:0

Introduction to generally accepted accounting principles as they pertain to external financial reports. The accounting cycle, accounting systems, theories and policies relative to asset valuation, liability measurement, and income determination are presented. Emphasis is placed on accounting for sole proprietorships and partnerships.

ACCT 200 – Principles of Accounting II 4:4:0

Recording, summarizing, and interpreting financial data for corporations; cash flows; financial statement analysis; job order and process costing; cost/volume/profit analysis budgets, variance analysis, cost allocation, and quantitative decision-making. *Prerequisite:* ACCT 101 with a grade of C or higher.

ACCT 201 – Intermediate Accounting I 4:4:0

The conceptual framework of accounting and further discussion of the income statement, retained earnings statement balance sheet, and statement of cash flow. Also covered are revenue recognition and measurement of cash, receivables, inventory, operational assets, intangible assets, natural resources, and investments in debt and equity securities. *Prerequisite:* ACCT 200 with a grade of C or higher.

ACCT 202 – Intermediate Accounting II 4:4:0

Critical study of pronouncements from the Financial Accounting Standards Board as they relate to financial reporting. Analysis of more complex accounting topics, including corporations' contributed capital, retained earnings, stock options, liabilities, statements of cash flow, pension plans, leases, earnings per share, income taxes, changes and error corrections, and financial statement analysis. *Prerequisite:* ACCT 201 with a grade of C or higher.

ACCT 203 – Income Tax Accounting 4:4:0

The Internal Revenue Code as it applies to the individual, partnership, and corporation. Emphasis is placed on the review of commonly filed income tax forms as well as retirement plans and gift and estate taxation. *Prerequisite:* ACCT 200 with a grade of C or higher or permission of coordinator.

ACCT 204 – Managerial Cost Accounting 3:3:0

The concepts and applications of cost accounting from a procedural and managerial approach. The accumulation of cost data for planning, organizing, controlling cost, and decision making. Factory overhead, responsibility accounting, job-order and process accounting, standard costs, variance analysis, direct costing, and cost/volume/profit analysis. *Prerequisite:* ACCT 200 with a grade of C or higher or permission of coordinator.

ACCT 205 – Auditing 3:3:0

The ethical and legal responsibilities of the auditor; audit objectives and procedures; internal control; the audit program; testing and sampling; working papers and audit reports. *Prerequisite:* ACCT 201 with a grade of C or higher or permission of coordinator.

ACCT 207 – Government and Not-for-Profit Accounting 4:4:0

Accounting theory and practice applied to governmental units and non-profit institutions. The course will provide an understanding of the classification and use of funds; fiscal procedures; budgetary control; financial statements and reports. *Prerequisite:* ACCT 200 with a grade of C or higher or permission of coordinator.

ACCT 215 – Microcomputer Accounting Applications 3:2:2

Conversion of a manually kept set of accounting records to a fully integrated micro-computer-based system using various commercial accounting software packages. Review of spreadsheet skills, including graphs, @functions, and macros. Development of several accounting spreadsheet templates. Income tax software is also reviewed. *Prerequisite:* ACCT 200 and CIS 105 with a grade of C or higher or permission of coordinator.

Admin. Office Specialist • BHET Division

AOS 100 – Keyboarding 2:1:2

Designed to develop touch-typing on alphabetic and numeric keyboards. Students master the basic keyboard found on the computer.

Prerequisite: Eligibility for enrollment in ENGL 003 or higher or ENGL 002 with a grade of C or higher.

AOS 101 – Document Processing 3:0:3

Designed to reinforce keyboarding techniques with emphasis on building speed and accuracy. Students learn proper formatting of business documents. Editing and proof-reading are stressed. Students must be able to key straight copy at 30 wpm using proper technique prior to registering for this class.

Prerequisite: Eligibility for enrollment in ENGL 003 or higher, or completion of ENGL 002 with a grade of C or higher.

AOS 110 – Microsoft Word 3:3:0

Covers the basics of creating, editing, and formatting a document using Microsoft Word software. The primary emphasis is on Word's features of advanced formatting and editing, macros, mail merge, online forms, and sorting options. *Prerequisite:* AOS 101 with a grade of C or higher.

AOS 111 – Grammar and Punctuation Essentials 3:3:0

Designed for those transcribing oral communication (dictation) into writing. This course stresses spelling, grammar, mechanics, punctuation, and usage. These skills are taught in the context of proofreading, copy editing, and listening. *Prerequisite:* ENGL 051 with a grade of C or higher, or eligibility for enrollment in ENGL 101.

AOS 160 – Office Accounting 3:3:0

Introduction to the principles of accounting with emphasis on their relationship to the single proprietorship. Specific topics for study include journal entries, posting, trial balance, adjustments, work sheets, closing entries, financial statements, special journals and ledgers, petty cash, and payroll.

AOS 202 – Project Management 3:3:0

Understanding and implementing time-management skills through manual competencies and computer software. Students complete advanced projects within given timelines—planning, organizing, meeting, and adjusting deadlines, communicating project

Administrative Office Specialist (continued) – Anthropology

information, and making decisions as one would on the job. *Prerequisite: AOS 110 or WEB 102 with a grade of C or higher.*

AOS 203 – Records and Imaging Management 3:3:0

Provides the concepts needed to optimize the value of records, information, and image management. *Prerequisite: CIS 105 with a grade of C or higher.*

AOS 210 – Cooperative Work Experience 3:0:16

A minimum of 240 hours in a College-approved office setting where students apply the knowledge and skills acquired in the Administrative Office Specialist curriculum. The course requires visits from an instructor and progress reports. Written documentation of the cooperative work experience activities and other performance-evaluation measurements are used to determine the grade. *Prerequisite: AOS 224 with a grade of C or higher.*

AOS 224 – Office Applications 3:3:0

A business simulation designed to reinforce and build software skills, improve Internet skills, and develop teamwork and critical-thinking skills. Projects are used to replicate the office environment. Integration of software programs is a priority. *Prerequisites: AOS 110 and CIS 105 with a grade of C or higher.*

AOS 225 – Office Procedures 3:3:0

Procedures for conducting common office tasks such as handling incoming and outgoing mail and other documents, making travel arrangements, planning meetings, and researching via the library and the Internet. The course includes the use of proper telephone techniques and proper business etiquette. *Prerequisites: AOS 101 and AOS 110 with a grade of C or higher.*

AOS 226 – Machine Transcription 3:2:2

Provides intensive instruction and practice in listening and transcribing from recorded dictation using transcribing equipment. *Prerequisite: AOS 101 with a grade of C or higher.*

Allied Health • MSAH Division

AH 140 – Introduction to Allied Health 3:3:0

An introduction to the allied health professions. The course reviews the evolution and current status of health care delivery. It also introduces the student to the concepts of human growth and development, safety in the workplace, communication skills, aspects of management, securing employment, and strategies for becoming a successful employee. Special emphasis is placed on medical terminology and health care law and ethics.

Prerequisites: ENGL 002 and 050 with a grade of C or higher.

AH 141 – Patient Care Skills Laboratory 1:0:3

Provides the student with skill and competency in the following areas: recognizing and understanding common health care equipment, ergonomics in the workplace, infection control, obtaining and understanding vital signs, recognition of medical emergencies, and documentation in the medical record. *A laboratory fee is required. Pre- and corequisite: AH 140.*

AH 142 – Introduction to Medical Laboratory Techniques 3:2:3

Introduces Medical Assisting students and other medical personnel to clinical laboratory procedures commonly performed in ambulatory-care settings. Basic laboratory principles are emphasized including quality assurance and safety requirements. Principles and techniques of commonly performed medical laboratory procedures are practiced. *Laboratory and liability fees are required.*

AH 150 – Introduction to Human Illness and Disease 3:3:0

Human-based illness and disease states with emphasis on acute manifestations of chronic illness and related terminology. *Prerequisite: BIOL 111 or 121 with a grade of C or higher.*

AH 150RT – Fundamentals of Radiography 3:3:0

AH 209 – Pharmacology For Allied Health 3:3:0

An introduction to pharmacology: drug preparation, dispensing and administration. Emphasis is placed on the study of groups of drugs, their pharmacokinetic aspects, dosages, dosage forms and calculations, administration and side effects. *Prerequisite: BIOL 111 or BIOL 121 with a grade of C or higher, or corequisite of BIOL 121, or permission of the instructor.*

AH 210 – Health Care Law and Ethics 3:3:0

Fundamentals of law and the court system as well as an exploration of basic ethical principles and bioethics. The course focuses on applying legal and ethical principles to health-care situations and includes a discussion on current medical-legal issues and bioethical dilemmas being addressed in the U.S. Healthcare system.

AH 213 – Introduction to Medical Insurance 3:3:0

Provides an overview of insurance programs at commercial, state and federal levels along with third-party billing techniques, cost-containment strategies, claims developing and processing, and diagnosis and procedure coding systems. Additional topics include legal issues, resources, managed care contracting,

fee schedules and electronic data systems. *Prerequisite: BIOL 105.*

Anthropology • CASS Division

ANTH 101 – Introduction to Anthropology 3:3:0

Examination of anthropology as the study of human physical and social evolution. Major emphasis on the sub-disciplines of physical anthropology, archaeology, and cultural anthropology. Non-literate societies are reviewed in detail. *(Core B)*

ANTH 201 – Social Anthropology 3:3:0

Broad, general introduction to social/cultural anthropology, the purpose of which is to acquaint the student with what anthropology is, what anthropologists do and why; to familiarize the student with the outlines of the history of anthropology; the concepts and tools of the discipline; its investigatory procedures, theoretical positions, subject matter, aims and achievements. *Occasional videocourse offering. (Core B)(D)*

ANTH 205 – Cultures of the World 3:3:0

Comparison, analysis, and description of selected cultures of the world from the simple to the complex, including the social evolution of societies from bands to states and the determinants of change. *(Core B)(D)*

ANTH 210 – North American Indian Cultures 3:3:0

General survey course focusing on the traditions, beliefs, social structure and ecology of Native American people from their earliest migrations to North America to the present. The forces of social change and acculturation are examined, and the impact of European contact is stressed. *(D)*

ANTH 212 – Anthropology of Mexico 3:3:0

General survey of the evolution of Mexican civilizations with special emphasis on pre-Hispanic societies (Olmec, Teotihuacan, Maya, Toltec, and Aztec, among others). Topics include the impact of the Spanish conquest and the social, political, and economic character of modern Mexico with emphasis on the life of the peasantry.

ANTH 215 – Physical Anthropology 3:3:0

General introduction to physical and biological anthropology designed to provide the student with a broad knowledge of human evolutionary biology. The historical development of physical anthropology and the evolution of the human vertebrate form are examined. Special emphasis is placed on paleoanthropology, population genetics, demography, sociobiology, osteology, primatology and modern human variation.

ANTH 220 – Introduction to Archaeology 3:3:0

Examines the development of archaeology

Anthropology (continued) – Architecture

as a science. Major topics include various methods of archaeological investigation, chronological placement, excavation procedures, and a review of extinct cultures in the Old and New Worlds.

Arabic • CASS Division

ARAB 101 – Elementary Arabic I 4:4:1

Fundamentals of Arabic grammar; drill in structure and pronunciation; development of vocabulary. Aural-oral and reading skills are introduced in the classroom and the language laboratory. *Prerequisite: Eligibility for enrollment in ENGL 101. (Core A)*

ARAB 102 – Elementary Arabic II 4:4:1

Continuation of ARAB 101 with increased emphasis on speaking and writing. *Prerequisite: ARAB 101 with a grade of C or higher. (Core A)*

Architecture • BHET Division

ARCH 101 – Architectural Design I 3:1:6

An introduction to basic theories of two- and three-dimensional space. Qualities of architectonic space including definition, scale, transition, light, emotive qualities and organizing systems are explored in accompaniment with this study of historical precedents. Graphic communication and model-making skills are developed. *A laboratory fee is required. Prerequisites: Eligibility for MATH 103 and ENGL 101.*

ARCH 102 – Architectural Design II 3:1:6

A study of visual composition in two and three dimensions. Concepts of visual movement, tension, balance, unifying systems, and the aesthetic expression of site occupancy and construction materials and structure in architectonic form are explored through various design problems. Continued emphasis on graphic communication and model-making skills. *A laboratory fee is required. Prerequisites: Eligibility for MATH 103 and ENGL 101.*

ARCH 110 – Construction Print Reading 3:3:0

An introduction to building materials and systems and their representation in construction drawings. Also included is an introduction to the field of building design and construction with a focus on basic terminology, industry standards, and the roles of the contractor, architect and other parties involved in construction projects. *A laboratory fee is required.*

ARCH 111 – Architectural Graphics I 3:1:6

An introduction to architectural drawing. Emphasis is on the development of visual cognition skills and techniques of drafting, including linework and lettering. The course

explores both freehand and hard-line methods, including orthographic, paraline, and perspective drawing. *A laboratory fee is required.*

ARCH 112 – Architectural Working Drawings I 3:1:6

Preparation of complete working drawings for a wood-frame structure. Emphasis is placed on sheet layout, material indication, linework, dimensioning, and notation. *A laboratory fee is required. Prerequisites: ARCH 110 and 111 with a grade of C or higher.*

ARCH 121 – History of Architecture I 3:3:0

A history of architecture from Prehistory to the Gothic period, with an emphasis on the relationship between architecture and social, economic, aesthetic and technological developments. Methods of historical inquiry, comparative analysis, and the use of documents and sources are emphasized. *Prerequisite: Eligibility for ENGL 101. (D)*

ARCH 130 – Construction Materials and Methods 3:3:0

Intensive investigation of building materials and systems of construction, including structure, enclosure, and interiors. The impact of building codes on material application and an overview of sustainable design as applied to construction material and methods is explored. *Prerequisite: ARCH 110 with a grade of C or higher.*

ARCH 135 – Codes, Specifications and Estimating 3:3:0

An introduction to codes, specifications, and estimating. The course focuses on the use of model building codes, CSI (Construction Specifications Institute) specification format, and basic estimating procedures in an architectural practice.

ARCH 201 – Architectural Design III 4:2:6

Students develop an individual design process through resolving simple architectural programs. Aspects of behavioral, environmental, and perceptual theory are explored in greater depth. Continued emphasis on graphic communication and model-making skills. *A laboratory fee is required. Prerequisites: ARCH 101 and 102.*

ARCH 202 – Architectural Design IV 4:2:6

Course focuses on the resolution of complex architectural programs within contextual issues including site analysis. Integration of basic structural concepts is explored. Continued emphasis on graphic communication and model-making skills. *A laboratory fee is required. Prerequisites: ARCH 101 and 102.*

ARCH 210 – Professional Practice for Architects 3:3:0

The role of the architect in the design and construction process. Topics include the five

project phases, AIA contracts, CSI format design and construction management, the ethical and legal responsibilities of the architect, business management, and project coordination. *Prerequisite: ARCH 110.*

ARCH 211 – Architectural Graphics II 2:0.5:4.5

Continuation of ARCH 111 exploring advanced methods of presentation drawing. Students use a variety of media, including ink, marker, colored pencil, drafting film, and illustration board. Advanced one- and two-point perspectives, shade and shadow, material rendition, nighttime renderings, and contextual elaboration are explored. *A laboratory fee is required. Prerequisite: ARCH 111 with a grade of C or higher, or permission of the coordinator.*

ARCH 212 – Architectural Working Drawings II 4:2:6

Design and preparation of a complete set of architectural construction drawings for a commercial project of steel or concrete. Emphasis is on the full resolution and integration of building systems and other issues explored in previous courses. *A laboratory fee is required. Prerequisite: ARCH 210 and 233 with a grade of C or higher. Corequisite: ARCH 230.*

ARCH 214 – Site Planning and Surveying 3:1:6

Preparation of site plans and related drawings used in architectural offices. Students learn to mediate building and site issues in designing and detailing foundation systems. Topics include topographic studies, zoning, handicap access, and parking layouts. The final third of the course incorporates a field surveying lab. *A laboratory fee is required. Prerequisites: ARCH 111 or CAD 114 with a grade of C or higher, or permission of the Coordinator.*

ARCH 221 – History of Architecture II 3:3:0

Exploration of architectural history from the Renaissance to the present. *Prerequisite: Eligibility for ENGL 101.*

ARCH 230 – Structural Concepts 4:3:3

Continuation of ARCH 130 exploring the interaction and coordination of building systems and factors affecting their selection and application. Structural principles are discussed, including beam design and the use of load tables. Students solve practical problems through laboratory exercises. *A laboratory fee is required. Prerequisites: ARCH 130 with a grade of C or higher; and MATH 020 or Math 913 or higher with a grade of C or higher; or placement through the College Testing and Placement Program into MATH 051 or higher.*

ARCH 233 – Renovations and Architectural Detailing 4:2:6

Large-scale architectural detailing for construction drawings. Students research the application and adaptation of various systems and manufacturers' products. Investigation of building surveying methodology for existing structure and review of code issues impacting renovations are explored. *A laboratory fee is required. Prerequisites: ARCH 112 and 130 with a grade of C or higher.*

ARCH 241 – Architectural Sketching 3:0:5:4

An introductory course that seeks to develop sketching abilities for students in the design fields. The class focuses on freehand drawing as a way of understanding the built environment. This allows the student to build a visual vocabulary, which will aid in the student's own design education. *Prerequisite: ARCH 101 or 111 with a grade of C or higher.*

ARCH 251 – Environmental Control Systems for Buildings 3:3:0

Investigation of mechanical, electrical, and plumbing systems commonly employed in modern structures including heating and cooling load analysis, HVAC design, and power and lighting system design. The impact of sustainable design building codes on equipment selection and design is also explored. *Prerequisites: ARCH 110 and 130 with a grade of C or higher.*

ARCH 253 – Sustainable Architecture 3:3:0

An introduction to sustainable architecture that examines what constitutes green buildings, why they are important, and how to design them. Integrated design is explored utilizing the U.S. Green Building Council's LEED Green Building Rating System as the framework for reducing the environmental impacts of buildings. Building performance metrics are analyzed in terms of sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality via case studies, design exercises, and web research.

ARCH 291 – Arch CoOp Work Experience 3:0:15

Faculty-monitored employment in a registered architect's office for a minimum of fifteen hours per week. *Open only to students in the Architectural Technology Program. Prerequisites: ARCH 210, 230, and 233 with a grade of C or higher; Corequisite: ARCH 212.*

ARCH 293 – Understanding England's History through its Architecture 3:3:0

A guided tour of historical sites in England that shows the evolution of England's architecture from pre-historic times to the present. Studying architecture exposes students to the social, political, economic, and technological

history of England. Introductory lectures prepare students before the course, which is usually offered in January just before the beginning of the spring term. *(D)*

ARCH 295 – Understanding Italy's History through its Art and Architecture 3:3:0

A ten-day guided tour of architectural sites in Rome, Florence, and Venice. The focus is on understanding Italy's contribution to Western architecture. Studying architecture exposes students to the social, political, economic, and technological history of Italy. *Introductory lectures prepare students before the course, which is usually offered during spring break in March. (D)*

ARCH 297 – Understanding Greece's Art History and Mythology through its Architecture 3:3:0

A ten-day guided tour of architectural sites in Greece. The focus is on understanding the contribution of Greece to Western architecture. Studying architecture exposes students to the social, political, economic, and technological history of Greece. *Introductory lectures prepare students before the course, which is usually offered between spring and first summer terms. (D)*

Art • CASS Division

ART 102 – Silkscreen Printing 3:2:3

An exploration of the art, aesthetics and craft of silkscreen printing by constructing prints using lacquer, photo emulsion, and computer-generated stencils. *A laboratory fee is required.*

ART 103 – Art Education I 3:2:3

Geared toward the child's needs for artistic expression. It is a studio/discussion course providing opportunities for the handling of materials and for the evaluation of children's works at various stages of physical and mental development. *A laboratory fee is required.*

ART 105 – Fundamentals of Two-Dimensional Design 3:2:3

The elements of design and color and their structural relationships as applied to problems in two dimensions. The course uses a variety of media. *A laboratory fee is required.*

ART 106 – Printmaking 3:2:3

Introduction to basic intaglio techniques. Students explore fundamental concepts and procedures of the etching process. *A laboratory fee is required. Prerequisite: ART 121 with a grade of C or higher. (Occasional offering)*

ART 107 – Fundamentals of Three-Dimensional Design 3:2:3

An introduction to working with the elements and principles of three-dimensional design. The student learns to work with basic

concepts of form, shape, mass, color, and texture using a variety of materials—paper, metal, plaster, clay and wood.

ART 108 – Fundamentals of Computer Art 3:2:3

A basic introduction to the fundamentals of computer art. Students in this course are free to create computer generated images such as portraits and landscapes. Students are exposed to computer hardware and software packages, computer vocabulary and commands related to computer art. *A laboratory fee is required.*

ART 109 – Computer Graphics 3:2:3

An introduction to producing graphic designs on a computer. Students become familiar with computer hardware and software packages as well as computer vocabulary and commands. *A laboratory fee is required. Prerequisites: ART 105, 111, 121, and 133 with a grade of C or higher; Corequisites: ART 143 and 144; and enrollment in Visual Arts-Graphic Design Program 2200 or 2840.*

ART 110 – Crafts 3:2:3

A studio course on the fundamentals of arts and crafts as applied to teaching, recreation, camping and rehabilitative programs. *A laboratory fee is required.*

ART 111 – Black and White Photography I 3:2:3

The basic techniques of photography through theory and practice in the use of the camera; the process of developing, printing and lighting, and the principles of composition. After conferences with the instructor, students secure their own photographic equipment and supplies. *A laboratory fee is required.*

ART 112 – Black and White Photography II 3:2:3

A continuation of the study of the theory and principles begun in ART 111, including creative darkroom techniques. At the end of this course, the student should have a portfolio of work for presentation. After conferences with the instructor, students secure their own photographic equipment and supplies. *A laboratory fee is required. Prerequisite: ART 111*

ART 114 – Interactive Media and Design 3:2:3

Development of short animations and interactive multimedia projects, while learning the basics of time-based authoring software. The students will begin with short exercises, culminating in final, larger interactive projects that develop their design and programming skills. Projects will focus on technical aspects of the software, as well as, layout and usability of the program. Students create media for distribution over the internet or on CD-ROM. *A laboratory fee is required. Prerequisites: ART 143, 144, and 145 with a grade of C or higher; Corequisites: ART 146 and 147; and enrollment in the Graphic Design Program 2200 or*

Art (continued)

2840, or by permission from the Graphic Design Program Director.

ART 121 – Drawing I 3:2:3

A basic drawing course that emphasizes conceptual structure as well as perceptual skill. *A laboratory fee is required.*

ART 122 – Drawing II 3:2:3

More advanced drawing concepts and techniques. Emphasis is on color, figure, and individual expression. *A laboratory fee is required. Prerequisite: ART 121 with a grade of C or higher.*

ART 123 – Illustration 3:2:3

An introduction to the concepts and techniques used in the illustration of advertisements, brochures, and other printed material. Students learn through problem-solving projects how to communicate visually. *A laboratory fee is required. Prerequisites: ART 105, ART 109, 121, 122, and 143 with a grade of C or higher. Corequisites: ART 140 and 145; Enrollment in the Visual Arts – Graphic Design Program 2200 or 2840, or by permission of the Graphic Design Program Coordinator.*

ART 131 – Painting I 3:2:3

An introduction to basic painting techniques and concepts. Emphasis is on construction, mixing of color, and paint qualities. *A laboratory fee is required. (Offered Fall only.) Pre- or corequisite: ART 122.*

ART 132 – Painting II 3:2:3

More advanced painting concepts and techniques. Emphasis is on experimentation with various materials and individual expression. *A laboratory fee is required. Prerequisite: ART 131 with a grade of C or higher.*

ART 133 – Introduction to Mac 1:1:1

An introduction to using the Macintosh operating system and several major graphic design software programs. Students complete tutorials and/or exercises that demonstrate an understanding of basic file creation and tool proficiency.

ART 140 – Web Design 3:2:3

The functions of the Internet and the fundamentals of creating Web sites. Students explore sites including those of corporations, retail operations, government agencies and educational institutions. They learn to design and build Web pages using a Web design software package. *A laboratory fee is required. Prerequisites: ART 109, 143, and 144 with a grade of C or higher; Corequisite: ART 145; Enrollment in the Graphic Design Program 2200 or 2840, or by permission of the Graphic Design Program Director.*

ART 143 – Typography 3:2:3

An introduction to typographic design. Students learn how to select typefaces and prepare lettering and body copy for reproduction. *A laboratory fee is required. Prerequisites: ART 105, 111, 121, and 133 with a grade of C or higher; Corequisites: ART 109 and 144; and enrollment in Visual Arts–Graphic Design Program 2200 or 2840.*

ART 144 – Graphic Design I 3:2:3

An introduction to skills needed in visual communication. Students will learn how to prepare material for print from thumbnail roughs to finished mechanicals ready for reproduction. *A laboratory fee is required. Prerequisites: ART 105, 111, 121, and 133 with a grade of C or higher; Corequisites: ART 109 and 143; and enrollment in Visual Arts – Graphic Design Program 2200 or 2840.*

ART 145 – Graphic Design II 3:2:3

A continuation of ART 144. Advanced principles of advertising, layout and design are studied. *A laboratory fee is required. Prerequisites: ART 109, 143, and 144 with a grade of C or higher; Corequisite: ART 140; and enrollment in Visual Arts – Graphic Design Program 2200 or 2840.*

ART 146 – Graphic Design III 3:2:3

Further experience in the techniques used in the graphic arts and design industry. Emphasis is placed on creating advanced graphic design pieces for inclusion in final portfolio. *A laboratory fee is required. Prerequisites: ART 123, 140, and 145 with a grade of C or higher; Corequisites: ART 114 and 147; and enrollment in Graphic Design Program 2200 or 2840.*

ART 147 – Portfolio Development 3:2:3

Development of a portfolio based on design work completed as part of the Graphic Design program. The merits of various portfolio styles and formats are explored. Students are expected to update existing work and complete new projects for inclusion in their portfolio. *A laboratory fee is required. Prerequisites: ART 140 and 145 with a grade of C or higher; Corequisites: ART 114 and 146; Enrollment in Graphic Design Program 2200 or 2840, and by permission from the Graphic Design Program Director.*

ART 148 – Graphic Design Internship 3:1:15

Graphic design internship. This internship provides valuable real-world experience for students enrolled in the graphic design program. Internship sites are carefully chosen for optimal career exposure in the design, print, and/or interactive media environment. *This internship is highly recommended for advanced graphic design students.*

Prerequisite: Enrollment in Graphic Design Program 2200 2840, and by permission from the Graphic Design Director.

ART 148A – Graphic Design Internship 2:1:10

Graphic design internship. This internship provides valuable real-world experience for students enrolled in the graphic design program. Internship sites are carefully chosen for optimal career exposure in the design, print and/or interactive media environment. *This internship is highly recommended for advanced graphic design students. Prerequisite: Enrollment in Graphic Design Program 2200 or 2840, and by permission from the Graphic Design Program Director.*

ART 148B – Graphic Design Internship 1:1:15

Graphic design internship. This internship provides valuable real-world experience for students enrolled in the graphic design program. Internship sites are carefully chosen for optimal career exposure in the design, print and/or interactive media environment. *This internship is highly recommended for advanced graphic design students. Prerequisite: Enrollment in Graphic Design Program 2200 or 2840, and by permission from the Graphic Design Program Director.*

ART 151 – Ceramics I 3:2:3

Theory and practice of the art of creative hand-building in clay. *A laboratory fee is required.*

ART 152 – Ceramics II 3:2:3

The design of pottery with emphasis on throwing, casting and the formulation of glazes. *A laboratory fee is required. Prerequisite: ART 151 with a grade of C or higher.*

ART 161 – Sculpture I 3:2:3

A studio course for the beginning study of art, offering experience in development of spatial form in several media: clay, wood and metal. *A laboratory fee is required. Prerequisite: ART 107.*

ART 162 – Sculpture II 3:2:3

An advanced studio course exploring a variety of media and processes. The course emphasizes the development of individual aesthetic approaches. *A laboratory fee is required. Prerequisite: ART 161. (Occasional offering)*

ART 171 – Jewelry and Metal Design I 3:2:3

A studio course for the student who wishes to develop skills in the design and manufacture of jewelry, working in woods and precious metals. *A laboratory fee is required.*

ART 172 – Jewelry and Metal Design II 3:2:3

A studio course for students who wish to expand their knowledge of jewelry and metal-working techniques. Raising, scoring, bending,

casting, and electroplating will be studied along with a review of techniques studied in ART 171. *A laboratory fee is required. Prerequisite: ART 171.*

ART 174 – QuarkXPress Essentials 3:2:3

Developing desktop publishing skills using QuarkXPress. The course emphasizes using style sheets, master pages, and effective typographical design. Students work on projects such as newsletters and brochures.

ART 175 – Adobe Illustrator Essentials 3:2:3

The basics of computer art and the use of Illustrator taught through demonstration, discussion and hands-on exercises. Emphasis is on navigating in Illustrator, using the drawing and transformation tools and working with various kinds of images.

ART 176 – Digital Photo Imaging 3:2:3

Explores the techniques and aesthetics of digital image capture and manipulation using digital photography, scanning, and computer imaging software as tools for creating expression. Students learn essential digital camera operations and skills necessary to navigate and work in the computer environment. Students use industry standard software to edit and enhance original digital photographs and images to express a personal vision. *A laboratory fee is required.*

ART 177 – Production Methods in Jewelry 3:3:2

A variety of metal techniques applicable to production work. Topics also include appropriateness of design and material to limited production runs, pricing and photographing the work. Field trips to working jewelers, galleries and craft shows as well as Internet searches improve the student's awareness of the client market. *A laboratory fee is required. Prerequisite: ART 172 with a grade of C or higher.*

ART 178 – Bench Jeweler Basics 3:3:2

The basic skills of a bench jeweler to prepare for certification. Techniques in basic repairs, assembly, ring sizing, stone setting, and finishing are demonstrated and executed. Basic knowledge of precious stone qualities. Field trip to the shop of a working bench jeweler. *A laboratory fee is required. Prerequisites: ART 171 and 172 with grades of C or higher.*

ART 181 – Art Through the Ages I (Cave to 1300) 3:3:0

Study of art from prehistoric times through the Middle Ages. The course emphasizes the relationship between art and social, economic, religious, and geographical conditions. Historical contexts of contemporary forms of expression are discussed whenever relevant. Western and non-Western cultures are

discussed. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Program. (Core A)(D)*

ART 182 – Art through the Ages II (1300 to 20th Century) 3:3:0

Study of art from the late Middle Ages to the early 20th century. The course emphasizes the relationship between art and social, economic, religious, and technological developments. Technical and historical contexts of contemporary forms of expression are stressed. Western and non-Western cultures are discussed. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing & Placement Program. (Core A)(D)*

ART 183 – Modern Art 3:3:0

Study of the development of modern styles in painting, sculpture, architecture and the graphic arts from their origins in the nineteenth century to the twentieth century. Emphasis is placed on styles and philosophies developed by modern artists and the elements of visual art they used, adapted or invented. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program.*

ART 184 – The Art of the Cinema 3:3:0

An investigation of the styles and techniques of movie making as an art form. In order to gain insights into cinematic form and art, several individual filmmakers and examples of their work are studied in detail. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program.*

ART 185 – The History of the Cinema 3:3:0

Survey course that investigates the development of the cinema from the late nineteenth century to the present. Emphasis is placed on movie genres, the people who have encouraged or created those genres, and how cultural patterns have affected the history of the cinema. *Prerequisites: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program.*

ART 186 – History and Aesthetics of Photography 3:3:0

The history of photography with emphasis on the aesthetic elements of traditional and contemporary work. The significance of technical developments, photographic processes and photographic criticism is discussed. *Prerequisite: ART 182. Corequisite: Eligibility for ENGL 101. required by the College Testing and Placement Program.*

ART 187 – Women and Art 3:3:0

Study of the contributions of women to visual art in Europe and the Americas from the Middle Ages to the late 20th century. The investigation incorporates historical, sociological, anthropological, cultural, and technical elements and examines of the impact of social, economic, and religious conditions on work created by women. This study also considers images of women in art, beginning with prehistory. *Prerequisites: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program.*

ART 188 – Art in the Diverse U.S. 3:3:0

A study of contemporary visual art in the United States that is multi-ethnic, cross-racial, multilingual, or gender based. The investigation includes historical, sociological, anthropological, cultural, and technical elements, and includes examinations of artists' ethnic or group origins. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (Core A)(D)*

ART 189 – Survey of Contemporary Crafts 3:3:0

A survey course that focuses on arts and crafts movements, design schools, and craft trends in the 19th and 20th centuries. Emphasis is placed on the aesthetic value and function of glass, metal, jewelry, furniture, and ceramics in contemporary society.

ART 190 – History of Graphic Design 3:3:0

A study of the history of graphic design from prehistoric visual communications to contemporary graphic design. This study also considers the impact of typography, technology, and modern art on graphic design, as well as the styles and contributions of individual graphic designers. *Prerequisites: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program; and enrollment in Visual Arts – Graphic Design Program 2200 or 2840.*

ART 191 – Glass 3:2:3

An introduction to the art, aesthetics, and methods of glass working. Students are introduced to the theory and techniques of blowing, fusing, and casting. *A laboratory fee is required.*

ART 201 – Color Photography I 3:2:3

Color photographic image-making based on the study of color vision, color principles, and color photographic materials and processes. Part of the course is a visual design workshop that explores the areas of visual awareness and sensitivity, while the theory of color photog-

Art (continued) – Automotive Technology

raphy is applied in lectures and weekly laboratory sessions. Color transparencies are emphasized in the design workshop and practice in color printing is used to emphasize theory. *A laboratory fee is required.*
Prerequisite: ART 111

ART 202 – Materials and Processes of Photography 3:3:2

A theoretical study of the science of photography with practical applications. This course includes the theory of image formation, optics, sensitized materials, exposure, processing, tone reproduction, color, variability, and visual perception. *Prerequisite: ART 111*

ART 205 – Color Photography II 3:2:3

Students who have a basic knowledge of color photography further their skills in color printing and visual design. *A laboratory fee is required. Prerequisite: ART 201.*

ART 206 – Studio Photography 3:2:3

A study of the art of photographic lighting, including the use of available light, quartz light, and electronic flash. Both 35mm and larger film formats are employed. *A laboratory fee is required. Prerequisites: ART 111, ART 112 and ART 201.*

ART 210 – Contemporary Crafts: Production and Marketing I 4:2:4

Prepares students to design, produce, and market original crafts products. It is for the serious crafts person who intends to do wholesale or retail crafts marketing. *A laboratory fee is required.*

ART 211 – Contemporary Crafts: Production and Marketing II 4:2:4

Participation in a wholesale and retail crafts market. Students get hand-on experience in production, display, and marketing. *A laboratory fee is required.*

ART 212 – Contemporary Crafts: Clay Design and Production 3:2:3

Production of professionally designed clay work in an apprenticeship environment. Topics of appropriateness of production, materials, and design modification facilitate the relationship between design and production. Field trips to production craft shops and galleries broaden the student's awareness of the local client/market relationship. *A laboratory fee is required.*

ART 214 – Advanced Glass 3:2:3

An advanced course in the forming of molten glass through the use of various mold making techniques and hot glass approaches. Students produce portfolio work based on advanced techniques of both form and surface. *A laboratory fee is required. Prerequisite: ART 191 with a grade of C or higher.*

ART 216A – Advanced Crafts: Glass 1:0:3

An advanced glass course in which students explore specific techniques, processes, and concepts in depth. Students produce a body of work that reflects their research. *A laboratory fee is required. Prerequisites: ART 191 and 214 with a grade of C or higher, and permission of the instructor.*

ART 216B – Advanced Crafts: Ceramics 1:0:3

An advanced ceramics course in which students explore specific techniques, processes, and concepts in depth. Students produce a body of work that reflects their research. *A laboratory fee is required. Prerequisites: ART 151 and 152 with a grade of C or higher, and permission of the instructor.*

Astronomy • MSAH Division

ASTR 103 – Introduction to Planetary Astronomy 3:3:1

An introduction to the solar system with an emphasis on the sun, major and minor planets, the earth-moon system, asteroids, comets, meteors, etc.; a study of the physical laws of motion and the properties of light. Course work includes instruction in the use of astronomical instruments; some planetarium shows, along with laboratory exercises, are an important part of this course. *A laboratory fee is required. (Core C)*

ASTR 104 – Introduction to Stellar Astronomy 3:3:1

Physical features of stars, including the sun as a star, stellar distances and motion, evolution and star types, study of the Milky Way Galaxy and other galaxies. The course includes discussion of recently discovered phenomena such as quasars, pulsars, cosmic blackbody radiation, and infrared stars. It also includes a short unit on the solar system. Planetarium visits and laboratory exercises allow students to gain familiarity with the science of astronomy. *A laboratory fee is required. (Core C)*

Auctioneering • BHET Division

AUCT 101 – Audience Communications 3:3:0

The principles and techniques of developing effective interpersonal communication with individuals, groups, and audiences. The auctioneer's chant is taught.

AUCT 102 – Procurement and Appraisal of Merchandise I 3:3:0

The principles of obtaining merchandise for the auction and appraisal as applied to antiques, modern household goods, farm equipment, heavy equipment, automobiles, and collectibles.

AUCT 103 – Procurement and Appraisal of Merchandise II 3:3:0

The principles of obtaining merchandise for the auction and appraisal as applied to real estate, livestock, coins, jewelry and art.

AUCT 104 – Auctioneering Law 3:3:0

An examination of the Pennsylvania Commonwealth Law Code regulating auctioneers and auctioneering. The federal and state statutes governing the operations of all phases of auctioneering are studied.

AUCT 105 – Preparations for the Auction 3:3:0

The techniques, procedures, and principles necessary to accomplish the preparations for an auction.

AUCT 106 – The Auction 3:3:0

The principles, techniques and procedures necessary to conduct and conclude an auction. *Pre- or corequisite: AUCT 105.*

AUCT 202 – Practicum in Auctioneering (Conducting an Auction) 2:0:5:4

Sixty hours of practical on-the-job experience with licensed auctioneers under College supervision. Seminars are held to discuss the practical and theoretical problems of auctioneering encountered by the students.

Automotive Technology • BHET Division

AUTO 101 – Automotive Fundamentals 3:2:3

An overview of automotive service practices and procedures, shop equipment, use of shop manuals, basic diagnosis and minor repairs, identification of components and component nomenclature. *A laboratory fee is required.*

AUTO 103 – Automotive Powerplants 3:2:3

Major and minor engine servicing. Component identification, function, and the repair or replacement of worn or defective components. Engine disassembly, use of precision measuring tools, and assembly techniques are covered in detail. *A laboratory fee is required. Pre- or corequisite: AUTO 101.*

AUTO 105 – Fundamentals of Electrical/Electronics I 3:2:3

Introduction of electrical, electronics, and magnetism principles as they relate to the automobile. Use of basic electrical/electronic equipment as it relates to batteries, charging, and starting systems and interpretation of wiring schematics are included. *A laboratory fee is required. Pre- or corequisite: AUTO 101.*

AUTO 107 – Fuel and Emission Systems 3:2:3

Basic fuel system components, construction, and diagnosis. The use of diagnostic equipment and specialized tools is emphasized in laboratory exercises. Operation of exhaust emission controls, such as air injection, EGR, timing controls, PCV, and catalytic converters

Automotive Technology (continued) – Automotive Technology – GM

is included in this course. *A laboratory fee is required. Pre- or corequisite: AUTO 101.*

AUTO 151 – Braking Systems 3:2:3

Fundamentals of brake hydraulics; theory and operation of drum and disc brakes. Troubleshooting and diagnostic procedures are introduced for various types of anti-lock braking and traction control systems. *A laboratory fee is required. Pre- or corequisite: AUTO 101.*

AUTO 153 – Suspension Systems 3:2:3

The principles of operation and the service procedures used to diagnose and service wheel alignment, suspension and steering systems. Procedures for performing the PA State Vehicle Safety Inspection are included. *A laboratory fee is required. Pre- or corequisite: AUTO 101 with a grade of C or higher.*

AUTO 157 – Engine Performance Testing 3:2:3

The theory and principles of operation and service procedures used to diagnose problems and service automobile engines. Performance testing using the oscilloscope, engine analyzer, exhaust gas analyzer and chassis dynamometer is included. *A laboratory fee is required. Prerequisite: AUTO 107.*

AUTO 159 – Heating and Air Conditioning Systems 3:2:3

Air conditioning components and basic refrigeration principles as applied in automobile service and replacement. The operation of air conditioning controls is stressed. Instructions on the use of proper diagnostic, recovery, and repair equipment are included. *A laboratory fee is required. Prerequisite: AUTO 105.*

AUTO 191 – Cooperative Work Experience 2:0:20

A cooperative work experience of part-time or full-time employment with an approved automotive repair facility. Students perform tasks consistent with topics studied in the prerequisite automotive courses. *A laboratory fee is required. Prerequisites: AUTO 101, 103, 105, 107, 151, and 153.*

AUTO 203 – Manual Transmissions/Transaxles and Differentials 3:2:3

Construction and operation of clutches, manual transmissions/transaxles, differentials, and four-wheel drive systems. Service and overhaul procedures for both manual transmissions and differentials are included. *A laboratory fee is required. Prerequisite: AUTO 101.*

AUTO 205 – Intermediate Electrical/Electronics 3:2:3

Continuation of AUTO 105 covering automotive circuitry and electrical control of various vehicle components. Specialized

electronics training is the main emphasis. *A laboratory fee is required. Prerequisite: AUTO 105.*

AUTO 207 – Computerize Powertrain Controls 3:2:3

Advanced study of the new technology in computerized powertrain controls, including diagnostic and repair procedures with the latest equipment. *A laboratory fee is required. Prerequisite: AUTO 157.*

AUTO 251 – Service Department Management 2:2:0

An overview of service/parts department operating procedures. Emphasis is on proper customer relations, how to organize service work, and how to interpret factory and extended warranties. The duties of service advisors, shop supervisors and service managers are discussed as they relate to becoming service professionals in the automotive field. *A laboratory fee is required. Prerequisite: AUTO 101.*

AUTO 253 – Automatic Transmissions/Transaxles 3:2:3

Automatic transmission/transaxle powerflow and hydraulic circuitry in today's vehicles. Overhaul procedures for these transmission/transaxles as well as diagnosis and minor service procedures are emphasized. Electronic controls such as shift solenoids and pressure control circuits and logic are introduced. *A laboratory fee is required. Pre- or corequisite: AUTO 205.*

AUTO 255 – Advanced Electrical/Electronics 3:2:3

An extension of AUTO 205 with an emphasis on complex electronic circuitry testing. Study includes PCM and other on-board electronic devices and displays used on today's vehicles. Use and function of today's automotive microprocessors are integrated throughout the course. *A laboratory fee is required. Prerequisite: AUTO 205.*

Automotive Technology – GM • BHET Div.

AGM 101 – GM Automotive Fundamentals 3:2:3

An overview of General Motors automotive service practices and procedures, shop equipment, use of shop manuals, basic diagnosis and minor repairs. Operating systems on current General Motors cars and trucks are introduced. *A laboratory fee is required.*

AGM 103 – GM Automotive Powerplants 3:2:3

Minor and major engine servicing. The course emphasizes component identification and function, and the repair or replacement of worn or defective components. The engines used are made by or for General Motors. *A laboratory fee is required. Pre- or corequisite: AGM 101.*

AGM 105 – GM Automotive Electrical Fundamentals/Electronics I 3:2:3

Introduction of electrical, electronic, and magnetism principles as they relate to the automobile. Additional content includes use of basic electrical/electronic test equipment for batteries, charging, and starting systems and interpretation of wiring schematics. *A laboratory fee is required. Pre- or corequisite: AGM 101.*

AGM 107 – GM Automotive Fuel Systems 3:2:3

Basic fuel system components, construction, and diagnosis. The use and interpretation of various diagnostic equipment and tools are emphasized in laboratory exercises. *A laboratory fee is required. Pre- or corequisite: AGM 101.*

AGM 151 – GM Automotive Braking Systems 3:2:3

Troubleshooting and servicing car and light truck drum/disc and four-wheel disc systems. Diagnostic procedures for anti-lock braking systems are introduced. Instruction and procedures for the brake inspection portion of a PA State Vehicle Safety Inspection are included. *A laboratory fee is required. Prerequisite: AGM 105.*

AGM 151A – GM Automotive Braking Systems 2:1.5:1.5

Troubleshooting and servicing car and light truck drum/disc and four-wheel disc systems. Instruction and procedures for the brake inspection portion of a PA State Vehicle Safety Inspection are included. *A laboratory fee is required. Prerequisite: AGM 101 or AUTO 101; corequisite: AGM 101 or AUTO 101.*

AGM 151B – GM Automotive Antilock Braking Systems 1:0.5:1.5

Troubleshooting and servicing car and light-truck antilock/traction control systems. Diagnostic procedures for anti-lock braking/traction control systems are introduced. *A laboratory fee is required. Prerequisite: AGM 101 or AUTO 101; corequisite: AGM 101 or AUTO 101.*

AGM 153 – GM Automotive Steering and Suspension Systems 3:2:3

Design, operation and service procedures used to diagnose and service General Motors suspension and steering systems. Proper vehicle alignment is emphasized as well as PA State Vehicle Inspection law as it pertains to suspension systems. *A laboratory fee is required. Prerequisite: AGM 105.*

AGM 153A – GM Automotive Suspensions and Alignment 2:1.5:2

Design, operation and service procedures used to diagnose and service General Motors suspension systems. Proper vehicle alignment is emphasized as well as PA State Vehicle

Automotive Technology – GM (continued) – Baking

Inspection law as it pertains to suspension systems. *A laboratory fee is required.*
Prerequisite: AGM 101 or AUTO 101;
corequisite: AGM 101 or AUTO 101.

AGM 153B – GM Automotive Steering Systems 1:0.5:1

Design, operation and service procedures used to diagnose and service General Motors steering systems. Electronic and hydraulic controls are emphasized. *A laboratory fee is required. Prerequisite: AGM 101 or AUTO 101; corequisite: AGM 101 or AUTO 101.*

AGM 157 – GM Automotive Fuel Systems/ Engine Performance Testing 3:2:3

Feedback fuel systems, including throttle body and multi-port fuel injection. Design, operation and diagnostic procedures are outlined. Engine performance testing using the oscilloscope and other test equipment emphasizes proper fuel and ignition system diagnosis. *A laboratory fee is required. Prerequisites: AGM 105 and 107.*

AGM 159 – GM Automotive Heating/ Air Conditioning Systems 3:2:3

Air conditioning components and basic refrigeration principles as applied in automobile service and replacement. Air conditioning controls using vacuum, electrical, and electronic modes are stressed, as well as environmental concerns including recovery and recycling. *A laboratory fee is required. Prerequisite: AGM 105.*

AGM 161 – Computer Usage/Applications 3:3:0

An introduction to computer use in the automotive and heavy construction fields. Basic computer operating skills are taught. Primary topics include Windows, CD ROM access, and Peripheral usage. *A laboratory fee is required.*

AGM 191 – GM Cooperative Work Experience I 1:0:10

A cooperative work experience of paid full-time employment with a General Motors dealership. Students perform tasks consistent with topics in prerequisite courses among their duties. *Students must purchase some hand tools at or before this time. A laboratory fee is required. Prerequisites: AGM 101, 103, 105, and 107.*

AGM 192 – GM Cooperative Work Experience II 1:0:10

A cooperative work experience of paid full-time employment with a General Motors dealership. Students perform tasks consistent with topics in prerequisite courses among their duties. *Students are expected to purchase some hand tools at or before this time. A laboratory fee is required. Prerequisites: AGM 151, 153, 157, and 159.*

AGM 203 – GM Automotive Manual Transmissions/Transaxles and Differentials 2:0.5:4.5

Construction and operation of manual transmissions/transaxles, differentials and four-wheel drive systems. An in-depth study of service and overhaul procedures for both manual transmissions and differentials is included. *A laboratory fee is required. Prerequisite: AGM 101.*

AGM 205 – GM Automotive Electrical Fundamentals/Electronics II 3:2:3

Continuation of AGM 105 covering automotive circuitry and including solid state devices, integrated circuitry, and electrical control of various vehicle components. GM Specialized Electronics Training (64 hours) is a main emphasis. *A laboratory fee is required. Prerequisite: AGM 105.*

AGM 207 – GM Automotive Fuel Injection Systems 2:1:3

Throttle body and multiport fuel system construction, operation, and diagnosis with an emphasis on distributorless ignition system diagnosis and repair. *A laboratory fee is required. Prerequisite: AGM 157.*

AGM 251 – GM Dealership Operations 2:2:0

An overview of service/parts department operation procedures. Emphasis is placed on proper customer relations, how to mechanize service work, and how to interpret factory and extended warranties. The duties of service advisors, shop supervisors, and service managers are discussed as they relate to becoming a service professional. *A laboratory fee is required. Prerequisite: AGM 101.*

AGM 253 – GM Automatic Transmissions/Transaxles 3:2:4

Automatic transmission/transaxle power-flow and hydraulic circuitry in General Motors cars from 1985 to the present. Overhaul procedures for these transmissions/transaxles as well as diagnosis and minor service procedures, including computer controls, are emphasized. *A laboratory fee is required. Prerequisite: AGM 205.*

AGM 255 – GM Advanced Automotive Electronics 2:1:3

An extension of AGM 205 with an emphasis on complex electronic circuitry testing. This study includes body control modules, programmers, audio systems, Techline terminals, air conditioning controls, and other on-board computers. Through the use of Techline terminals and the Fluke 87 digital volt/ohm meter, specific diagnostic procedures are studied. *A laboratory fee is required. Prerequisite: AGM 205.*

AGM 291A – GM Cooperative Work Experience III 1:0:10

A cooperative work experience of paid full-time employment with a General Motors dealership. Students perform tasks that demonstrate the topics of automotive technology among their duties. *Students are expected to purchase some hand tools at or before this time. A laboratory fee is required. Prerequisite: AGM 205.*

AGM 292A – GM Cooperative Work Experience IV 1:0:10

A cooperative work experience of paid full-time employment with a General Motors dealership. Students perform tasks that demonstrate the topics of automotive technology among their duties. *Students are expected to purchase some hand tools at or before this time. A laboratory fee is required. Prerequisites: AGM 203, 207, and 255.*

AGM 293A – GM Cooperative Work Experience V 1:0:10

A cooperative work experience of paid full-time employment with a General Motors dealership. Students perform tasks that demonstrate the topics of automotive technology among their duties. *Students are expected to purchase some hand tools at or before this time. A laboratory fee is required. Prerequisites: AGM 251 and 253.*

Baking • BHET Division

BAKE 101 – Baking I 4:2:6

Combines theory, demonstration and hands-on laboratory time. Students are introduced to techniques in the preparation of assorted quick breads and muffins, yeast raised sponge and starter bread dough, cookies, brownies and batters. Students evaluate and study product identification and functions while applying bakeshop sanitation. Students practice proper use of equipment and bakeshop mise en place with an emphasis on precise calculation of baker's mathematics and formulas. *Students are responsible for purchasing appropriate uniform and a designated small equipment kit. A laboratory fee is required.*

BAKE 103 – Baking II 2:1:3

Exposes the student to a continuation of various bread styles using advanced techniques and hands-on application for sourdough and artisan style breads. Emphasis is placed on the importance of proper dough handling and consistency of the finished product. Theme specific showpiece utilizing different decorative doughs will be a part of grading. *A laboratory fee is required. Prerequisite: BAKE 101 with a grade of C or higher.*

Baking (continued) – Biology

BAKE 111 – Pastry Arts I 4:2:6

Combines theory, demonstration and hands-on laboratory time. Students are introduced to the techniques and presentations of traditional American and International desserts. Emphasis is placed on numerous different types of cakes and fillings. Time is also spent on pies, tarts, cheesecakes, ice creams, custards and puddings, mousses and bavarians. Daily presentation of desserts focuses on individual plating of modern trends and traditional demands within the industry. *Students are responsible for purchasing appropriate uniforms and a designated small equipment kit. A laboratory fee is required. Prerequisite: BAKE 101 with a grade of C or higher.*

BAKE 113 – Pastry Arts II 2:1:3

Focuses on a continuation of the principles of cake baking and assembly. Emphasis is placed on cake structure, texture, and levelness. Decorating techniques, such as gumpaste, pastillage, and marzipan are introduced for cakes and showpieces. Chocolate candies and petite pastry platters are outlined. Construction, assembly, decoration, and cost analysis of tiered theme cake is a part of grading. *An approved uniform is required. A laboratory fee is required. Prerequisite: BAKE 111 with a grade of C or higher.*

BAKE 291 – Baking and Pastry Arts Internship 3:1:12

A baking and pastry arts internship. The student obtains employment in an approved bakery worksite or at Ciao', HACC's teaching bakery facility, for the equivalent of 180 hours on-the-job training. There is a one hour weekly seminar giving the student and instructor the opportunity for discussion. Progress reports are required as are work visitations by the instructor. The student compiles a portfolio of the experience for a grade. *For internship sites over 50 miles from Harrisburg, a student must receive instructor permission. There is an additional fee for excessive distance. Prerequisite: BAKE 111 with a grade of C or higher.*

Banking • BHET Division

BANK 101 – AIB Principles of Banking 3:0:0

Long recognized as the standard introduction to the banking industry. This course touches on nearly every aspect of banking, from the fundamentals of negotiable instruments to contemporary issues and developments within the industry.

BANK 103 – AIB Law and Banking: Applications 3:0:0

Devoted to the laws and regulations that govern funds transactions, whether by check, EFT, wire transfers, or letters of credit. In addition

focus is placed on issues of liability, wrongful payment and dishonor, electronic banking, deposit accounts, mutual funds and annuities.

BANK 105 – AIB Law and Banking: Principles 3:0:0

A guide to legal and regulatory issues. This course will have special emphasis on the Uniform Commercial Code.

BANK 107 – AIB Marketing Financial Services 3:0:0

Provides a thorough immersion to marketing concepts and activities involved in specifically marketing financial services. The course is a how-to guide which takes a marketer from the basic understanding of marketing through the steps necessary to integrate and grow marketing at their institution. Concepts considered include developing a marketing plan, sales and sales management, communications, and public relations. The course uses case studies to illustrate various concepts and provides a complete tool kit of items to help a marketer integrate the ideas and concepts in their own bank.

BANK 133 – AIB Consumer Lending 3:0:0

Introduces students to the consumer lending process, its importance to the bank and consumers, and the environment in which it functions. Participants learn the essentials about closed-end loans, indirect loans and related credit products, and open-end credit products. They also trace the consumer lending process from developing and taking loan applications to collection and recovery. The course explores what is involved in a credit investigation, decision making, loan pricing and loan policy. Participants develop a greater understanding for relationship building, new lending technologies and the importance of consumer regulations.

BANK 170 – Financial Services Internship 3:1:15

A minimum of 200 hours of work experience in an approved financial services organization. The organization selected must be approved by the Division administrator and be specifically related to the objectives of the Banking program. Available to students from any curriculum, this internship provides the student with realistic knowledge of and experience in career opportunities and responsibilities within a financial service organization. A comprehensive final report and a daily diary are required. *Prerequisite: Division administrator's recommendation.*

Biology • MSAH Division

BIOL 206 – Ecology 3:3:0

This class is intended to familiarize science

majors with the concepts and applications of modern ecology. Emphasis on ecological principles and case studies, including the natural history of aquatic and terrestrial life, individual ecology, the distribution and abundance of organisms, population dynamics and life-history strategies; competition, herbivory, predation and symbiotic relationships; disturbance and succession; community structure and function; ecosystem energetics and biogeochemical cycling. *Prerequisite: BIOL 101 or 103 or 108 or 130 with a grade of C or higher.*

BIOL 100 – Basic Microbiology 1:1:0

General review of microbiology with emphasis on pathological mechanisms of infectious disease and precautions necessary for the prevention of infectious disease in health care and extended care facilities.

BIOL 101 – General Biology I 4:3:3

Biological organization; basic biochemistry; biophysics of living systems; cellular structures, reproduction and functions; photosynthesis; cellular respiration; ecology; structures and functions of plants; classification of the major divisions of the plant kingdom. *A laboratory fee is required. Prerequisites: high school academic biology and chemistry; pre- or corequisites: ENGL 101 and reading ability at the ENGL 003 level or higher; or permission of the instructor.*

BIOL 102 – General Biology II 4:3:3

Basic energy reactions of living things; metabolism, and life functions of animal systems; detailed examination of organ systems which, in the mammal, support Homeostasis; principles of heredity, reproduction and embryology; evolution as a process; structure, function and classification of major phyla of the animal kingdom. *A laboratory fee is required. Prerequisite: BIOL 101 or the equivalent.*

BIOL 103 – Environmental Science 3:3:0

Introduction to the basic concepts of human ecology, such as population, natural resources, pollution, and current issues of environmental concern. *(Core C)*

BIOL 105 – Medical Terminology 3:3:0

The study of frequently used medical terms, abbreviations, and symbols as found within their usual contexts. Approached through an integrative review of anatomy and physiology, common pathophysiological states, and related diagnostic tests and treatments (including an introduction to the metric system).

BIOL 108 – Introduction to Biological Science 3:3:1

Designed for the non-science major as a review of contemporary and historical advances in biology. Topics of study include evolution and the diversity of life, the spectrum

Biology (continued) – Building Codes

of animal and plant life, and ecology. *A laboratory fee is required. (Core C)*

BIOL 111 – Introduction to Human Biology 3:3:1

A study of basic principles of biology with emphasis on the structure and function of the human body. This is an introductory science course for non-science majors and preparatory students in Life Science and Allied Health areas. Topics of emphasis include basic principles of biochemistry, cell structure and function, human genetics, and systems of the human body. *A laboratory fee is required. (Core C)*

BIOL 121 – Anatomy and Physiology I 4:3:3

Intended for students who contemplate careers in Allied Health fields. Basic body organization; functional biochemistry; cytology, histology, study of integumentary, skeletal, muscular, circulatory, and respiratory systems, and emphasis on the study of normal anatomy and physiology with clinical applications. *A laboratory fee is required. Prerequisites: High school biology and chemistry or HACC equivalents.*

BIOL 122 – Anatomy and Physiology II 4:3:3

A continuation of BIOL 121. A comprehensive study of the digestive, excretory, endocrine, reproductive, and nervous systems. *A laboratory fee is required. Prerequisite: BIOL 121 with a grade of C or higher.*

BIOL 130 – Field Biology 4:3:3

Field studies in Biology intended to acquaint the student with local flora and fauna, their biology and ecological relationships. Emphasis is placed on identification of organisms, collecting techniques, and their economic and ecological significance. *A laboratory fee is required.*

BIOL 201 – Invertebrate Zoology 4:3:3

A functional, morphological approach to the study of the major and minor invertebrate phyla. Special attention is given to phyla and organisms of economic and evolutionary importance. *Pre- or corequisite: BIOL 102 or permission of the instructor.*

BIOL 202 – Vertebrate Zoology 4:3:3

A phylogenetic study of the structural, functional and behavioral adaptations of the vertebrates: fishes, amphibians, reptiles, birds, mammals. *Pre- or corequisite: BIOL 102 or permission of the instructor.*

BIOL 212 – Botany 4:3:3

Designed for science majors. Topics include plant physiology, comparative anatomy, and plant classification. Reproduction and other major botanical concepts will be emphasized through the study of local flora, laboratory

exercises and lectures. *Prerequisite: BIOL 101 with a grade of C or higher*

BIOL 215 – Introduction to Genetics 4:3:3

Introduction to the fundamental concepts of genetics. The student gains an understanding of the physical nature of the genetic material, how the genetic material controls the inheritance of traits, classic and modern genetics, and how genetics applies to other areas of biology and to societal issues. The student experiences first-hand both the classical and molecular sides of genetics in the laboratory. *Prerequisites: BIOL 101 and 102 with a grade of C or higher; or the equivalent.*

BIOL 221 – Microbiology 4:3:2

A comprehensive study of the structure and function of microorganisms. Control of microorganisms, immunity, and microbes in the news are also presented. Selected infectious diseases are discussed; laboratory activities emphasize procedures and techniques for the laboratory study of microorganisms and related areas. *A laboratory fee is required. Prerequisite: high school biology and chemistry or HACC equivalents. (Core C)*

BIOL 225 – Human Biology 3:3:0

Fluids, electrolytes, nutrition therapy, and the physiology of exercise. *Prerequisites: BIOL 121 and BIOL 122.*

BIOL 230 – Physiological Pathology 3:3:0

The scientific study of the alterations produced by disease in human systems. *Prerequisite: BIOL 122.*

BIOL 245 – Head/Neck Anatomy and Histology 4:3:3

A detailed study of gross anatomical structures and relationships of the head and neck. The course includes histological and physiological fundamentals having importance in odontology. *Prerequisite: BIOL 121.*

Biotechnology • MSAH Division

BTC 101 – Overview of Biotechnology 3:3:0

A study of the basic principles of biotechnology with emphasis on current applications and techniques of this technology. Topics will focus on current concepts and themes in biotechnology, scientific methodology and ethical, legal and social implications of biotechnology. *Prerequisite: High school academic biology and chemistry or HACC equivalents. (Core C)*

BTC 201 – Techniques in Biotechnology 4:2:5

A laboratory intensive study of basic methodologies and techniques currently used in the biotechnology industry. The course will provide students with practical industry-related

introductory laboratory techniques in biotechnology and a solid foundation in current laboratory procedures and methodologies. *Prerequisites: BIOL 101, 102 and CHEM 101 and BTC 101 with a grade of C or higher.*

BTC 235 – Molecular Biology Techniques 4:3:3

A survey of principles in biotechnological applications of molecular and cell biology. Topics include transcription, translation, PCR, spectrophotometer, protein expression, prokaryotic and eukaryotic gene expression, antibodies, and chromatography. The laboratory gives the students exposure to recombinant DNA technology such as cloning techniques, restriction digests, plasmid design and purification, electrophoresis, protein expression and purification, and immunoassays. *A laboratory fee is required. Prerequisites: BTC 201 and BIOL 221 with a grade of C or higher.*

BTC ELECT – Elective in Biotechnology 90:0:0

Building Codes • BHET Division

BLDC 101 – International Residential Code 3:3:0

Requirements of the International Code Council (ICC) relating to the International Residential Code for dwelling construction (including standards for footing, foundation, framing, electrical, plumbing, and mechanical materials) and occupancy.

BLDC 103 – Non-Structural Building Code 3:3:0

Students learn to apply the portions of the most recent edition of the ICC International Building Code covering types of construction, occupancy classification, mixed uses, height and area requirements, means of egress, natural light and ventilation, flame spread, and smoke development. *Prerequisite: BLDC 101 with a grade of C or higher.*

BLDC 106 – Handicapped Accessibility 3:3:0

Analysis of the scope and specific elements of ingress, egress, safety, sanitation, and signage required to ensure minimum accessibility for the physically impaired to all buildings and structures. *Prerequisite: BLDC 103 with a grade of C or higher.*

BLDC 111 – Inspection Techniques 2:2:0

Inspection of wood structures for compliance with the ICC International Residential Code, the ICC International Building Code, and sub-system codes. Covered are simple wood framing, alternative materials, and methods of construction and design. *Prerequisite: BLDC 103 with a grade of C or higher.*

BLDC 135 – Property Maintenance Code 3:3:0

Analysis of the health, safety, and welfare requirements for buildings and exterior areas

as specified in the most recent edition of the ICC International Property Maintenance Code. Community involvement and voluntary compliance techniques are emphasized. *Prerequisite: BLDC 111 with a grade of C or higher.*

BLDC 201 – Structural Building Code 3:3:0

Articles of the most recent edition of the ICC International Building Code covering hazards protection. Study includes requirements for vertical shafts, surface coatings, exits, fire protection systems, and weather protection. Attention is given to special requirements for public buildings.

Prerequisites: BLDC 103 and MATH 020 or MATH 913 with a grade of C or higher, or eligibility for MATH 051.

BLDC 203 – Energy Conservation Code 3:3:0

Analysis of the energy conservation requirements specified in the most recent edition of the ICC National Energy Conservation Code and the regulations of the Pennsylvania Building Energy Conservation Act of 1980, as amended. *Prerequisite: BLDC 201 with a grade of C or higher.*

BLDC 207 – Building Plan Review

Proper review of structural and non-structural plans to ensure compliance with ICC International Building Code and sub-system codes. *Prerequisites: BLDC 201, and BLDC 221, 223, or 225, both with grades of C or higher.*

BLDC 221 – Plumbing Code 3:3:0

Analysis of the minimum design requirements for potable water sources; service and distribution systems; and septic, waste, and storm-water removal systems, as specified in the most recent editions of the ICC International Building Code and the ICC International Plumbing Code. Sizing, layout, support, and protection systems are covered. Code requirements for protection of the physically impaired and for special occupancies are discussed. *Prerequisite: BLDC 103 with a grade of C or higher.*

BLDC 223 – Mechanical Code 3:3:0

Analysis of minimum design requirements for heating, ventilation, and air conditioning systems, as specified in the most recent editions of the ICC International Building Code and the ICC International Mechanical Code. Energy conservation requirements and heat-loss and heat-gain calculations are emphasized. *Prerequisite: BLDC 103 with a grade of C or higher.*

BLDC 225 – Electrical Code 3:3:0

Analysis of the design requirements for electrical service and distribution including sizing, layout, and protection devices as speci-

fied in the most recent editions of the ICC International Building Code, the ICC International Electric Code, and NFPA National Electrical Code. Code requirements for special uses and protection of the physically impaired are discussed along with the interrelationships of the electrical, mechanical, and fire-protection systems. *Prerequisite: BLDC 103 with a grade of C or higher.*

BLDC 227 – Fire Code 3:3:0

Analysis of fire-protection systems-maintenance and inspection procedures as specified in the latest editions of the ICC International Building Code and the ICC International Fire Code. The effect of changes in building occupancies is considered, along with an appreciation for the relationship between the inspection code and new construction code. Evacuation planning and detailed occupancy operational requirements are considered. *Prerequisite: BLDC 207 with a grade of C or higher.*

BLDC 230 – Code Administration 3:3:0

Administration of governmental and independent construction and safety codes. Emphasis is on the legal aspects of financial, personnel, and technical record-keeping. Compliance with the Pennsylvania Uniform Commercial Code and pertinent state laws is emphasized, as is the maintenance of public records. *Prerequisite: BLDC 207 with a grade of C or higher.*

Building Constr. Technology • BHET Division

BCT 211 – Construction Design Methods 3:3:0

Fundamentals of statistics; design of wood and steel structures, including beams, columns, joists, and trusses; shear and moment diagrams; mechanics of materials including Hooke's Law. *Prerequisite: MATH 020 with a grade of C or higher.*

BCT 212 – Construction Contracts and Related Laws 3:3:0

The legal factors associated with the operation of a construction company. Emphasis is on a practical approach to the law as it relates to such topics as construction contracts, interprofessional relationships, payments, bonds, liens, labor practices, liquidated damages, arbitration and delays. Also covered are the legal aspects of drawings, specifications and insurance.

BCT 213 – Construction Supervision and Leadership 3:3:0

The human relations skills needed by a construction project manager/supervisor in order to develop sound managerial practices. Project management problems and their influence on efficiency, productivity and

employee morale are studied. *Prerequisite: ARCH 110 or permission of coordinator.*

BCT 214 – Project Management 3:3:0

The construction management process with emphasis on the phases of a commercial project from inception through owner occupancy. The roles of the owner, architect, construction manager, general contractor and subcontractors are emphasized. *Prerequisites: ARCH 110 and ARCH 130 or permission of coordinator.*

BCT 215 – Construction Estimating 3:3:0

Conceptual, preliminary, detailed and quantity estimating as currently practiced in the construction industry. The interrelationship of drawings, specifications and construction contracts is emphasized. Conceptual and final estimates are prepared for an actual commercial construction project. Introduction to the use of computerized methods of construction estimating is included. *Prerequisites: ARCH 110 and 130 and MATH 913 or permission of coordinator.*

BCT 216 – Construction Planning and Scheduling 3:3:0

The planning and scheduling process before and during the construction project. Emphasis is on the need for coordination of manpower, materials, equipment, project funding, and cash flow. The use of the computer in the planning and scheduling process is extensively integrated. *Prerequisites: ARCH 110 and 130 or permission of coordinator.*

BCT 217 – Construction Project Administration 3:3:0

The procedures for effective project cost control and systematic methods of handling changes, claims, and disputes for both general and subcontracting. Construction accounting and the administrative issues associated with job performance are included. *Prerequisites: ARCH 110 and 130 or permission of coordinator.*

BCT 218 – Construction Documents for Technicians 1:1:0

A first-level course to prepare for certification examinations by the Construction Specifications Institute. Topics include the Institute's Manual of Practice and American Institute of Architects' General Conditions of Construction Contracts.

Business • BHET Division

BUSI 150 – Introduction to Agribusiness 3:3:0

Introduction to agribusiness fundamentals. Topics include a comparison of agriculture and agribusiness, agribusiness types, organization, planning and operation, and agribusiness inputs and outputs. There is also an examination of

Business (continued) – Cardiovascular Technology

agribusinesses involved with post-production processing and agricultural products.

BUSI 200 – The American Business System 3:3:0

The structure, principal activities and problems of business, including operations, techniques of operation and control, competition, labor laws, taxation, research, and the role of government.

BUSI 201 – Business Law I 3:3:0

Legal rights and the agencies for their enforcement; history and development of Anglo-American law; criminal and tort law applied to business; consumer protection; contracts; and sales. Application of the Uniform Commercial Code.

BUSI 202 – Business Law II 3:3:0

A continuation of BUSI 201. Commercial paper; creditor's rights; agency and employment; partnerships and corporations; real property; personal property and bailments; computers and the law. Application of the Uniform Commercial Code. *Prerequisite: BUSI 201.*

BUSI 209 – Legal Environment of Business 3:3:0

General introduction to the law as it affects profit and non-profit organizations. Topics include the elements of the legal process; legal rights and liabilities of employers, employees, and consumers; and laws governing relationships among businesses.

BUSI 211 – Agricultural Law 3:3:0

Basic knowledge and understanding of the legal system, theory, and concepts as they relate to agriculture. Topics covered include contracts, sales, secured transactions, real estate, environmental law, cooperatives, water law, and regulatory laws.

BUSI 214 – Music Business Studies 3:3:0

Music and entertainment industry with a focus on career choices. Topics include song-writing and publishing, copyright registration, royalty income, performance societies, and music licensing. In addition, the roles of unions, music associations, guilds and talent agencies are explored. *(Students may opt to participate in a twenty-hour internship with local music professionals or prepare a semester project.)*

BUSI 225 – Business and Industry Systems 3:3:0

Introduction to the business and industry work environments, with emphasis on the service sector. Consulting and professional service businesses are targeted for study and analysis. Course content will include the structure, principal activities, and problems of service businesses, including operations, development, competition, research, and regulation. A study of one or more service

businesses with onsite visits to observe, investigate, and assess business parameters will be incorporated in the course.

BUSI 227 – Principles of Agri Economics 3:3:0

Agriculture in local and national economy. Topics covered include: distribution; size and organization of the farm business unit; policies affecting agriculture. Agricultural economics is simply economics applied to agricultural problems. *Prerequisite: ECON 201 with a grade of C or higher.*

BUSI 230 – Introduction to International Business 3:3:0

The environmental and cultural aspects of international business and major functional areas, such as trade, investment, management, marketing, and the international monetary system. *(D)*

BUSI 245 – Business Ethics 3:3:0

General introduction to ethics as it effects decision-making in the business environment. Topics include ethical theory, moral issues, economic justice, capitalism, corporate social responsibility, individual moral decision-making, social and economic policy, and the environment. There is a strong emphasis in the use of case studies.

BUSI 250 – Management of Food Systems 3:3:0

Introduces the logistics and management of the wholesale food, food service, and retail food systems. The emphasis is on product and process, merchandising the buying and selling function, finance, safety and sanitation supervision, customer service and community partnering.

BUSI 291 – Cooperative Work Experience in Business 3:0:15

Faculty monitored employment of at least 15 hours per week in an approved cooperative business work experience applying the knowledge and skills acquired as a student in a business curriculum. Written documentation of the cooperative work experience activities and other performance-evaluation measurements will be used to determine the grade. *Prerequisites: Completion of at least 30 credits in a business major with a GPA of 2.0 or higher; instructor approval of work plan.*

Cabinetry • BHET Division

CBNT 101 – Introduction to Cabinetry I 4:2:4

History of cabinetry and the use of basic hand tools through instruction in various types of wood joinery. Blueprint reading, measuring skills, and safety are stressed. *A laboratory fee is required.*

CBNT 102 – Introduction to Cabinetry II 4:2:4

Introduction to portable and stationary

power equipment. Planning, designing, and estimating are incorporated into increasingly difficult projects. Basic construction methods are covered. *A laboratory fee is required.*

Prerequisite: CBNT 101.

CBNT 103 – Intermediate Cabinetry 4:2:4

Frame and frameless construction, various types of joining, and case work. Furniture design and production are discussed with more difficult hands-on projects. *A laboratory fee is required. Prerequisite: CBNT 102.*

CBNT 104 – Advanced Cabinetry 4:2:4

Study of finishing procedures including sanding, staining, and topcoating. Other topics to be covered include architectural millwork, hardware, laminates, and installation procedures. *A laboratory fee is required. Prerequisite: CBNT 103.*

Cardiovascular Technology • MSAH Division

CVT 101 – Introduction to Cardiovascular Technology 3:3:0

Provides an introduction to the field of Cardiovascular Technology. This course emphasizes arrhythmia recognition, basic EKG interpretation, cardiac electrophysiology and anatomy and physiology of the heart. The global perspective of Cardiology and an appreciation for the role of the Cardiovascular Technologist in the Cardiovascular department are also included. *Prerequisites: Admission into the Cardiovascular Technician program; BIOL 111 or 121 and MATH 020 with a grade of C or higher; Corequisite: CVT 102.*

CVT 102 – Cardiovascular Technology Laboratory 1:0:3

Basic cardiovascular procedures and application. The student practices and demonstrates skills involving EKG, Holter monitoring, patient assessment, exercise stress testing and vital signs. Standard cardiovascular laboratory procedures are discussed. *A laboratory fee is required. Prerequisites: Admission to the Cardiovascular Technician program; BIOL 111 or 121 and MATH 020 with a grade of C or higher; Corequisite: CVT 101.*

CVT 103 – Cardiovascular Technology Clinical Experience 2:0:12

Scientific theory and techniques studied in CVT 101 and 102 applied in a clinical setting at a hospital or cardiology practice. *An insurance fee is required. Pre- or corequisites: CVT 101 and CVT 102.*

CVT 201 – Introduction to Echocardiography 4:3:3

A thorough introduction to cardiac anatomy and function of the adult heart. The laboratory component gives an introduction to echocardiography examinations including proper techniques, image acquisition and

artifacts, quality assurance, bioeffects, and safety of ultrasound. *Prerequisites: CVT 101, CVT 102 and CVT 103, or equivalents.*

CVT 202 – Echocardiography Physics and Instrumentation 3:3:2

Provides the student with an overview of echocardiographic scanning equipment including transducers, image display, and storage. Instrument controls including power, gain, compression, and focal zone are covered. The principles of pulse echo imaging are also presented. Laboratory sessions allow the student to manipulate equipment controls, access the internal design of transducers, experiment with scan converter and digital memory technology, and perform quality assurance tests. *Prerequisite: MATH 051; Pre- or corequisite: CVT 201 or permission of the instructor.*

CVT 203 – Echocardiography Clinic I 3:0:16

Provides an orientation to the echocardiography clinical site including patient records, scheduling, and care of the examination room. The development of interpersonal skills with patients and staff is emphasized. Introductory scanning experience under the direct supervision of cardiac sonographers is included in this course. *Prerequisites: CVT 103, CVT 201 and CVT 202.*

CVT 204 – Cardiac Pathophysiology I 3:3:0

This course provides an overview of cardiac diseases including causes, symptoms, physical examination results, and related diagnostics tests. Specific conditions which are covered include: systemic, pulmonary hypertensive, and ischemic heart diseases, cardiomyopathies, cardiac tumors, congenital heart disease in the adult, and diseases of the aorta.

Echocardiography imaging techniques including 2D, Doppler, and Color Doppler are presented. *Prerequisites: BIOL 122, CVT 201 and CVT 202.*

CVT 205 – Cardiac Pathophysiology II 3:3:0

A continuation of CVT 204. This course completes the overview of cardiac diseases. Symptoms, physical examination results, and related diagnostic tests are presented. Specific diseases which are covered include: valvular disease, endocarditis, and pericardial disease. Echocardiography imaging techniques including M-mode, 2D, Doppler and Color Doppler are also presented. *Prerequisites: BIOL 122 and CVT 204.*

CVT 206 – Doppler Physics and Hemodynamics 4:3:3

Introduces students to the basic principles of Doppler Physics including the Doppler effect, Doppler equations, spectral display and analysis. An overview is presented of continuous-wave and pulsed Doppler

including aliasing, Nyquist Limits, velocity calculations, and angle-correction techniques. Color-flow Doppler Tissue Imaging, and Power Doppler concepts are also covered. Hemodynamics is presented, including the relationship to cardiac anatomy, physiology, and cardiovascular function parameters. *Prerequisites: MATH 103 and CVT 202.*

CVT 207 – Echocardiography Clinic II 3:0:16

A continuation of CVT 203. This course provides the student with additional clinical experience needed to perform a complete 2D echocardiographic examination with Doppler correlation. Students are expected to maintain and improve upon the objectives and skills demonstrated in CVT 203 as they learn how to perform a complete M-mode and 2D echocardiographic study of the adult heart. Students are able to perform studies with limited supervision. The course concludes with an introduction to Doppler examinations. *Prerequisite: CVT 203.*

CVT 208 – Introduction to Fetal and Pediatric Echocardiography 2:2:0

Provides an overview of the normal anatomy and physiology of the fetal and pediatric heart, including functional assessment. Embryology including a comparison between fetal and postnatal circulation is presented. Congenital conditions including outflow and inflow obstruction and volume overload are discussed. Acquired pathological conditions are also presented. Material is correlated with sonographic images and differential diagnoses discussed. *Prerequisites: CVT 201, CVT 204 and CVT 205.*

CVT 209 – Echocardiography Clinic III 4:0:24

A continuation of CVT 207. The student is provided with the additional clinical experience needed to perform a complete 2D echocardiographic examination with Doppler and Color Doppler correlation on the adult heart. Students perform examinations with indirect supervision. The course includes an introduction to pediatric and fetal echocardiography scanning. *Prerequisite: CVT 207.*

CVT 210 – Introduction to Invasive Cardiovascular Technology 3:3:0

Introductory material for the Cardiac Catheterization laboratory. Discussion includes left and right heart catheterization, access, cardiac angiography, application of pathophysiology hemodynamics, and procedural care. *Enrollment is limited to students enrolled in the Invasive Cardiovascular Technology program. Prerequisites: CVT 101 and 102, BIOL 121, and MATH 103 with a grade of C or higher.*

CVT 211 – Radiation Safety and Invasive Instrumentation 2:2:0

Presentation of radiation safety principles and catheterization equipment instrumentation. The student learns theory relating to x-ray production and radiation safety; the Medrad injector, processing and CD components, ASSIST devices, and quality improvement mechanisms in the catheterization laboratory. Defibrillation, pacemakers, and infusion pumps are also discussed. *Enrollment is restricted to students enrolled in the Invasive Cardiovascular Technology program. Prerequisites: CVT 101 and 102, BIOL 121, and MATH 103 with a grade of C or higher.*

CVT 212 – Invasive Cardiovascular Procedures 3:3:0

Procedures performed in the Invasive Cardiovascular setting. Class covers basic and interventional procedures. The course also provides a strong focus on indications, contraindications, and instructions for performing the entire procedure. The student's understanding of the appropriate procedure performed for the correct indication is the major goal. *Enrollment is limited to students enrolled in the Invasive Cardiovascular Technology program. Prerequisites: CVT 101 and 102, BIOL 121, and MATH 103 with a grade of C or higher.*

CVT 213 – Invasive Instrumentation Laboratory 2:0:6

Students practice the techniques used in the Catheterization Laboratory before attending the clinical setting. Hands-on experience with catheters, wires, access, needles, and medications are keys to the learning process, using mannequins. Demonstration of proficiency is a primary goal; checklists are employed. *A laboratory fee is required. Enrollment is limited to students enrolled in the Invasive Cardio-vascular Technology program. Prerequisites: CVT 101 and 102, BIOL 121, and Math 103 with a grade of C or higher.*

CVT 214 – Interventional Cardiac Practices 3:3:0

Interventional techniques used in the Cardiac Catheterization area. Topics include Percutaneous Coronary Interventions, tissue sampling, biopsy, atherectomy (rotational and directional), TEC, stenting, transcatheter therapy and evaluation, drug eluting stents, thrombolytics, CABG, electrophysiology studies, and new trends in Cardiovascular Invasive medicine. *Enrollment is restricted to students enrolled in the Invasive Cardiovascular Technology program. Prerequisites: BIOL 121, CVT 204, 210, and 212 with a grade of C or higher.*

Cardiovascular Technology (continued) – Civil Technology

CVT 215 – Cardiovascular

Clinical Practicum I

4:0:4

First clinical rotation for the Invasive Cardiovascular student. Emphasis is placed on practice with laboratory equipment, scrubbing, circulating and monitoring, and patient care in the catheterization laboratory. The clinical hours are 360 (3 days a week throughout the semester). Students complete monitoring forms and a manual, as well as two case-studies. *Enrollment is restricted to students enrolled in the Invasive Cardiovascular Technology program. A liability insurance fee is required. Prerequisites: CVT 204, 210, 212, and BIOL 121 with a grade of C or higher. Corequisites: AH 209, CVT 205, 214, and 216.*

CVT 216 – Congenital Heart Disease

1:1:0

Congenital Heart Disease in both pediatric and adult patients. The course includes a review of embryology, common issues affecting congenital disease, pathophysiology, signs and symptoms, treatment options, and corrective surgical and interventional techniques. *Enrollment is limited to students enrolled in the Nursing and Cardiovascular Technology programs. Prerequisites: CVT 204 with a grade of C or higher. Corequisites: CVT 205 and 214, and AH 209.*

CVT 217 – Cardiovascular

Clinical Practicum II

5:0:5

Second clinical rotation for the Invasive Cardiovascular student. Emphasis is placed on increasing patient acuity and skill for the clinical laboratory. Students perform hands-on techniques in Interventional cardiology. The clinical hours are 480 (4 days a week throughout the semester). Students complete monitoring forms and a manual, as well as two case-studies. *Enrollment is restricted to students enrolled in the Invasive Cardiovascular Technology program. Prerequisite: CVT 215 with a grade of C or higher.*

Chemistry • MSAH Division

CHEM 100 – Principles of Chemistry

3:3:2

For students desiring an introduction to chemistry or requiring a course to update their knowledge of chemistry. Fundamentals stressed are atomic structure, bonding, molecular structure, solutions, acids and bases, chemical nomenclature, and stoichiometry. *A laboratory fee is required. Prerequisite: completion of all reading courses required by the College Testing and Placement Program and MATH 051 with a grade of C or higher. (Core C)*

CHEM 101 – General Inorganic Chemistry I

4:3:3

Emphasis on the principles and theories of

chemistry. Concepts covered include: atomic theory and structure, bonding, periodicity, oxidation/reduction, stoichiometry, molecular geometry, gas laws, and solutions. The laboratory work reinforces the theoretical understanding and the quantitative nature of matter. *A laboratory fee is required.*

Prerequisites: Completion of ENGL 003 and 051 with a grade of C or higher, or their equivalents; MATH 103 with a grade of C or higher; CHEM 100 with a grade of C or higher or a score of 26 or better on the Toledo Chemistry Placement Examination. (If necessary, the exam can be taken in the College Testing Center.) (Core C)

CHEM 102 – General Inorganic Chemistry II and Qualitative Analysis

4:3:3

A continuation of CHEM 101. Concepts covered include gaseous equilibria, acid-base theories, equilibria in aqueous solutions, complex ion equilibria, solubility product equilibria, electrochemistry, thermodynamics, rates of reaction, and coordination compounds. The laboratory work emphasizes kinetics, equilibria and qualitative analysis. *A laboratory fee is required. Prerequisite: CHEM 101 with a grade of C or higher.*

CHEM 113 – Chemistry for the Nonscientist

3:3:1

The basic concepts and principles of chemistry with reference to their impact on present day living. Included are topics such as chemistry in the home, agricultural chemistry, chemistry and personal health, and chemistry of the earth's atmosphere and water. The laboratory work demonstrates chemical principles and applications. *This course is not for students in an Allied Health or science curriculum. A laboratory fee is required. (Core C)*

CHEM 200 – Principles of Organic and Biological Chemistry

4:3:3

Designed for students needing a one-semester survey of the principles of organic and biological chemistry. Topics covered are bonding, stereochemistry, nomenclature, functional groups, biologically-related syntheses and reactions, lipids, carbohydrates, proteins, enzymes, and metabolism. Laboratory work includes purification and separation techniques, instrumentation, and biochemical detection and testing. *A laboratory fee is required. Not open to chemistry majors. Prerequisite: CHEM 100 or equivalent with a grade of C or higher within the past seven years.*

CHEM 202 – Quantitative Analysis

4:2:6

The theory and practice employed in the basic methods of volumetric, gravimetric, and instrumental analysis; emphasis on the solution of problems and development of

precise calculations. *A laboratory fee is required. Prerequisite: CHEM 102, or CHEM 101 and permission of the instructor.*

CHEM 203 – Organic Chemistry I

4:3:4

An introduction to the chemistry of carbon-containing compounds. Emphases are on bonding, structure, stereochemistry, reaction mechanisms, and related thermodynamic considerations. In the laboratory, methods of preparation and purification of compounds, and synthesis techniques are covered. *A laboratory fee is required. (Offered Fall only.) Prerequisite: CHEM 102 with a grade of C or higher, or CHEM 101 with a grade of C or higher and the consent of the instructor.*

CHEM 204 – Organic Chemistry II

4:3:4

A continuation of CHEM 203. The properties and reactions of functional groups, spectroscopy, and multistep synthesis are emphasized. The laboratory includes an introduction to the chemical literature, spectroscopy, organic qualitative analysis, and synthesis. *A laboratory fee is required. (Offered Spring only.) Prerequisite: CHEM 203 with a grade of C or higher.*

Civil Technology • BHET Division

CVTE 102 – Introduction to Highway, Drainage, and E&S Design

3:2:3.5

The civil engineering calculations and graphics introduced in CVTE 110 studied in greater detail. The emphasis is on performing computations and understanding of computed results before drafting takes place. The computations include cross and longitudinal slopes, roadway stations, interior angles of property lines, and quantities according to PennDOT specifications. Developing cross sections, profiles and drainage areas are also included. All assignments originate exclusively from projects in industry. *A laboratory fee is required. Prerequisites: CVTE 105 and 110 with a grade of C or higher; Corequisite: MATH 913 or higher; or permission of the Coordinator.*

CVTE 103 – Surveying I

3:1.5:4

An introduction to land surveying methods and field procedures. The course focuses on the operation and care of surveying instruments, the collection of field data, and the preparation of base plans. Surveying types studied include topographic, construction, boundary surveys, control traverses and benchmark level loops. *A laboratory fee is required. Prerequisite: MATH 913 or higher.*

CVTE 105 – Numerical Methods in Civil Engineering

3:2:3.5

Designed to prepare students to take the Civil Technology degree classes. Numerical

Civil Technology (continued) – Computer Aided Drafting

and graphical methods are studied with strong emphasis on application in the following areas: highway design, drainage design, site design, E&S design, surveying I, surveying II, and the capstone project. *A laboratory fee is required. Prerequisite: MATH 020 or higher with a grade of C or higher; corequisite: MATH 913; or permission of the Coordinator.*

CVTE 110 – Civil Engineering Graphics 2:1:4

An integration of hand and computer drafting. Students study the basics of civil engineering drafting on the board, followed by the AutoCAD application. The topics covered include civil engineering scale, basic geometric shapes, measuring angles, definition of slope, introduction of a plan view and cross section. The AutoCAD part of the class focuses on basic commands, scales, line types, colors, layers, dimensioning, placing text, and the file management. *A laboratory fee is required.*

CVTE 111 – Topographic Site Mapping 2:0.5:4.5

Using AutoCAD for residential and commercial land development projects, the focus is on drawing topographic site plans, interpreting engineer's site studies and sketch designs and understanding general design principles. Drawing details include parking, roads, contours, drainage, utilities, and cut and fill quantity calculations. Highway occupancy permit plans are considered. *A laboratory fee is required. Prerequisites: CVTE 102, 103, 110, and CAD 130 with a grade of C or higher; or permission of the Coordinator.*

CVTE 112 – Topographic Highway Mapping 2:0.5:4.5

Using MicroStation for highway development projects. Topics include construction of topographic mapping, highway plan, study of site, sketch designs, and design principles. Drawings focus on all aspects of the site plan including contours, drainage, utilities, symbology, plans, profiles, cut and fill quantity calculations, and highway occupancy permit plans. The PennDOT Design Manual is a basic reference. *A laboratory fee is required. Prerequisites: CAD 115, CVTE 102, and CVTE 103 with a grade of C or higher; or permission of the Coordinator.*

CVTE 120 – Codes, Laws, Acts and Regulations 1:1:0

An overview of the codes, laws, acts, and regulations used most often in the civil engineering, surveying and environmental fields, and architecture. The course introduces references and resources used in these fields. The course also provides students with the basic terminology, and introduces the administrative part of the permitting process and overview of design requirements.

CVTE 203 – Surveying II 3:1.5:4

An introduction to the legal aspects and methods of land surveying. The course focuses on basic procedures for performing boundary-type surveys. From courthouse record research and field data collection to computation and problem solving for deeds, this course explores the fundamentals necessary for any boundary survey project. *A laboratory fee is required. Prerequisite: CVTE 103.*

CVTE 205 – Highway Design 3:2:3.5

Emphasis is on highway and roadway planning and design according to state standards. The course covers principles of highway design which include computing horizontal and vertical alignments by hand. Explanation of basic terms such as tangents, curves and superelevation transitions are covered. Students work with plan views, cross sections and profiles. Additional topics include meeting AASHTO and PennDOT requirements. Quantity computation and cost estimates, writing specifications, the basics of railroad design and highway rehabilitation projects are also covered. *A laboratory fee is required. Prerequisites: CVTE 102 and MATH 913 or higher.*

CVTE 207 – Drainage 3:2:3.5

Emphasis is on hydraulics and hydrology as applied to storm sewer design. Covered are design storm determination and drainage area delineation, Rational Formula and Manning's Formula, pipe design and pipe alternates, computation of actual depths and velocities in pipes, setting inverts for sewer main line and laterals, inlets, capacities, bypasses, and outfall protection. The student is introduced to the PennDOT Design Manual 2, Chapter 10 Drainage; DEP Manual; PennDOT RC Standards; and PennDOT Publication 408 sections that are related to roadway/highway drainage design. *A laboratory fee is required. Prerequisites: CVTE 102 and 205, and MATH 913 or higher.*

CVTE 208 – Strength of Materials 3:3:0

Emphasis on axial stress and strain, shear, riveted and welded connections, torsion, beam stresses and deflections, columns, resilience and toughness of materials, yield, combined stress, shear and moment diagrams. The computer is used in solving problems. *Prerequisite: GTEC 201 with a grade of C or higher.*

CVTE 209 – Selected Topics in Site Design 3:2:3.5

Emphasis is on the basics of site development design using software applications. Students are introduced to municipal zoning ordinances and all other design criteria set by the municipalities. Other topics include Property Line, Right-of-Way, and easements.

Storm sewer, sanitary sewer, culvert and storm water management design, Storm Water Management Act, Highway Occupancy Permit, and parking lot design are also covered. *A laboratory fee is required.*

Prerequisites: CVTE 102, 111, and 211, and MATH 913 or higher.

CVTE 211 – Erosion and Sedimentation Control and Permits 3:2:3.5

Emphasis is on erosion and sedimentation control plan with students studying the definition of basic E&S controls as defined in the DEP Erosion and Sediment Pollution Control Program Manual. Topics include contours, slopes and level surfaces, grading the site and sediment cleaning facilities. Other topics include top-of-cut ditches, toe-of-slope ditches and roadway swales, lining design and peak flow computation for temporary and permanent conditions using the Rational Formula, writing construction sequencing for the project, and the introduction of common permits (NPDES, Chapter 105, Joint Permit Application, Permit 404). *A laboratory fee is required. Prerequisites: CVTE 102 and MATH 913 or higher.*

CVTE 213 – Capstone Project 3:2:3.5

Work on an assigned building or highway site project, according to field of specialization. The assignment covers the plan view design, profile, typical section, cross slopes, longitudinal slopes, details, actual cross section, storm sewer design, grading, and erosion and sediment control design. Students are required to prepare a complete package for review including computations, graphs, and charts from manuals and reference books. Students also prepare construction sequencing for the proposed project and complete a set of plans as required by the regulatory agency and client. *A laboratory fee is required. Prerequisite: CVTE 205 or 211. Corequisite: CVTE 207 or 209.*

Computer Aided Drafting • BHET Division

CAD 114 – AutoCAD I 1:0.25:2.25

An introduction to computer-aided drafting and designs using the latest release of AutoCAD software. The focus is on basic terminology and vocabulary required to operate an AutoCAD design work station, including draw, edit, dimensions, layer, text, and plotting commands. *Prerequisite: Technical Drawing Background.*

CAD 115 – MicroStation I 1:0.25:2.25

An introduction to computer-aided drafting using the latest release of MicroStation software. The focus is on the basic terminology required to operate MicroStation including

Computer Aided Drafting (continued) – Computer Information Systems

opening new drawings, saving, editing, setting dimensions, opening levels, and using text and plotting commands. *Prerequisite: CVTE 110 with a grade of C or higher, or permission of the Coordinator.*

CAD 124 – AutoCAD II 1:0.25:2.25

Advancement of the student's knowledge of AutoCAD techniques focusing on external references, blocks and attributes, and customizing. Basics of three-dimensional drawing are also introduced. *Prerequisite: CAD 114 or permission of the Coordinator.*

CAD 125 – MicroStation II 1:0.25:2.25

Practical application of MicroStation for technicians. The focus is on Coordinate Geometry (COGO), using points, working with plan views, cross sections, typical sections, vertical and horizontal alignments and site plans. Dimensioning, stationing, angular measurements, and northing/easting values are taught. *Prerequisite: CAD 115 with a grade of C or higher.*

CAD 130 – Civil Engineering Drawing 1:0.25:2.25

Advancement of AutoCAD techniques for the civil technology student. The topics include: plan views, cross sections, stream and roadway profiles, application of surveyor units, measuring and computing quantities, and preparing tabulations. Plan presentation and basic civil engineering terminology are studied. *Corequisite: CVTE 110.*

CAD 134 – AutoCAD: Three-Dimensional 1:0.25:2.25

Introduction to AutoCAD's basic 3-D terminology and model creation using extrusion, wireframe, and solid models. Introduction to AutoCAD's capabilities to render completed models. *Prerequisite: CAD 114 or permission of coordinator.*

CAD 154 – Computer Aided Drafting and Design 3:2:3

The study of basic drafting concepts including orthographic projection, sections, and auxiliary views. Students are given an introduction to selected computer-aided drafting and design programs. Students create multi-view working drawings and study solids modeling techniques.

CAD 164 – Advanced Computer Aided Drafting and Design 2:1:4

Advanced 3D topics in SolidWorks including sheet metal, cam, and gear design. Students examine applied problems in finite element analysis using COSMOS/Works. Application in PhotoWorks and Animator are also discussed. *Prerequisite: CAD 154 with a grade of C or higher.*

CAD 201 – Advanced Topics in AutoCAD 3:2:3

Configuring AutoCAD and using Paperspace Drawing Translation, AutoCAD's AME (3-D Imaging), and Menu Customization add-ons. *Prerequisites: CAD 114 and 134.*

CAD 202 – Introduction to AutoLISP Programming 3:2:3

Constructing Macros that automate commands by grouping function in order to enhance AutoCAD software capabilities. *Prerequisites: CAD 114 and 134.*

CAD 203 – Rendering with 3D Studio 3:2:3

Course focuses on using 3D Studio VIZ, a powerful rendering and animation software package. Topics include creating and modifying objects to generate effective presentations, architectural walkthroughs, and more. *Prerequisites: CAD 114 and 134.*

CAD 204 – Land Development Desktop 3:2:3

Hands-on class develops skills necessary for the experienced user to successfully employ AutoDesk's Land Development Desktop/Civil Design software to create site development drawings. *Prerequisites: CAD 114 and 124 and 134.*

CAD 205 – Architectural Desktop 3:2:3

Two-dimensional/three-dimensional architectural drawing techniques utilizing Architectural Desktop in AutoCAD's drawing environment. Students construct architectural drawings using automated techniques for graphical representation of designs and layouts. *Prerequisites: CAD 114 and 134.*

CAD 206 – 3D Modeling with AutoCAD Mechanical Desktop 3:2:3

Three-dimensional drawing and modeling techniques with AutoCAD Mechanical Desktop in AutoCAD's drawing environment. Students use the software to parametrically construct simple to complex models for graphical representation of detailed designs and layouts. *Prerequisites: CAD 114 and 134.*

Computer Information Security • BHET Div.

CISE 200 – Information Security Fundamentals 3:3:0

Provides a basic understanding of industry standards for securing information. Topics include: legal, ethical, and business requirements, and an overview of security tools and practices, and secure network architecture. *A laboratory fee is required. Prerequisites: Completion of ENGL 101 with a grade of C or higher, CIS 115 or CTEC 102 with a grade of C or higher, and placement in MATH 051, or permission of the instructor.*

CISE 210 – Information Security Administration 4:3:1.5

Encompasses the practical application of operational, administrative, and basic management aspects of information security. Topics include: installation and administration of security hardware and software, expansion planning, equipment inventories, policy adherence, and documentation procedures. *A laboratory fee is required. Prerequisites: CISE 200, CTEC 122, and CTEC 221 with a grade of C or higher.*

CISE 220 – Information Security Analysis and Response 4:3:2

Explores the identification of information security vulnerabilities and intrusions while developing skills to utilize monitoring and auditing functions. Topics include: prevention of and response to intrusions and data handling for forensic purposes. *A laboratory fee is required. Prerequisites: CISE 210 and CIS 224 with a grade of C or higher.*

CISE 230 – Information Security Management 3:3:0

Focuses on the management of information security, communication, monitoring, and auditing tools. Topics include: the development of new procedures, change management, report generation, and the security project life cycle. *A laboratory fee is required. Prerequisites: CISE 210 and CIS 224 with a grade of C or higher.*

Computer Information Systems • BHET Div.

CIS 100 – Computer Fundamentals 3:3:0

Covers the fundamentals of computer-system operations and designed for the student with little or no prior knowledge of, or experience with, PC operations. Topics covered include the fundamentals of the following: keyboarding, hardware components, keyboard and mouse operations, file and disk management, data security and control, printing, PC terminology, using Windows, word processing, and an introduction to the Internet.

CIS 105 – Introduction to Software for Business 3:3:0

Provides a fundamental understanding of computers and familiarizes students with the interaction of computer hardware and software. Emphasis is on the application of computers and hands-on use of software applications, including word processing, spreadsheet, file and database management. *Prerequisite: Completion of ENGL 003 and ENGL 051 with a grade of C or higher or their equivalents.*

CIS 106 – Windows Fundamentals 1:1:0

A brief, hands-on introduction to the basics of the Windows operating system. Topics

Computer Information Systems (continued)

include: sizing windows, using the mouse, accessing on-line help, navigating the system using the My Computer and the Windows Explorer features, and working with Windows application programs. *(Students may not receive credit for this course and CIS 127.) Prerequisite: CIS 105 with a grade of C or higher, or permission of the instructor.*

CIS 107 – Introduction to Microsoft Access 1:1:0

A hands-on overview of the fundamentals of a database application. Topics include: designing, creating, editing, and printing tables; creating a simple form; customizing the data as it appears on screen; sorting and querying the data; and using Wizards to create reports. *(The student may not receive credit for this course and CIS 105.) Prerequisite: Working knowledge of computer operations.*

CIS 108 – Introduction to PowerPoint 1:1:0

A hands-on, project-oriented course designed to teach the student to produce professional looking presentation materials in the form of overhead transparencies, electronic presentations using a projection device attached to a computer. *Prerequisite: Working knowledge of computer operations.*

CIS 109 – Integrating Technology into the K-12 Classroom 3:3:0

Current or future K-12 teachers, administrators, and counselors are introduced to educational technology including how to use computers, how to access information on the World Wide Web, and how to integrate a current productivity-software suite into elementary, middle school, high school, and special-education curricula. *Prerequisite: Eligibility for ENGL 101 or Guest student.*

CIS 110 – Introduction to Computer Systems 3:3:0

Provides a hands-on understanding of the underlying concepts, terminology, and operations of hardware components and software associated with computer information systems in industry and for personal use. The Internet and its component parts are covered through in-class activities and extended class assignments. The course serves as a foundation for further study through topics including systems design, data input/output processing, hardware basics, software integration, and associated technologies. *Prerequisite: Eligibility for enrollment in ENGL 101. Pre or Corequisite: CIS 105 with a grade of C or higher.*

CIS 127 – Microsoft Windows Operating Systems 3:3:1.5

Builds on the fundamentals of Windows (window management and design and Desktop organization) to introduce the student to the underlying features and capabilities of the operating system. Topics covered include:

planning and installing Windows, viewing and modifying the Registry, managing users and system resources, monitoring, optimizing, and troubleshooting Windows, and certain networking aspects. *Prerequisites: CIS 110 with a grade of C or higher. Corequisite: Any CIS, CISE, CNT, CPS, or WEB course, except CIS 100, or permission of the instructor.*

CIS 129 – Operating Systems for Technicians 3:2:3

An introductory course in Operating Systems Software. The course covers fundamental terms and functions of Operating Systems Software. Several different operating systems are installed, configured, and upgraded. Emphasis is on a lab-oriented, hands-on approach to understanding, diagnosing, and troubleshooting today's popular PC Operating Systems. Operating Systems studied include DOS, Windows 9X, Windows NT, Windows XP, and LINUX. *Prerequisite: CIS 127 with a grade of C or higher.*

CIS 135 – Intermediate Spreadsheet Applications 3:3:0

Hands-on experience with a widely used computer spreadsheet applications package with emphasis on an introduction to the worksheet, graphics, database, and macro features. The course builds on the spreadsheet applications concepts and skill developed in CIS 105. *Prerequisite: CIS 105 with a grade of C or higher, or permission of the instructor.*

CIS 140 – Intermediate Database Management 3:3:0

An in-depth study of database management. The course builds on the concepts and skills in the use of a database management program developed in the introductory applications course. *Prerequisite: CIS 105 with a grade of C or higher, or permission of the instructor.*

CIS 207 – Desktop Publishing 3:3:0

A hands-on introduction to desktop publishing fundamentals. Students produce publication-ready documents combining text, graphics, illustrations, and photographs. In preparing the documents, the student learns to apply design templates, graphic manipulation tools, and advanced layout and printing tools to the task at hand. *Prerequisite: CIS 105 with a grade of C or higher.*

CIS 222 – Introduction to Windows Servers 3:3:1.5

Introduction to local-area client and server networking using the current generation of Microsoft Windows Servers. While providing students with the knowledge and skills necessary to install and configure the current Microsoft Windows operating system on stand-alone and client computers that are part of a workgroup or domain, this course emphasizes the skills and knowledge

necessary to install, configure, and administer and Active directory. *Prerequisite: CIS 115 or CTEC 102 with a grade of C or higher.*

CIS 223 – Intermediate Windows Servers 3:3:1.5

Local area client/server networking using the current generation of Microsoft Windows Servers. Provides students with the knowledge and skills necessary to configure and maintain advanced components of the Microsoft Windows 2000 operating system as a domain controller. This course emphasizes the skills and knowledge necessary to administer a domain using Network Services, Active Directory, and Security Services. *Prerequisite: CIS 222 with a grade of C or higher, or permission of the instructor.*

CIS 224 – Introduction to Systems Analysis and Design 4:4:0

An introduction to Systems Analysis and Design using the Systems Development Life Cycle (SDLC) as an organizing tool, and taking the student from Planning and Selection through Implementation and Operation. It covers current practices as well as accepted concepts and principles of system development, with an understanding of the processes as well as the techniques and end products. There is extensive coverage of oral and written communication skills, including documentation, project management and team management. *Prerequisites: CNT 120 with a grade of C or higher; and one of the following with a grade of C or higher – CIS 238, 245, CPS 115, 121, 135, 141, 151, 230, WEB 140, 144, 220, 240, 242, 244, 246.*

CIS 225 – Introduction to Graphic Software 3:3:0

Provides a basic understanding of graphic layout, presentation, and image editing software packages. Emphasis is on hands-on use and the integration of these software applications as they can be utilized in various industry scenarios. Expertise in using Internet clip art and photography sites is developed. *Prerequisite: CIS 105 or CAD 201 with grades of C or higher, or permission of the instructor.*

CIS 226 – Novell NetWare Administration 3:3:1.5

An introduction to Local Area Network and Wide Area Network administration using Novell NetWare. The course includes network design; features, functions and components of Novell's eDirectory system; installation and file system and the management of users, groups, login security and trustee assignments. Web Services, Groupwise and OneNet utilities are also covered. *Prerequisites: CIS 115 or CTEC 102 with a grade of C or higher.*

CIS 227 – Technical Support 3:3:0

Provides skills needed to operate and manage in a technical support environment.

Computer Information Systems (continued)

The course covers technical support, troubleshooting, escalation channels, communication skills, and developing professional interaction with end users. Also included is an in-depth study of help desk software with an emphasis on call and asset management. *Prerequisites: CNT 120 and CIS 222 or CIS 249 or CIS 265 with a grade of C or higher.*

CIS 232 – Introduction to COBOL Programming 3:3:0

Fundamentals of the COBOL programming language and its applications, including maintenance and interaction with legacy COBOL systems. Course covers Job Control Language (JCL), Customer Information Control System (CICS), DB2, and TSO/ISPF. Students write and maintain programs written in the COBOL language. *Prerequisite: CIS 105 with a grade of C or higher, or permission of the instructor.*

CIS 235 – Advanced Spreadsheet Applications 3:3:0

Builds on the spreadsheet applications concepts and skills developed in CIS 135. Emphasis includes in-depth study of file importing and exporting, functions, advanced macro features, and file linking as they apply to large worksheets. In addition, advanced features of the spreadsheet graphics and database are covered. *Prerequisites: CIS 110 and 135 with grades of C or higher, or permission of the instructor.*

CIS 238 – Visual Basic Programming for Business Applications 3:3:0

A hands-on approach to the fundamentals of creating Visual Basic programs for supporting business operations. The course is designed to teach the student how to apply programming logic and Visual Basic tools to common business practices such as data capture and data analysis using file management techniques and control arrays. *Prerequisite: CIS 135 or WEB 243 or WEB 125 with grades of C or higher, or permission of the instructor.*

CIS 240 – Advanced Database Management 3:3:0

Builds on the database management applications, concepts, and skills developed in CIS 140. The course provides an opportunity to develop a database application for business using the programming language provided with the database. In addition, full documentation is developed by the student. *Prerequisite: CIS 140 with a grade of C or higher, or permission of the instructor.*

CIS 241 – Database Administration I 3:3:0

An introduction to the core concepts of database administration. Topics include: an in-depth discussion of Database Architecture, hands-on exercises installing the database, creating database objects such as tables and

indices, applying database security, performing various database backup/recovery scenarios, and an introduction to database optimization utilizing performance tuning and database normalization. *Prerequisite: CIS 140 with a grade of C or higher, or permission of the instructor.*

CIS 243 – Database Administration II 3:3:0

Builds upon the database administration concepts developed in CIS 241. This course covers data manipulation and data conversion using built-in database functions and advanced query techniques, accessing data in a heterogeneous environment, managing database objects using the data dictionary, and evaluating performance using the database optimizer. *Prerequisite: CIS 241 with a grade of C or higher, or permission of the instructor.*

CIS 245 – Database Programming 3:3:0

An introduction to database programming using SQL. Students create, store, retrieve, and maintain database objects. Students create stored procedures, and manage distributed data and transactions. Students also learn how to create SQL blocks of code to be used in other programming languages. *Prerequisite: CIS 140 or WEB 243 with a grade of C or higher, or permission of the instructor.*

CIS 247 – Database Backup and Recovery 3:3:0

An introduction to the critical task of planning and implementing database backup and recovery strategies. The course addresses backup and recovery techniques and examines various backup, failure, restore, and recovery scenarios. Backup methodologies based on business requirements in a mission critical enterprise are also covered. *Prerequisite: CIS 241 with a grade of C or higher, or permission of the instructor.*

CIS 249 – Fundamentals of the UNIX Operating System 3:3:0

Covers the UNIX operating system and environment as well as similarities with LINUX. Topics include logging onto UNIX, the UNIX file system, basic operating system commands, processing and system resources, login profiles, and beginning shell scripting. Hands-on experience with the vi editor, the UNIX help system, and other UNIX tools and utilities is also covered. *Prerequisite: CIS 105 with a grade of C or higher, or permission of the instructor.*

CIS 264 – Fundamentals of LINUX Administration 3:3:1.5

Covers the basics of the LINUX operating system with an emphasis on system administration and security. Topics include: the installation and configuration of LINUX, logging into LINUX, basic commands, the

vi editor, creating and administering user accounts. System backup and recovery, software installation and package management, the graphical user interface, and basic LINUX administration are covered. Other LINUX tools and utilities are also covered.

Prerequisite: CIS 115 or CTEC 102 with a grade of C or higher, or permission of the instructor.

CIS 265 – Fundamentals of UNIX Administration 3:3:0

Covers the basics of the UNIX/LINUX operating system with an emphasis on system administration and security. Topics include: the installing and configuration of UNIX, logging into UNIX, basic commands, the vi editor, creating and administering user accounts, system backup and recovery, software installation and package management, the graphical user interface, and basic UNIX administration. Other UNIX tools and utilities are also covered. *Prerequisite: CIS 110 with a grade of C or higher, or permission of the instructor.*

CIS 270 – Computer Practicum 4:1:15

A minimum of 225 hours of work experience, over at least a 15-week period, in an approved internship applying the knowledge and skills acquired in the Computer Information Systems curriculum. Written documentation of internship activities and other performance-evaluation measurements will be used to determine the grade. The course must be scheduled for the last semester so that the student derives the most benefit from the experience. (This course is intended for those who are not currently employed in a position requiring extensive use of computers. It is an alternative to CIS 275; credit will not be given for both courses.) *Prerequisites: CIS 135, 140, 210, and 222 with grades of C or higher, or permission of the instructor. Corequisite: ELEC 126.*

CIS 275 – Computer Information Systems Practicum 3:1:12

A minimum of 180 hours of work experience, over at least a 15-week period, in an approved internship applying the knowledge and skills acquired in the Computer Information Systems curriculum. Written documentation of internship activities and other performance-evaluation measurements are used to determine the grade. *The course must be scheduled for the last semester so that the student derives the most benefit from the experience. (The course is intended for those who are currently employed in a position requiring extensive use of computers. It is an alternative to CIS 270; credit will not be given for both courses.) Prerequisites: CIS 135, 140,*

Computer Information Systems (continued) – Computer Networking Technology

210, and 222 with grades of C or higher.
Corequisite: ELEC 126.

CIS 278 – Advanced Database Project 3:3:0

Capstone course of the CIS-Database Analyst concentration. Students use various database analysis and design skills acquired from courses in the Database Analyst concentration to develop database systems through all aspects of the life cycle. Students work in small groups to develop and implement a database system specific to business. A user's manual and a reference manual are also developed. *Prerequisites: CIS 243, 245, and 247 with grades of C or higher.*

Computer Networking Technology • BHET Div.

CNT 120 – Network Communications Technology I 3:3:1.5

Network communications technology. Business data communications concepts are covered, beginning with an overview and a discussion of the companies and government agencies involved in the field. Topics include basic terminology associated with network signaling, media, the public network, local area networks, mainframe communications, architectures, terminal types, multiplexers, modems, and terminal controllers. The technology of signaling is covered including noise, error detection and correction, flow control techniques, data compression, and encoding technology. The effects of communications on today's society are also discussed. Different types of networks are introduced. *A laboratory fee is required. Prerequisites: Eligibility for ENGL 101 and MATH 051; test out or completion of CIS 105 with a grade of C or higher.*

CNT 125 – Network Communications Technology II 4:3:3

A continuation of CNT 120. Students in this course learn the detailed concepts, technologies, components and protocols inherent in today's local area networking environments. Technical aspects of the operation of local area networks (LANs) are covered, including encoding schemes, access technology, access management methods, control signaling, and electronic devices. Students see how computers are connected together to form peer-to-peer and server-based networks, and discover the functionality and uses of a router, bridge, switch, hub and repeater. Implementations studied include forms of Ethernet, token ring, and asynchronous transfer mode. The most commonly used network operating systems today, those from Microsoft, Novell and Linux, are also introduced in this course. VLANs and the various forms of Ethernet technology such as

Fast Ethernet are also explained. Students develop system designs based on customer specifications. Students study classic data communications topics with an introduction to wireless technologies, e-Business applications, and communications services. Network security issues, network management and future technologies are also discussed. *A laboratory fee is required. Prerequisite: CNT 120 with a grade of C or higher.*

CNT 130 – Fundamentals of Telecommunications 3:3:1.5

Telecommunications primer that will give students a thorough understanding of the worldwide telecommunications network. Students learn about the basic signaling and switching systems that make the telephone system work and gain an appreciation of the complex technologies necessary for reliable phone service. This course also explains the business aspects of the telecom industry, as well as introduces the various types of companies that now compete for commercial and residential customers. Students explore the issues and trends that are fueling the explosive growth in the telecommunications industry, and gain a firm understanding of the state of the industry today. Topics include transmission circuit types including t-carriers, analog lines, ISDN circuits, and technologies such as ATM, SMDS, and frame relay. The effect of the regulatory environment on network design is also covered. *A laboratory fee is required. Prerequisite: CNT 120 with a grade of C or higher.*

CNT 140 – The Physical Network 3:2:3

Provides the student with practical skills necessary to design, install, and test communications wiring systems. Topics include communications cabling choices currently available, the standards for their use, and testing installed cabling systems. Students learn the rules that govern the design of cabling systems. The student states the design rules for such systems. Students also use test equipment that certifies that the installed cabling meets current industry standards. Should the cabling not meet the certification requirements, the student determines the cause of the failure. *A laboratory fee is required. Prerequisite: CNT 120 with a grade of C or higher.*

CNT 200 – Technical Aspects of Network Operating Systems 4:3:3

Addresses the coordination of network resources including such functions as directory and naming services, addressing, resource discovery and system integrity for Microsoft, NetWare, UNIX, and AppleTalk networks. Students learn how to troubleshoot problems

that originate in the network including network operating system software, network hardware, and network security issues. *A laboratory fee is required. Prerequisites: CNT 120 and 125 with a grade of C or higher.*

CNT 220 – Internetworking 5:4:3

Advanced course. The course gives a more detailed understanding of internetworking and internetworking devices. Data link functions and characteristics and the protocols of layer three and four of the OSI model are studied in detail. Specifically, the details of the Internet Protocol and Transmission Control Protocol (TCP/IP) are covered. The world's largest network, the Internet, is also one of the world's most powerful communication tools. Students learn the underlying applications, components and protocols of TCP/IP and its necessary link to the Internet, as well as how to identify TCP/IP layers, components and functions. Navigation tools, TCP/IP services and troubleshooting Methodologies are also reviewed. This course focuses on the issues that are encountered with network growth and the internetworking components that offer solutions to these problems. The components covered in this class include repeaters, hubs, bridges, switches, routers and gateways. Network Management and the Simple Network Management Protocol (SNMP) are also used in this course. Topics include routing techniques, routing protocols including RIP and OSPF, subnet addressing, domain name resolution, and application program interfaces in a TCP/IP environment. *A laboratory fee is required. Prerequisites: CNT 120 or CTEC 101 and CNT 125 or CTEC 102 with a grade of C or higher.*

CNT 240 – Cisco Routing 3:2:3

Designed to help the student prepare for the Cisco Certified Network Associate certification exam. Each of the 60 objectives on the CCNA exam is covered. This course is not sponsored by, endorsed by, or affiliated with Cisco Systems, Inc. Cisco and CCNA are registered trademarks of Cisco Systems, Inc. in the United States and certain other countries. *A laboratory fee is required. Prerequisites: 220 or CTEC 121 and 122 with a grade of C or higher.*

CNT 260 – Wireless Network Administration 3:3:1.5

Provides the networking professional a complete foundation of knowledge for entering into or advancing in the wireless networking industry. From basic RF theory to link budget math, including topics from troubleshooting to performing a site survey, this course delivers hands on training that benefits the novice as well as the experienced

Computer Networking Technology (continued) – Court Reporting

network professional. This course targets both novice and experienced networking professionals who wish to gain a solid understanding of wireless networking to complement their knowledge of traditional wired networking. This course can be used to help students prepare for the CWNA (Certified Wireless Network Administrator) exam. *A laboratory fee is required. Prerequisites: CNT 120 or or CTEC 101 and CNT 125 or CTEC 102 with a grade of C or higher.*

CNT 291 – Cooperative Work Experience 3:0:15

Faculty-monitored employment in an approved internship with a local employer, maintaining an active network environment for a minimum of 15 hours per week. The intern works on a day-to-day basis with a network administrator, specialist, or technician. As a job “shadow,” the intern has responsibilities that may include basic network configuration, documentation, support, and troubleshooting tasks. The qualified candidate applies the knowledge and skills acquired as a Computer Networking Technology major. This course is scheduled for the last semester and is intended for those not employed in a computer-related position. *Restricted, see Program Coordinator.*

CTEC 102 – Network Communications Technology II 3:3:0

A continuation of CTEC 101. The course includes a study of classic data communications topics with an introduction to the importance of wireless technologies, e-Business applications, and communications services. Network security issues, network management, and future technologies are also discussed. *Prerequisite: CTEC 101 with a grade of C or higher.*

CTEC 215 – Technical Aspects of LAN Telecommunications 3:3:0

The concepts, technologies, components, and protocols inherent in today’s local area networking environments. Technical aspects of the operation of local area networks (LANs) are covered including encoding schemes, access technology, access management methods, control signaling, and electronic devices. Students learn how computers are connected to form peer-to-peer and server-based networks, and discover the functionality and uses of a router, bridge, switch, hub and repeater. Implementations studied include forms of Ethernet, token ring, and asynchronous transfer mode. The two most commonly used network operating systems today, Microsoft’s NT and Novell’s NetWare, are also introduced in this course. VLANs and the various forms of Ethernet technology such as Fast Ethernet are also explained. Students

develop system designs. *Prerequisites: CTEC 101 and 102 with grades of C or higher.*

Computer Science • MSAH Division

CPS 113 – BASIC Programming Using Microcomputers 3:3:0

Fundamentals of programming. A beginning programming language is introduced to the new programmer who defines and writes simple programs that highlight inherent data types and which place special emphasis on the interactive capabilities found in the language. Gradually, program design techniques are developed to enable the student to write more complex programs from a variety of fields in an efficient manner. These programs incorporate numeric and text data processing, single dimension array data structure processing, subprograms, file access, peripheral device control, and simulations in addition to conventional computer topics like searching and sorting. *Prerequisite: MATH 051 with a grade of C or higher.*

CPS 115 – Visual Basic Programming I 3:2:3

The concepts and techniques of programming in a Windows environment. Project assignments require students to demonstrate an understanding of BASIC programming structures and incorporate event-driven interfaces, decision-making structures, and arrays. An introduction to more advanced Visual Basic topics is included. *No prior programming experience is necessary. Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 051 with a grade of C or higher.*

CPS 116 – Visual BASIC Programming II 3:2:3

Continuation of CPS 115. Topics include: menu driven applications, incorporation of graphical images, additional controls and objects, data bound controls, database tables and reporting, an introduction to object oriented programming and communicating with other applications. Additional advanced topics are introduced as time permits. *A laboratory fee is required. Prerequisite: Visual Basic Programming I or equivalent.*

CPS 121 – JAVA Programming 3:3:0

Defining and writing simple programs that emphasize object-oriented programming. Programming concepts such as algorithms, data types, classes, methods, looping, decision-making, arrays, and files are explored. JAVA Applications and Applets will be developed using an appropriate development environment. Program design techniques will be developed to enable the student to write more complex programs from a variety of fields in an efficient manner. *This course is geared toward the*

computer science major but would benefit the general college student. Prerequisite: MATH 103 with a grade of C or higher.

CPS 135 – C Programming 3:3:0

An introduction to structured programming using the C language. C is a powerful language, rich in data types; its flexibility allows a wide range of applications that normally would be written in Assembly language through self-documenting high-level languages. An integral part of the course is exploration of the type of programming that is encouraged by C’s flexibility. *Prerequisite: CPS 113 or 115 or 121 with a grade of C or higher; or by permission of the instructor.*

CPS 161 – Computer Science I 3:3:0

Techniques of algorithm development and programming style. Two high level languages are employed for algorithm testing. A number of projects (e.g. character manipulation, polynomial operations, file processing) are assigned to the student for design, coding, and documentation. *Prerequisite: CPS 121 with a grade of C or higher.*

CPS 162 – Computer Science II 3:3:0

A continuation of CPS 161 that allows dynamic memory allocation. Projects involving data structures (stacks, queues, linked lists, trees, graphs, and numerical methods), string processing, recursion, searching, and sorting techniques are assigned to the student. Programming teams are used for project analysis and solution. *Prerequisite: CPS 161 with a grade of C or higher.*

CPS 230 – Object Oriented Programming 3:3:0

Object oriented or OO programming. Students are introduced to the concept of classes and how abstraction, encapsulation, and inheritance fit into the object paradigm. Students learn OO analysis and design. Syntax and its idioms are covered with particular emphasis on programming using OO. *Prerequisite: CPS 121 or 162 with a grade of C or higher; or with instructor permission.*

Court Reporting • BHET Division

CRT 101 – Court Reporting Theory I 6:6:0

Introduction to machine shorthand theory. Letters, words, brief forms, and phrases on stenotype machine are presented. The reporting profession is introduced.

CRT 102 – Court Reporting Theory II 6:6:0

Continuation and completion of machine shorthand theory with a goal of 60 words per minute. Computerized transcription and realtime writing are introduced. *Prerequisite: CRT 101.*

Court Reporting (continued) – Criminal Justice

<p>CRT 103 – English for Court Reporters 2:2:0 Introduction to proper usage of punctuation and grammar as they relate to material in the court reporting profession. <i>Corequisite: CRT 101.</i></p> <p>CRT 104 – Technology for Court Reporters 2:2:0 Introduction to CaseCATalyst software used in dictation and realtime translation. <i>Prerequisite: CRT 101. Corequisite: CRT 102.</i></p> <p>CRT 105 – Medical Terminology for Court Reporters 3:3:0 Introduction to construction and pronunciation of medical words, medical terminology, and anatomy and physiology. The application of terminology to stenotype machine is also covered. <i>Prerequisite: CRT 101.</i></p> <p>CRT 201 – Realtime Reporting I 5:4:2 Continuation of verbatim reporting. The course focuses on phrases and brief forms while introducing two-voice testimony, jury charge, and statements. Speed development to 100 words per minute. <i>Prerequisite: CRT 102.</i></p> <p>CRT 202 – Realtime Reporting II 5:4:2 Continuation of verbatim reporting. The course focuses on advanced vocabulary development. Speed development to 140 words per minute. <i>Prerequisite: CRT 201.</i></p> <p>CRT 203 – Realtime Reporting III 5:4:2 Continuation of verbatim reporting. The course focuses on speed building. Captioning is introduced. Speed development to 180 words per minute. <i>Prerequisite: CRT 202.</i></p> <p>CRT 204 – Realtime Reporting IV 5:4:2 Continuation of verbatim reporting. The course focuses on speed building. Speed development to 225 words per minute. <i>Prerequisite: CRT 203.</i></p> <p>CRT 211 – Court Reporting Procedures 2:2:0 Introduction to procedures used in all Court Reporting professions including official, freelance, captioning, and CART. <i>Prerequisite: CRT 202. Corequisite: CRT 203.</i></p> <p>CRT 291 – Realtime Reporting Internship 3:1:3 Forty hours of internship in the reporting profession and preparation for RPR Written Knowledge Exam. <i>Prerequisite: CRT 203. Corequisite: CRT 204</i></p>	<p>CJ 103 – Principles of Security and Loss Prevention 3:3:0 An introduction to security, safety and loss prevention in retail, industrial and institutional settings, including an overview of current issues affecting the security industry.</p> <p>CJ 104 – Police Operations 3:3:0 Introduction to the responsibilities of police and police agencies at the local, state and federal levels. Police operations are examined relative to effectiveness in crime control, delivery of services, and maintenance of order with particular emphasis on patrol operations and techniques.</p> <p>CJ 106 – Introduction to Corrections 3:3:0 An overview of correctional processes and procedures; including various types of programs and systems at the local, state, and federal levels. Victim and offender rights are also discussed.</p> <p>CJ 108 – Criminology 3:3:0 Development and causes of criminal and delinquent behavior; an overview of criminological theories; social norms and criminal law; patterns of crime, delinquency, and deviant behavior.</p> <p>CJ 109 – Instrumentation and Technologies 3:3:0 An introduction to the technologies presently utilized by criminal justice agencies. Current technological hardware and software available to agencies are discussed with a cost/benefit approach. Including, but not limited to, topics such as speed detection devices, computerization, and communications.</p> <p>CJ 130 – International and Domestic Terrorism 3:3:0 Study of the phenomena of international and domestic terrorism from the historical and criminal justice perspectives. The course provides historical and political viewpoints, followed by a study of the changing trends in security and justice.</p> <p>CJ 201 – Criminal Investigation 3:3:0 Techniques, principles, problems, and theories of criminal investigation. Emphasis is also placed on the questioning of witnesses and suspects; collection and preservation of evidence; preparation of cases.</p> <p>CJ 203 – Criminal Evidence 3:3:0 Evaluation of evidence and proof with regard to kind, degree, admissibility, competence and weight; studies based on court decisions as they relate to force, search and seizure, other legal aspects of evidence.</p> <p>CJ 205 – Traffic Administration 3:3:0 History of traffic control; traffic law; investigation of traffic accidents; the police role in education, engineering and enforcement.</p>	<p>CJ 206 – Criminalistics 4:3:3 Scientific aspects of criminal investigation at the crime scene and in the criminalistics laboratory. Includes preserving and processing fingerprints; tool impressions; analysis of hair, fibers, blood and narcotics; casts and molds; polygraph examination; and voiceprint identification. <i>A laboratory fee is required. Prerequisites: CJ 201 and CJ 203 or permission of the instructor.</i></p> <p>CJ 207 – Community Policing and Crime Prevention 3:3:0 Major aspects of community policing and crime prevention. Topics covered include types of community policing programs, political power, the media and public opinion, police authority, crime prevention programs, and crime prevention surveying.</p> <p>CJ 208 – Intermediate Criminalistics 4:2:4 A continuation of CJ 206. Forensic examination, identification and analysis of physical evidence in the criminalistics laboratory, including examination of hairs and fibers, documents, pathology, voice identification, and paint via modern methods and equipment. <i>A laboratory fee is required. Prerequisite: CJ 206.</i></p> <p>CJ 209 – Institutional Treatment of Offenders 3:3:0 Principles and philosophies underlying modern trends in the institutional treatment of offenders. Types of correctional institutions, sentencing, prison programming, life in prison, prisoners' rights and special issues related to imprisonment.</p> <p>CJ 210 – Noninstitutional Treatment of Offenders 3:3:0 Evaluation of the roles of public and private agencies concerned with the treatment of the offender in the community; the objective of probation, parole, and other community programs; half-way houses; work-release programs; prevention programs.</p> <p>CJ 211 – Juvenile Delinquency 3:3:0 Overview of the juvenile justice system, programs, and the legal methods of handling delinquents, including theories of juvenile delinquency; biological, psychological, and sociological factors in juvenile delinquency; and modern trends in prevention and treatment.</p> <p>CJ 212 – Criminal Law and Procedure 3:3:0 History, theory, and principles of criminal law with particular emphasis on the duties and responsibilities of officers enforcing various criminal laws.</p> <p>CJ 213 – Advanced Criminology 3:3:0 An in-depth review and analysis of crime causation, including biological, psychological, and sociological theories; criminal classifica-</p>
---	--	---

Criminal Justice • CASS Division

Criminal Justice (continued) – Dental Assisting

tion and typology; an examination of the criminal behavior systems; and application of theory to explain the causes of different criminal patterns.

CJ 215 – Criminal Justice Organization and Administration 3:3:0

Principles of management as they relate to organizational structures and activities of public and private police and corrections agencies. The development of policy, personnel administration, inspection procedures, performance evaluations, and planning and research are discussed.

CJ 220 – Physical Security and Safety 3:3:0

The use of physical controls for securing facilities. Topics include security surveying, site selection, facility layout, parking and traffic control, barriers, lighting, security and fire alarm systems, locking systems, and electronic access control devices. Insurance and safety standards are also discussed.

CJ 221 – Retail Security and Safety 3:3:0

Methods of prevention and control of internal and external losses in retail business, including employee theft, shoplifting, fraud, robbery and burglary. Safety responsibilities and liability problems are also discussed.

CJ 222 – Industrial Security and Safety 3:3:0

Industrial and manufacturing applications of security and safety principles, including fire prevention and control, control of internal and external theft, disaster and emergency management, transportation problems, and liability issues. The roles of O.S.H.A and other regulatory agencies are discussed.

CJ 223 – Loss Prevention Issues 3:3:0

An analysis of problems and issues in the security and loss prevention field specific to various institutions. Computer security, protection of proprietary information, terrorism, public relations, current legal issues, and other current topics are discussed.

CJ 240 – Ethics and Diverse Cultures 3:3:0

Contemporary issues in the criminal justice field, including an analysis of diversity factors and of common life problems of persons employed in the criminal justice field. (D)

CJ 245 – Criminal Justice Seminar in London 3:3:0

Comprehensive two-week study of the British criminal justice system, its historical development, operational procedures and policies, and the significance of the British system for American criminal justice. Students visit the City of London Police, Scotland Yard, Surrey County Constabulary, the Old Bailey, Bow Street Magistrates Court, Juvenile Court, and a number of penal institutions. Lectures are provided at the facilities by experienced

police, court, and prison personnel. Additionally, students have an opportunity to sit in on court sessions, observe English constables on patrol, and discuss the rehabilitation process with guards and prisoners. Visits to the National Police College, Tower of London, Police Museum, and a trip to Canterbury afford students an opportunity to better understand English culture and to develop a sense of its history in relation to the criminal justice process.

CJ 251 – Criminal Justice Internship 3:3:0

A minimum of 200 hours of work experience in an approved public safety agency, commonly defined as police, courts, corrections, or fire service, or in a commercial/ industrial security agency. The agency or industry selected must be approved by the Division administrator and be specifically related to the curriculum of the student. Requires a comprehensive final report and daily diary. *Limited to highly qualified students. Prerequisites: Sophomore standing; Division administrator's recommendation; minimum 3.0 GPA or permission of the instructor.*

Dental Assisting • MSAH Division

DA 171 – Dental Assisting I 4:2:5

Introduction to the dental profession. Topics include professional ethics, Pennsylvania dental-law, the members of the dental health team (their education, duties, credentials, and professional organizations); the principles and performance of four-handed operative dentistry; the use and care of equipment and instruments; storage, manipulation, and use of dental materials; sterilization and disinfection; and promotion of wellness. Laboratory practice supplements lecture topics. Pennsylvania dental law does not permit a dental assistant to perform certain procedures on patients in the clinical setting. Only those procedures legally permitted will be taught to clinical competence; all other procedures will be taught to laboratory competence.

DA 172 – Dental Assisting II 4:2:5

Continuation of DA 171, Dental Assisting I, with emphasis on dental materials and their applications in dentistry. Topics include but are not limited to: materials used in the specialty areas; placement and removal of rubber dam; fabrication of temporary crowns, custom trays, athletic mouth guards/fluoride and bleaching trays; final impression materials; denture (partial and full) repairs; placing/finishing/polishing temporary and permanent restorations; and instrument sharpening. Pennsylvania dental law does not permit a dental assistant to perform certain procedures

on patients in the clinical setting. Only those procedures legally permitted will be taught to clinical competence; all other procedures will be taught to laboratory competence.

Prerequisites: DA 171, 173, and 175 with grades of C or higher.

DA 173 – Dental Radiology I 4:3:3

Theory, history, science, and procedures of dental radiography. Topics include hazards of dental radiation; placement and exposure techniques; film equipment; processing techniques (manual and automatic); mounting, labeling, and filing radiographs; and sterilization and disinfection. The course also includes radiology laboratory sessions that require the student to expose, process, mount, evaluate, and file full-mouth series radiographs.

DA 174 – Dental Radiology II 3:2:2

Continuation of DA 173, Dental Radiology I, provides further experience with radiographs through the use of the bisecting technique, panoramic radiographs, occlusal and lateral oblique exposures. The use of the intraoral camera is practiced for educating the patients/clients about dental needs. The student learns to further differentiate between diagnostic and non-diagnostic radiographs, causes and prevention of errors, and identify anatomical landmarks. *Prerequisites: DA 173 and 175 with grades of C or higher; Pennsylvania Radiology Examination for Dental Auxiliary.*

DA 175 – Oral Anatomy 3:3:0

Study of the development, form and function of teeth (permanent and primary dentition) and supporting tissues. Included are the bones and muscles of the head; nerves, blood and lymph supply to the head and neck; salivary glands and sinuses.

DA 176 – Dental Specialties 3:3:0

The study of the physiology and pathology of the oral cavity as it relates to the eight dental specialties. The dental specialties are Endodontics, Maxillofacial and Oral Surgery, Periodontics, Orthodontics, Pediatrics, Oral Pathology, Prosthodontics, and Public Oral Health. The study of each specialty includes definition of the specialty oral conditions, health and disease conditions, laboratory techniques, instrumentation, materials used, and the dental assistant's responsibilities in each specialty. Additional areas of instruction include Forensic Dentistry and Pharmacology as they relate to each of the specialty areas. *Prerequisites: DA 171, 173, and 175 with grades of C or higher; current CPR certification.*

DA 178 – Dental Clinical Experience I 2:0:16

A first practical experience. Two days per

week students are assigned to area dental offices which will provide an opportunity to the student to apply knowledge and skills acquired from the classroom and laboratory sessions. Periodic seminars are provided on campus for students to share experiences and to discuss situations and/or problems encountered in the dental clinic office. Observation evaluation reports will be reviewed with the student. *Prerequisites:* DA 171, 173, and 175 with grades of C or higher; current CPR certification; HBV; PA Radiology Exam.

DA 179 – Dental Clinical Experience II 5:3:32

A four-week clinical experience in which the student is exposed to the office environment in its total operation. The clinical experience is supplemented with discussion and review on campus. Observation and evaluation reports are reviewed with the student. *Prerequisites:* Recommendation of the faculty; DA 172, 174, 176, 178, and 180 with grades of C or higher.

DA 180 – Dental Office Practice 3:3:0

Prepares the student for the various business-office aspects of dental practice. Topics include patient psychology, communication skills such as telephone technique and correspondence, maintenance of patient records, appointment control, recall systems, bookkeeping, filing, preparation of insurance forms, and maintaining supply inventories.

Dental Hygiene • MSAH Division

DH 100 – Introduction to Dentistry 1:1:0

Basic information about the practice of dentistry and dental hygiene for students with no prior experience in a dental office. Basic terminology, procedures and principles related to dental practice are presented for students who are interested in pursuing a career in dental hygiene. This introductory course provides a foundation for future courses within the dental hygiene curriculum.

DH 101 – Clinical Experience I 4:3:7

Introduction to disease-preventive oral health services. Study of intraoral structures provides a basis for understanding abnormal and disease states. Emphasis is placed on dental histories, examinations, barrier protection for both client and dental hygienist, sterilization techniques, and instrument use. The student learns to educate clients in home care. *Laboratory and insurance fees are required. Prerequisite:* BIOL 121 with a grade of C or higher. *CoRequisite:* DH 110 and 120.

DH 102 – Clinical Experience II 4:2:12

Preventive oral-care services for children and adults, including monitoring home care in a clinic-recare system. Refinement of clinical

techniques continues. *A laboratory fee is required. Prerequisites:* DH 101, DH 110, and DH 120 with grades of C or higher.

DH 110 – Dental Radiology I 3:2:2

Physics of radiation, principles of proper exposure techniques and processing of radiographs. Infection control and radiation safety are stressed. *Prerequisite:* BIOL 121 with a grade of C or higher.

DH 111 – Dental Radiology II 1:1:0

Interpretation of intraoral radiographs and introduction to extraoral radiography. Emphasis on accurate exposure as well as the dental hygienist's role in supervising maintenance of equipment, collaborating in exposure policies, and keeping records. *Prerequisite:* DH 110 with a grade of C or higher.

DH 120 – Dental Anatomy 2:2:0

The form, function, occlusion, and eruption of primary and permanent teeth. Study includes endodontic and coronal morphological considerations and periodontal health. *Prerequisite:* BIOL 212 with a grade of C or higher. *CoRequisite:* BIOL 245 and DH 110.

DH 121 – Periodontics I 2:2:0

Study of periodontal structures in a healthy state compared to stages of disease. Disease and treatments are studied on clinical, microscopic, and biochemical levels. *Prerequisites:* BIOL 245, DH 101 and DH 120 with grades of C or higher.

DH 130 – Medical/Dental Emergencies 1:1:0

Introduction to recognition, prevention, and assistance in emergencies with emphasis on the value of a team approach and the prevention of emergencies through use of medical histories. *Prerequisite:* DH 101 with a grade of C or higher.

DH 201 – Clinical Experience III 5:2:16

Use of diagnostic and preventive aids such as study models, pit and fissure sealants, and nutrition counseling. Dental specialties including orthodontics, endodontics, oral surgery, pediatric dentistry, and prosthodontics are discussed. Refinement of clinical techniques continues. *Laboratory and insurance fees are required. Prerequisites:* DH 102 and completion of all required science and Dental Hygiene courses with grades of C or higher; *corequisite:* HRIM 104.

DH 202 – Clinical Experience IV 4:1:16

Emphasis on the dental hygienist as a professional member of a dental team. Topics discussed include professional ethics, office practices, writing resumes, and conduct during an interview. Refinement of clinical techniques continues. *Prerequisite:* DH 201 with a grade of C or higher.

DH 210 – Dental Materials 2:2:2

Study of characteristics and use of dental materials. Opportunity is provided to manipulate common restorative materials. *Corequisite:* DH 201.

DH 221 – Periodontics II 2:2:0

Evaluating, planning treatment, and providing therapy for clients with periodontal disease. *Prerequisite:* DH 121 with a grade of C or higher.

DH 222 – Periodontics III 1:1:0

Evaluation of scientific information and study of current literature on periodontics and the need for continuing education. *Prerequisites:* DH 201 and DH 221 with grades of C or higher.

DH 230 – Oral Pathology 2:2:0

Recognizing the difference between normal and abnormal conditions of the mouth. *Prerequisites:* DH102 and DH 111 with grades of C or higher.

DH 233 – Community Dental Health I 1:1:0

The role of the dental hygienist as educator and resource person for the community. *Corequisite:* DH 201.

DH 234 – Community Dental Health II 1:1:0

Continuation of DH 233. *Prerequisite:* DH 233.

DH 240 – Pharmacology 2:2:0

An overview of the composition, dosage, therapeutic action indication, and effects of drugs used in dentistry. Drugs used in emergencies are discussed. *Prerequisites:* BIOL 122 and DH 102 with grades of C or higher; *corequisite:* HRIM 104.

Economics • CASS Division

ECON 201 – Principles of Economics I: Macro 3:3:0

Structure and operation of the American economy. National income, employment, and fiscal policy; money, monetary policy, and economic stability; American economic growth achievements, problems, and policies; international trade and monetary problems, and the world economy. (*Core B*)

ECON 202 – Principles of Economics II: Micro 3:3:0

Analysis of demand, supply, production costs, market structures, and resource allocation. Current economic policies and problems and other special topics such as government regulation, income distribution, and labor economics. *Prerequisite:* ECON 201 or permission of the instructor. (*Core B*)

Education • CASS Division

EDUC 101 – Foundations of Education 3:3:0

Introduction to the teaching professions and

Education (continued)

the world of education. Examines the historical, philosophical, psychological, and sociological foundations of American education. Purposes, structure, and impact of schools as well as teaching methodology, curriculum, and the teaching profession are discussed in relation to students, parents, and society. Also investigated are career opportunities and the latest ideas, methods and legal interpretations in the field of education.

EDUC 122 – Child Observation Strategies 1:1:3

Introduces methodologies used for observing and recording children's behavior. Purposes of child observation, analysis of data, objectivity, and confidentiality are addressed. Requires weekly three hour lab (minimum 26 hours) in program approved early childhood setting to practice observation and recording skills. *Prerequisites: Medical examination and Act 33 Clearances (child abuse and criminal record).*

EDUC 124 – Early Childhood Professional Practice Lab: Creative Arts 1:0:2

Student participates weekly in assigned early childhood classroom and demonstrates skills and strategies needed for planning and facilitating creative experiences with young children. The course includes observation and assessment of children's creative development and behaviors. The student must complete 26 lab hours (2 per week) and demonstrate satisfactory competence in lab skills. *Prerequisite: Medical examination and Act 33 Clearances (child abuse and criminal record). Corequisite: EDUC 254.*

EDUC 126 – Early Childhood Professional Practice Lab: Literacy and Language 1:0:2

Student participates weekly in assigned early childhood classroom and demonstrates classroom skills and strategies needed for planning and facilitating language and literacy learning experiences. This class includes observing, assessing and extending children's language and literacy development and skills. Must complete 24 lab hours (2 hours per week) in a program approved early childhood setting and demonstrate satisfactory competence in lab skills. *Prerequisites: Eligibility for ENGL 101, medical examination and Act 33 Clearances (child abuse and criminal record). Corequisite: EDUC 256.*

EDUC 128 – Early Childhood Professional Practice Lab: Curriculum 1:0:2

Student participates weekly in an assigned early childhood classroom and demonstrates skills and strategies needed for planning and facilitating curriculum experiences with young children. This class includes observation and assessment of children's learning, facilitating

learning experiences and projects. The student must complete 26 lab hours (2 hours per week) in a program approved early childhood setting and demonstrate satisfactory competence in lab skills. *Prerequisites: EDUC 122, 231, and 240 with a grade of C or higher; and medical examination and Act 33 Clearances (child abuse and criminal record). Corequisites: EDUC 232 or PSYC 212 and EDUC 258.*

EDUC 130 – Introduction to the Child Development Associate 1:1:0

Introduces students to the Child Development Associate (CDA) credential program and prepares students to document their competence working with young children. Examines the thirteen CDA functional areas and guides students in preparing for formal CDA assessment. *Prerequisite: Student must be working in a center-based or home-based Early Childhood setting.*

EDUC 131 – Child Development Associate Assessment and Portfolio Preparation 3:3:0

Prepares the student for assessment by the Council for Professional Development, leading to credentialing as a Child Development Associate. The student develops a competency portfolio according to standards of the Council and is observed and assessed functioning in one of these settings: infant and toddler, preschool, family child care, or home visitor. Students who intend to apply for CDA assessment at the conclusion of this course must meet the current training and experience requirements of the Council for Professional Recognition. *Prerequisites: EDUC 130 with a grade of C or higher, or permission of faculty in Early Childhood Education, and currently working in an early childhood classroom where the student can be observed.*

EDUC 132 – Fundamentals of Family Child Care 3:3:0

Introduces potential and existing child care providers to the essentials of operating family child care as a home-based business. Addresses the home environment, scheduling and programming for children, financial considerations, state regulations, family partnerships, and current issues.

EDUC 134 – Fundamentals of School-Age Care 3:3:0

Introduction to school-age child care. This class presents developmental theory of school-age children and how this theory applies to program planning, design, and implementation. It also includes age-appropriate guidance strategies, role and purpose of school-age care, activity planning, and licensing and national standards.

EDUC 202 – Introduction to Educating Children with Exceptionalities 3:3:0

An overview of the origins, status, and trends of special education, plus a general introduction to the characteristics of exceptional learners from elementary through secondary settings. Classroom practices as well as the psychological, sociological, and medical aspects of disabilities and giftedness are covered. Attention is given to orienting prospective teachers to working with the individual differences of children, in collaboration with other professionals and parents, and within inclusive educational settings. *Prerequisite: EDUC 101 or PSYC 101 with a grade of C or higher.*

EDUC 203 – Introduction to Classroom Instruction 3:3:0

An orientation to teaching. Lecture topics will include instructional strategies and supporting theories, planning, observation strategies, viewing teachers as decision-makers, differentiating instruction, classroom management, and portfolio development. Includes field experiences and reflection to identify effective classroom practices. *Twenty (20) hours of on-site classroom field experience is required. Restricted to Education Majors. Prerequisites: EDUC 101 with a grade of C or higher; medical examination (TB Tine Test); Act 151 Child Abuse Clearance; and Act 34 Criminal Record Check.*

EDUC 205 – Practicum in Family Child Care 6:2:18

Practicum in education. Students work in an approved family child care program for 18 hours a week (minimum 216 hours) and meet weekly to discuss their work experience in relation to teaching theory. A college supervisor observes and assesses students regularly. *Students must contact the program coordinator/facilitator eight weeks prior to the start of the semester to arrange placement. Prerequisites: EDUC 232 or PSYC 212, and EDUC 122, 231, 258, 128, 132, and ENGL 101 with a grade of C or higher; and any two of the following: EDUC 254 and 124 or EDUC 256 and 126 or EDUC 248 with a grade of C or higher. A GPA of at least 2.0; medical examination; First Aid certification; Act 33 Clearances (child abuse and criminal record); and permission of the Early Childhood program faculty. Corequisite: SPCH 101 or 104. A grade of C or higher in this course is required to graduate in the Early Childhood Education associate degree program.*

EDUC 208 – Early Childhood Education Practicum 6:2:18

Practicum in Early Childhood Education. Students work in a qualified early childhood

program for 18 hours a week (minimum 216 hours) and meet weekly to discuss their work experience in relation to teaching theory. A college supervisor observes and assesses students regularly. *Students must contact the program coordinator/facilitator eight weeks prior to the start of the semester to arrange placement. A grade of C or higher in this course is required to graduate in the Early Childhood Education degree program.*
Prerequisites: ENGL 101, EDUC 122, 128, 231, 258, and EDUC 232 or PSYC 212 with a grade of C or higher; any two of the following – EDUC 254 and 124 or EDUC 256 and 126 or EDUC 248 with a grade of C or higher; A GPA of at least 2.0, medical examination, First Aid certification, Act 33 Clearances (child abuse and criminal record), and permission of the Early Childhood program faculty. Corequisite: SPCH 101 or 104.

EDUC 231 – The Early Childhood Professional 3:3:0
 Introduction to the practical knowledge and skills needed to organize, setup, and manage an early childhood classroom designed to establish responsible, productive, and cooperative behavior in young children. *Several observations at child care facilities are required.*

EDUC 232 – Development and Behavior of Children: Birth-12 Years 3:3:0
 Comparison of theories of child development and examination of biological, environmental, and cultural influences on the growth of children from birth through twelve years. The course also includes relevance of developmental principles and characteristics to the care and education of young children with varying abilities. *Several observations of children are required. Prerequisites: Eligibility for ENGL 101 and completion of all reading requirements.*

EDUC 240 – Introduction to Early Childhood Education 3:3:0
 Review of the historical development of early childhood education and daycare movements in the United States. Topics include legislation, funding, philosophical theories, curriculum approaches, professional development, and current issues in Early Childhood Education. Short visits will be made to several types of early childhood programs.
Prerequisite: Eligibility for ENGL 051.

EDUC 242 – Health, Safety and Nutrition in Early Childhood Education 3:3:0
 Analysis of the health, safety and nutritional needs of preschool children in group settings; consideration of children with special needs; examination of state early childhood programs; strategies for teaching health and safety to young children.

EDUC 247 – Young Children with Special Needs 3:3:0
 Introduces the principles and rationale for partnerships between early intervention and early childhood education programs. Focuses on legislation, service delivery models, curriculum planning and classroom strategies, and roles of teachers and families early intervention. *Approximately 10 hours of field visits and observations at early childhood/intervention programs are required.*
Prerequisites: EDUC 232 or PSYC 212 and EDUC 122 with a grade of C or higher; or permission of the instructor; eligibility for ENGL 051, medical examination, and Act 33 Clearances (child abuse and criminal record).

EDUC 248 – Mathematics and Science for Young Children 3:3:0
 The development of mathematical and scientific thinking in the young child. Emphasis is on the teaching strategies and activities appropriate for young children. *A mathematics or science background is not required. Prerequisite: EDUC 122 with a grade of C or higher; Corequisite: EDUC 232 or PSYC 212; EDUC 231 and 258 are also recommended as pre- or corequisites.*

EDUC 249 – Early Childhood Education Program Administration 3:3:0
 Examines the administrative role of the child care director. Topics include: regulatory considerations, staffing, administrative responsibilities, financial management, facility development, client relations, marketing, and employee supervision. *Prerequisites: EDUC 232 or PSYC 212 with a grade of C or higher; nine credits in Early Childhood Education, or permission of the instructor or program coordinator.*

EDUC 250 – Family Focused Infant and Toddler Care 4:3:4
 Caring for and guiding infants and toddlers in group settings utilizing family-centered strategies. This course examines developmental characteristics and needs of all young children and the significance of family involvement in their care and education. Emphasis is on developing skills needed to provide stimulating early care and education. *A four hour per week (minimum of 39 hours) practicum in a campus child care facility is required. Prerequisites: EDUC 232 or PSYC 212, and EDUC 122 and 242 with a grade of C or higher; eligibility for ENGL 051; or permission of the instructor; medical examination; Act 33 Clearances (child abuse and criminal record).*

EDUC 254 – Creative Experiences in Early Childhood Education 3:3:0
 Introduction to the development of creativity

in the young child. Prepares students to plan, conduct, and evaluate creative activities in art, music, and movement in early childhood settings. *Concurrent enrollment in EDUC 124 is recommended.*

EDUC 256 – Early Childhood Literacy and Language Arts 3:3:0
 Study of the emergence of language and development of literacy in young children and implications for teaching. The course includes examination and assessment of research-based practices for facilitating and integrating literacy and language learning experiences throughout the early childhood curriculum. *Concurrent enrollment in EDUC 126 is recommended. Prerequisite: Eligibility for enrollment in ENGL 101.*

EDUC 258 – Curriculum Development in Early Childhood Education 3:3:0
 Developing a curriculum based on an understanding of the child's physical, mental, and social development. The course includes planning activities and using strategies compatible with theoretical models. Emphasis is on constructivist curriculum approaches in which children construct knowledge by actively participating in investigations of relevant and engaging topics. *Concurrent enrollment in EDUC 128 is recommended. Prerequisite: EDUC 122, 231, and 240 with a grade of C or higher; eligibility for enrollment in ENGL 101; medical examination, Act 33 Clearances (child abuse and criminal record); or permission of the instructor. Corequisite: EDUC 232 or PSYC 212.*

Electrical Occupations • BHET Division

ELOC 153 – Fundamentals of Electricity 4:2:4
 Presents basic electrical terms, units and Ohm's Law, analysis of series, parallel and series/parallel circuits, and the operation and use of batteries. The use of capacitance in DC currents and the operation of magnetic circuits are also covered. In addition, the course introduces alternating current waveforms, average and effective values, and capacitors and inductors in AC circuits. Reactance and impedance are defined. The operation of series and parallel AC circuits, resonance circuits (series and parallel), and polyphase systems are covered. *A laboratory fee is required.*

ELOC 157 – Electrical Wiring I 4:2:4
 Provides an introduction to residential wiring practices, including safety procedures and introduction to basic tools. Cutting, stripping, and splicing Romex wire, duplex and basic receptacles, lighting circuits, single-pole systems and three- and four-way systems are covered. Students wire combination

Electrical Occupations (continued) – Electronics

lighting/receptacle circuits, water heaters, baseboard heaters, dryers, range circuits and the rewiring of existing systems. Installing fused and fuseless panels is also covered. *A laboratory fee is required. Prerequisites: ELOC 153 and 172, and GTEC 130, or permission of the instructor or program coordinator.*

ELOC 163 – Electrical Wiring II 4:2:4

Introduces commercial wiring safety requirements, basic tools and related equipment. Installation of branch circuits, feeders, switches, receptacles and appliances are covered. In addition, students learn lighting terminology, fixture locations, installation, overcurrent protection, and emergency systems operations. *A laboratory fee is required. Prerequisite: ELOC 157 or permission of the instructor or program coordinator.*

ELOC 165 – Alarm and Phone Cabling 2:1:2

Installation, troubleshooting and repair of single- and multi-line systems for telephones, fax machines, and alarms. *A laboratory fee is required. Prerequisite: ELOC 157 or permission of the coordinator.*

ELOC 168 – Introduction to Fiber Optics 3:2:2

Introduction to fiber optics as used in modern communications systems. Students investigate the types, theory, and applications of fiber optics commonly used in the industry. Laboratory activities include cleaving, connecting, and installing fiber optic cable in simple circuits. *A laboratory fee is required. Prerequisite: ELOC 153 or permission of the program coordinator.*

ELOC 171 – Electrical Service 2:1:2

The procedures for safe installation of commercial and residential services. *A laboratory fee is required. Prerequisite: ELOC 163 or permission of the coordinator.*

ELOC 172 – National Electric Code 2:2:0

Layout of the National Electrical Code with emphasis on requirements for service, feeder, and branch circuits, conductor sizing and grounding. An analysis of appropriate wiring methods for residential and commercial buildings is provided.

ELOC 175 – Electrical System Troubleshooting 3:2:2

Skills and procedures for troubleshooting electrical circuits. Students learn to systematically identify problems, isolate probable causes, repair malfunctions, and establish preventative maintenance systems. Laboratory work is completed on live problems found in typical industrial settings. *A laboratory fee is required. Prerequisites: ELOC 153, GTEC 130, and IMT 104; or permission of the program coordinator.*

ELOC 291 – Cooperative Work Experience 3:0:15

A part-time work experience with an approved electrical employer. Under the supervision of a faculty member, the student performs duties and tasks consistent with topics studied in program courses. Open only to students who have earned 24 or more credits in an Electrical Technology program and who are enrolled in Electrical Technology, either the Certificate or Career Degree program. *Prerequisites: IA 201 and ELEC 163 or permission of the program coordinator.*

Electronics • BHET Division

ELEC 100 – Fundamentals of Electricity and Electronics 1:0:3

A survey of electricity and electronics for students whose interest is engineering technologies. The course investigates the use of measuring instruments and circuit components such as resistors, capacitors, inductors, diodes, and transistors. The theory and operation of DC and AC motors and an introduction to digital electronics are included. *A laboratory fee is required. Corequisite: MATH 051.*

ELEC 101 – Equipment Utilization 1:0:3

Introduction to basic electronic devices and special technical skills: use of voltmeters, ammeters, ohmmeters, and basic hand tools; electronic component identification, applications and testing; familiarization with schematic diagrams and soldering techniques; laboratory safety instruction. *Previous electronic experience is not required for this course. A laboratory fee is required. Corequisites: GTEC 111, MATH 051, and ELEC 100.*

ELEC 106 – Fundamentals of Electronics 4:3:3

Introduction to electronic devices and circuits including semiconductor diodes, rectifiers, special purpose diodes, bipolar transistors, JFETs and MOSFETs. Analysis of biasing circuits and small signal amplifiers such as common emitter, common collector, common base, common source, common drain, and common gate. *A laboratory fee is required. Prerequisite: ELEC 111.*

ELEC 108 – Applied Digital Electronics 3:2:3

Study of digital logic circuit fundamentals for technicians. Topics include numbering systems, logic gates, Boolean algebra simplification, and combinational logic circuits. *A laboratory fee is required. Prerequisite: ELEC 100 with a grade of C or higher. Corequisite: MATH 051.*

ELEC 111 – AC/DC Circuits I 4:3:3

Basic study of AC/DC circuits and magnetism. Topics include Ohm's and Kirchhoff's Laws applied to AC/DC circuits;

effect of resistance, inductance, and capacitance in AC/DC circuits; and solutions of circuits using Thevenin's Theorem and Norton's Theorem. *A laboratory fee is required. Prerequisite: ELEC 101; Corequisite: MATH 103.*

ELEC 125 – Introduction to PC Technology 3:2:3

Provides students with operational skills for MS-DOS and the MS Windows Operating System. An understanding of PC hardware and terminology is developed as well as basic computer operational skills. *A laboratory fee is required. Familiarity with word processing and the MS Windows Operating System.*

ELEC 126 – Installing and Troubleshooting PCs 4:3:3

A lab-oriented approach to understanding PC hardware. Upgrading and troubleshooting systems are stressed through hands-on experience. *A laboratory fee is required. Prerequisite: ELEC 125 or (CIS 127 and 210).*

ELEC 201 – Electrical Machinery 4:3:3

The study of the fundamentals of electro-mechanical energy conversion, the principles of magnetic induction, energy and forces, DC machines, and synchronous and induction motors. The computer is used as a problem-solving tool. *A laboratory fee is required. A laboratory fee is required. Prerequisite: ELEC 211.*

ELEC 203 – Electronic Circuit Design 4:3:3

Analysis of Class A, B, and C power amplifiers; frequency effects of small signal amplifiers; operational amplifiers; negative feedback; oscillators, timers. The computer is used as a problem-solving tool. *A laboratory fee is required. Prerequisites: ELEC 106 and ELEC 211.*

ELEC 211 – AC/DC Circuits II 4:3:3

Continuation of ELEC 111. Network analysis using vectors and complex notation; solutions of AC/DC networks using mesh and nodal analysis; solutions of AC/DC circuits using Thevenin, Norton, and superposition theorems; energy, power, and resonance in AC/DC circuits; and an introduction to single and polyphase transformer theory and PSPICE software as a circuit-analysis simulator are all included. *A laboratory fee is required. Prerequisite: ELEC 111. Corequisite: MATH 104.*

ELEC 213 – Digital Electronics 4:3:3

Basic computer functions. An introduction to number systems, such as binary, octal, and hexadecimal. A study of pulse generating and logic circuits. An introduction to Boolean Algebra, Karnaugh maps, and the basic logic networks, such as OR, AND, and NOT. An in-depth look at flip-flops and their applications

Electronics (continued) – Engineering

in counters, registers, adders, converters, etc. A brief survey of computers, microcomputers and D-to-A, and A-to-D converters. The computer is used as a problem solving tool. *A laboratory fee is required. Prerequisite: ELEC 108; Corequisite: MATH 103.*

ELEC 215 – Microprocessor Assembly Language Programming 3:2:3

The study of machine language programming and CPU architecture. Addressing methods, memory usage, and PC system assets are stressed. Emphasis is placed on solving technical problems. *A laboratory fee is required. Prerequisite: ELEC 125.*

ELEC 291 – Cooperative Work Experience 3:0:15

Part-time work experience with an approved electronic employer. Under the supervision of a faculty member, the student performs duties and tasks consistent with topics studied in program courses. *Open only to students who have earned 24 or more credits in the Electronic Engineering Technology program and who are enrolled in Electronic Engineering Technology, either the Certificate or Degree program. Prerequisites: ELEC 100, 101, 108 and 111.*

Emergency Medical Services • MSAH Div.

EMS 131 – EMT – Basic 3:2:1

Emphasis on patient assessment, initial treatment, and field communications. Topics discussed include basic anatomy and physiology, airway management and cardiopulmonary resuscitation, oxygen therapy, bandaging and splinting, and lifting and moving. *Corequisite: EMS 132.*

EMS 132 – EMT – Basic Field Experience 3:2:1

Supervised basic life support experience on emergency vehicles and in hospital emergency departments. *Corequisite: EMS 131.*

EMS 133 – EMT – Instructor 1:1:0

Theory and techniques of teaching in order to prepare for state EMT Instructor certification. State requirements and guidelines for maintaining certification are discussed. *(Enrollment priority is based on local needs.) Prerequisites: EMS 131 and EMS 132.*

EMS 200 – Introduction to Advanced Life Support 5:5:0

Emphasis is on human-based anatomy and physiology, human illness and disease and an introduction to drug dosage calculations. *Prerequisite: EMS 131 or Pennsylvania EMT State Certification.*

EMS 231 – Advanced Life Support I 5:5:0

Emphasis on patient assessment, shock and fluid therapy, pharmacology, and field communications. *Prerequisites: EMS 131 and EMS 132.*

EMS 232 – ALS Hospital Experience I 1:0:3

Clinical experience in hospital departments, including emergency, coronary care, intensive care, anesthesia, respiratory therapy, and morgue. *A laboratory fee is required. Pre- or corequisite: EMS 231.*

EMS 233 – Advanced Life Support II 6:6:0

Emphasis on respiratory and cardiovascular systems, trauma, central nervous system, soft-tissue injury, musculoskeletal systems, obstetrical/gynecological emergencies, pediatric/neonatal emergencies, and psychiatric problems. *Prerequisites: EMS 231 and EMS 232.*

EMS 234 – ALS Hospital Experience II 1:0:3

Clinical experience in hospital departments, including orthopedics, labor and delivery, pediatrics, and psychiatrics. *A laboratory fee is required. Pre- or corequisite: EMS 233.*

EMS 235 – Advanced Life Support III 3:3:0

Emphasis on complex medical emergencies and on rescue techniques. *Prerequisites: EMS 233 and EMS 234.*

EMS 236 – ALS Hospital Experience III 1:0:3

Clinical experience in hospital departments, emphasizing further work in labor and delivery, pediatrics, and psychiatrics. *A laboratory fee is required. Pre- or corequisite: EMS 235.*

EMS 237 – ALS Field Experience 3:0:12

Supervised internship on advanced life support vehicles. *(Offered by arrangement.) Pre- or corequisites: EMS 233 and EMS 234.*

EMS 238 – Introduction to Rescue 3:2:3

Rescue of patients trapped in vehicles and structures with emphasis on safety. *Prerequisites: EMS 131 and EMS 132.*

EMS 240 – Introduction to Emergency Medical Services 3:3:0

History and development of Emergency Medical Services, including current legislation and system models. Topics include delivery of services and levels of care. *Prerequisite: Permission of the instructor.*

EMS 241 – Emergency Medical Services: Externship 3:3:0

Supervised administrative experience in local EMS agencies. *(Offered by arrangement.) Prerequisite: EMS 240.*

EMS 242 – Emergency Medical Services: Management Issues 3:3:0

Current issues in the EMS system with a concentration on injury prevention and control strategies, principles of adult education, legal implications for EMS managers, and the application of management principles. Discussions will also consider ethics,

professional conduct, relationships with other health care providers, and the impact of specialty referral centers. *Prerequisite: EMS 240 or permission of the instructor.*

EMS 245 – ALS Field Summative Evaluation 1:0:3

Summative evaluation of supervised internship on advanced life support vehicles. This course is offered by arrangement with the Paramedic Program Director. *Prerequisite: EMS 237 with a grade of C or permission of the Paramedic Program Director.*

EMS 250 – Prehospital RN 7:3:12

Provides knowledge and skills required to prepare the entry level student desiring to become a prehospital registered nurse (PHRN). The emphasis is on the role of the PHRN, the recognition, assessment, and management of medical and traumatic emergencies. The PHRN is qualified by successful completion of a competency based educational program of clinical, didactic, and practical instruction in advanced emergency care practices. *A liability insurance fee is required. Special admissions process: RN licensure, transcript required and permission of the Paramedic Program Director.*

Energy • MSAH Division

ENGY 111 – Introduction to Energy Alternatives 3:3:1

Patterns of energy use, principles of energy conversion for traditional and non-traditional sources, and conservation techniques. Environmental, social, political, and economic implications are discussed in the context of resource availability and distribution. The laboratory develops facility in the measurement of energy and energy flow. *Field trips may be required. A laboratory fee is required. Pre- or corequisite: MATH 103.*

ENGY 215 – Energy Evaluation and Planning 3:2:3

Energy usage and environmental effects in business, industry, and residences. Topics include energy auditing and efficiency planning. Laboratory exercises feature site visits, energy assessments, and recommendations. *A laboratory fee is required. Prerequisite: Permission of the instructor.*

Engineering • BHET Division

ENGR 100 – Engineering Orientation 1:1:1

The role of the engineer/technologist in an industrial society; areas of specialization and functions of the engineer. Ethics, career suitability, and problems of transfer will be discussed. Guest speakers and off-campus events augment the course. *Fee required for the Engineering Interest Inventory. Corequisite: ENGL 003 or higher.*

Engineering (continued) – English

ENGR 203 – Engineering Geoscience 4:3:3

Applications of geology to engineering and technology. Provides a foundation in geology so engineers and geospatial technologists can interact with professional geologists and understand geologic reports pertinent to engineering projects. Major topics include fundamentals of earth materials and processes, identification of rocks and minerals, engineering problems involving geologic media and processes, soil classification and testing, engineering geology investigations, and geoscience application of remote sensing. Laboratory emphasizes practical engineering problems requiring use of geology. *Prerequisites: MATH 103 and 104 with a grade of C or higher.*

ENGR 213 – Statics 3:3:0

The characteristics of a force; equilibrium of coplanar force systems; non-coplanar force systems; couples; analysis of structures; friction; centroids; moments of inertia. *Prerequisite: MATH 122. Corequisite: PHYS 211.*

ENGR 214 – Dynamics 3:3:0

Rectilinear and curvilinear translation, rotation and plane motion; work and energy; impulse and momentum; mechanical vibrations. *Prerequisite: ENGR 213.*

ENGR 271 – Design for the Environment 3:3:0

Examines the effects of progress and advances in technology on the global environment. Product design and manufacturing processes are studied for their effects on the environment.

ENGR 291 – Engineering Cooperative Experience 3:0:15

Faculty-monitored employment in an engineer's facility for a minimum of 15 hours per week. *Open only to students with more than 30 earned credits in the Engineering transfer program. Prerequisite: Restricted, see program coordinator.*

English • CASS Division

ENGL 001 – Strategy-Based Reading I 3:3:0

Courses in reading improvement open to all students. While comprehension strategies are emphasized for most students, the courses are also intended to serve those students who need to improve their vocabulary and reading fluency. *Students required to take reading may have to work through more than one semester. Students who must enroll in these courses will be identified through the College Testing and Placement Program and will be notified. STUDENTS REQUIRED TO ENROLL IN READING MUST MAINTAIN THEIR*

ENROLLMENT OR THEY WILL BE DROPPED FROM OTHER ENGLISH COURSES. Prerequisite: ENGL 001 entry-level performance in the College Testing and Placement Program.

ENGL 002 – Strategy-Based Reading II 3:3:0

Courses in reading improvement open to all students. While comprehension strategies are emphasized for most students, the courses are also intended to serve those students who need to improve their vocabulary and reading fluency. *Students required to take reading may have to work through more than one semester. Students who must enroll in these courses will be identified through the College Testing and Placement Program and will be notified. STUDENTS REQUIRED TO ENROLL IN READING MUST MAINTAIN THEIR ENROLLMENT OR THEY WILL BE DROPPED FROM OTHER ENGLISH COURSES. Prerequisite: ENGL 002 entry-level performance in the College Testing and Placement Program, or ENGL 001 with a grade of C or higher.*

ENGL 003 – Strategy-Based Reading III 3:3:0

Courses in reading improvement open to all students. While comprehension strategies are emphasized for most students, the courses are also intended to serve those students who need to improve their vocabulary and reading fluency. *Students required to take reading may have to work through more than one semester. Students who must enroll in these courses will be identified through the College Testing and Placement Program and will be notified. STUDENTS REQUIRED TO ENROLL IN READING MUST MAINTAIN THEIR ENROLLMENT OR THEY WILL BE DROPPED FROM OTHER ENGLISH COURSES. Prerequisite: ENGL 003 entry-level performance in the College Testing and Placement Program, or ENGL 002 with a grade of C or higher, or completion of ENGL 002 exit criteria while a student in ENGL 001.*

ENGL 026 – English as a Second Language 6:5:2.25

A skills-building sequence for non-native English speakers that teaches the grammatical structure, vocabulary, and sound system of American English. Integrated development of the listening, speaking, reading, and writing skills within each level. Focus on both fluency and accuracy. *Students who must enroll in ESL courses will be identified through the ESL portion of the College Testing and Placement Program. Prerequisite: ENGL 026 performance in the ESL portion of the College Testing and Placement Program at the ENGL 026 entrance level.*

ENGL 027 – English as a Second Language 6:5:2.25

A skills-building sequence for non-native English speakers that teaches the grammatical structure, vocabulary, and sound system of American English. Integrated development of the listening, speaking, reading, and writing skills within each level. Focus on both fluency and accuracy. *Students who must enroll in ESL courses will be identified through the ESL portion of the College Testing and Placement program. Prerequisite: ENGL 026 with a grade of C or higher, or meeting the ENGL 026 exit criteria through the ESL portion of the College Testing and Placement Program.*

ENGL 028 – English as a Second Language 6:5:2.25

A skills-building sequence for non-native English speakers that teaches the grammatical structure, vocabulary, and sound system of American English. Integrated development of the listening, speaking, reading, and writing skills within each level. Focus on both fluency and accuracy. *Students who must enroll in ESL courses will be identified through the ESL portion of the College Testing and Placement Program. Prerequisite: ENGL 027 with a grade of C or higher, or meeting the ENGL 027 exit criteria through the ESL portion of the College Testing and Placement Program.*

ENGL 029 – English as a Second Language 6:5:2.25

A skills-building sequence for non-native English speakers that teaches the grammatical structure, vocabulary, and sound system of American English. Integrated development of the listening, speaking, reading, and writing skills within each level. Focus on both fluency and accuracy. *Students who must enroll in the ESL courses will be identified through the ESL portion of the College Testing and Placement Program. Prerequisite: ENGL 028 with a grade of C or higher, or meeting of the ENGL 028 exit criteria through the ESL portion of the College Testing and Placement Program.*

ENGL 050 – Basic English Workshop 3:3:0

Development of clear sentences, paragraphs, and short essays with emphasis on basic grammar and usage skills. *A grade of C or higher in this course, which includes satisfactory completion of a final writing project, qualifies the student for ENGL 051. Prerequisite: Placement through the College Testing and Placement Program.*

ENGL 051 – English Essentials 3:3:0

Development of clear, coherent paragraphs and longer essays with emphasis on basic grammar and sentence combining skills.

Attention is given to the formulation of thesis statements and the development of ideas. *A grade of C or higher in this course, which includes satisfactory completion of a final writing project, qualifies the student for ENGL 101. Prerequisite: Placement through the College Testing and Placement Program or completion of ENGL 050 or ENGL 029 with a grade of C or higher.*

ENGL 101 – English Composition I 3:3:0

The development of fluency in writing clear, forceful, effective prose. *A computer fee may be required. Prerequisite: Placement through the College Testing and Placement Program or completion of ENGL 051 with a grade of C or higher. English 003 is a pre- or corequisite.*

ENGL 102 – English Composition II 3:3:0

Builds on English 101, connecting thinking, reading and writing. Research, interpretation, and argumentation emphasized. *Prerequisites: ENGL 101 with a grade of C or higher and completion of ENGL 003 with a grade of C or higher; or its equivalent.*

ENGL 104 – Report and Technical Writing 3:3:0

Application of the principles of communication in the writing of effective reports and technical papers, including letters, memos, proposals, instructions, and research reports. *This course is primarily for technical students. Prerequisites: Eligibility for enrollment in ENGL 101 and completion of ENGL 003 with a grade of C or higher when required by the College Placement Test.*

ENGL 106 – Written Business Communication 3:3:0

Application of the principles of effective communication in the writing of memoranda, letters, and short reports. *This course is primarily for business students. Prerequisites: Eligibility for enrollment in ENGL 101 or completion of ENGL 051 with a grade of C or higher; and completion of ENGL 003 with a grade of C or higher when required by the College Placement Test.*

ENGL 107 – Creative Writing I 3:3:0

A workshop in the writing of works of fiction and non-fiction in shorter forms. *Prerequisite: ENGL 101 or permission of the instructor.*

ENGL 108 – Creative Writing II 3:3:0

Builds on the principles discussed in ENGL 107 for the writing of more sophisticated forms of poetry, fiction, and plays. *Prerequisite: ENGL 107 or permission of the instructor.*

ENGL 201 – Major English Writers I 3:3:0

Representative works of British literature from the Middle ages through the Restoration and Eighteenth Century. *Prerequisite:*

Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (Core A)

ENGL 202 – Major English Writers II 3:3:0

Representative works of British literature from the Romantic period to the present. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (Core A)*

ENGL 203 – Major American Writers I 3:3:0

Texts from the earliest period through 1865. Typical writers discussed include Edwards, Hawthorne, Poe, Douglass, and Dickinson. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (Core A)*

ENGL 204 – Major American Writers II 3:3:0

Writers from 1865 to the present. Typical works discussed include those by Twain, Cather, Hemingway, Baldwin, Morrison and major poets. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (Core A)*

ENGL 205 – World Literature I 3:3:0

Representative works from antiquity to the end of the European Renaissance. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (Core A)(D)*

ENGL 206 – World Literature II 3:3:0

Representative works from the Seventeenth Century to the present, including examples from Europe, the Middle East, Asia, Africa, and the Americas. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (Core A)(D)*

ENGL 207 – Introduction to Literature 3:3:0

Understanding and increasing human experience through literature. The major literary types (poetry, fiction, and drama) are defined and illustrated through examples drawn from English and American literature as well as other literatures of the world. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (Core A)*

ENGL 217 – African – American Literature 3:3:0

Race, class, gender, and politics as portrayed in African-American literature from colonial times to the present. The emphasis is on the ways African-American writers have depicted

the perils and promise of reconstruction, the migration to urban life, and topics in contemporary literature. The course also examines how historical and political movements account for various ways the urban experience is represented and how it is reflected in the shape of the narrative itself. *Prerequisites: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement program. (Core A)(D)*

ENGL 246 – Shakespeare 3:3:0

Reading of six or more plays. Included will be examples of comedies, tragedies and histories. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program.*

ENGL 247 – English Arthurian Literature 3:3:0

A survey of the literary tradition of Arthurian romance in Western thought, beginning with medieval writings on courtly love as seen through legends of King Arthur, and tracing that tradition through European literature to the present. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program.*

ENGL 265 – Women Writers 3:3:0

Analysis of representative works by major female writers from antiquity to the present. Works include short stories, poems, novels and essays. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (D)*

ENGL 267 – Banned Books 3:3:0

The study of representative works of poetry and prose banned in the U.S. and around the world by courts, schools, churches, and governments. Topics include the legal and ethical issues of banning and the politics of censorship. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program.*

ENGL 269 – Native American Literature 3:3:0

Short stories, poems, novels, and essays by American Indian writers. The readings explore such topics as identity, cultural tension, and religion in the American Indian experience. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (D)*

ENGL 278 – American Short Story 3:3:0

Study of works of representative writers with emphasis on the development of an appreciative response to the American short

Courses 2008/2009

English (continued) – Environmental Specialist

story as a distinctive art form. Typical writers studied are Crane, James, Hemingway, Wright, Faulkner, and O'Connor. *Prerequisite:* Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program.

ENGL 279 – Modern Short Novel 3:3:0

Study of works of the representative writers from several cultures with emphasis on the development of an appreciative response to the novella as a distinctive art form. Typical writers studied are Tolstoy, Conrad, Kafka, McCullers, and Bellow. *Prerequisite:* Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program.

ENGL 901 – Basic Communications Skills 1:1:0

Oral and written communications skills for diploma students. Emphasis on interview techniques, principles of interaction with co-workers, writing resumes and business correspondence; basic grammar and usage. This course may not be transferred to a certificate or degree program.

Entrepreneur • BHET Division

ENTR 103 – Product Management for the Entrepreneur 3:3:0

Covers topics necessary to manage products from the development stage through distribution. Topics include: prototype development, identifying resource needs, production, quality control and managing the product life cycle.

ENTR 201 – Marketing for the Entrepreneur 3:3:0

Designed specifically for the entrepreneur. This course offers a practical approach to marketing topics important to the entrepreneurial professional in new and/or small businesses. Market analysis, product development and positioning, market penetration, channel strategy and distribution, branding and corporate image. Students complete a comprehensive marketing plan tailored to their individual interest or business needs. *Prerequisite:* MGMT 121 with a grade of C or higher, or permission of the instructor.

ENTR 203 – Finance and Accounting for the Entrepreneur 4:4:0

Topics in finance and accounting necessary for the entrepreneur including: developing a financial plan, preparing a financial analysis, managing cash and company growth. Computerized accounting is also covered. Students complete a comprehensive financial plan tailored to their individual interest or business needs.

ENTR 271 – Entrepreneurial Capstone 3:3:0

Development of a comprehensive business plan to the point of refinement ready for

review by a potential lender or investor. The plan includes individual marketing, management and finance plans developed in courses previously taken. *Prerequisites:* ENTR 201, 203 and MGMT 121 with a grade of C or higher; or permission of the instructor.

ENTR 273 – Entrepreneurial Practicum 2:1:10

A minimum of 180 hours of work experience, over at least a 15-week period, in an approved internship applying the knowledge and skills acquired in the Entrepreneurial Leadership Certificate or Degree program. The internship must be industry-specific, and take place in either a retail, professional services, manufacturing or non-profit organization. Written documentation of internship activities and other performance-evaluation measurements are used to determine grades. The course must be scheduled for the student's last semester so that the student derives the most benefit from the experience. *Prerequisites:* ENTR 201, 203, and 205 with a grade of C or higher. *Corequisite:* ENTR 271.

Environmental Science • MSAH Division

ENVS 201 – Introduction to Environmental Science 4:3:3

This basic scientific principles employed in the study of the environment. The ecological effects of population density, energy production, water pollution, waste management, air quality, habitat alteration, and land use are studied. Laboratory work emphasizes habitat assessment, field sampling and analysis techniques. *A laboratory fee is required. Prerequisite:* High school academic chemistry or biology or equivalent. (Core C)

Environmental Specialist • MSAH Division

ENSP 100A – Environmental Seminar 1:1:0

Topical sessions on multidisciplinary environmental issues, research, assessment approaches, and implementation procedures. Activities involve participation by students, faculty, and environmental professionals. *Seminar may be taken more than once. A fee may be required. Prerequisite:* Permission of instructor.

ENSP 100B – Environmental Seminar 1:1:0

Topical sessions on multidisciplinary environmental issues, research, assessment approaches, and implementation procedures. Activities involve participation by students, faculty, and environmental professionals. *Seminar may be taken more than once. A fee may be required. Prerequisite:* Permission of instructor.

ENSP 100C – Environmental Seminar 1:1:0

Topical sessions on multidisciplinary envi-

ronmental issues, research, assessment approaches, and implementation procedures. Activities involve participation by students, faculty, and environmental professionals. *Seminar may be taken more than once. A fee may be required. Prerequisite:* Permission of instructor.

ENSP 100D – Environmental Seminar 1:1:0

Topical sessions on multidisciplinary environmental issues, research, assessment approaches, and implementation procedures. Activities involve participation by students, faculty, and environmental professionals. *Seminar may be taken more than once. A fee may be required. Prerequisite:* Permission of instructor.

ENSP 160 – Professional Issues 1:1:0

Overview of the Environmental Specialist career and transfer programs. Topics include the history, scope, and trends of environmental technology, career options, professional expectations and ethical issues, team participation, public communications, and environmental information sources.

ENSP 180 – Introduction to Environmental Technology 4:3:3

An overview of principles and techniques associated with resource utilization, environmental degradation, and environmental remediation. Various types of natural resources, solid waste, hazardous materials, pollution, and resource management approaches are considered. Included are recitations, field trips, laboratory exercises, and/or individual projects on environmental topics. *A laboratory fee is required. Prerequisite:* High school academic chemistry or equivalent with a grade of C or higher. *Pre- or corequisite:* BIOL 101 or 130 with a grade of C or higher, or permission of instructor.

ENSP 200 – Quantitative Field Methods 4:2:6

Sampling and analysis of air, soil, water, and other resources in natural and built environments. Students develop skills in the use of sampling devices, operation of field instruments, reporting, and the integration of field procedures with laboratory requirements. *A laboratory fee is required. Prerequisites:* GEOL 201, CHEM 100 or 101, and MATH 178 or 202 with grades of C or higher; or permission of instructor. *Pre- or corequisites:* BIOL 101 or 130 and ENGL 101 or 104 with grades of C or higher.

ENSP 205 – Quantitative Laboratory Methods 4:2:6

Equipment calibration, sample preparation and analysis, quality control, and quality assurance. Integrated with field sampling, monitoring, and legal requirements, with emphasis on chromatographs, spectrophoto-

Environmental Specialist (continued) – Fire Science

meters, and detection-measurement meters. Applications involve analysis of samples from sites and facilities. Evaluation and report preparation are emphasized. *A laboratory fee is required. Prerequisites: CHEM 101 or 100, CHEM 200, and MATH 178 or equivalent, with grades of C or higher; or permission of instructor. Pre- or corequisites: BIOL 101 or 130, and ENGL 101 or 104.*

ENSP 210 – Site Assessment and Planning 3:2:3

Principles and procedures of site evaluations and planning. Topics include aspects of environmental assessment, evaluation techniques, and physical survey methods. Applications include a site audit and evaluations for a plan development. *A laboratory fee is required. Prerequisites: GEOL 201, CHEM 101 or 100, and MATH 178 or 202 with grades of C or higher; or permission of instructor. Pre- or corequisites: BIOL 101 or 130, and ENGL 101 or 104 with grade of C or higher.*

ENSP 215 – Hazardous Substances and Safety 3:2:3

Hazardous substances generation, control, transport, and disposal. Topics include environmental contamination and clean-up, hazard communication, and safety regulations and procedures. Laboratory sessions include hands-on exercises and demonstrations in management of hazardous waste and spills. *A laboratory fee is required. Prerequisite: Physician's permission to participate in hands-on laboratory exercise with respirator, or permission of instructor. Pre- or corequisite: CHEM 100 or 101 with a grade of C or higher.*

ENSP 220 – Environmental Laws, Regulations and Compliance 3:3:0

The major laws, regulations, administrative directives, and aspects of compliance and enforcement pertaining to environmental protection, workplace safety, pollution and waste management. The responsibilities of environmental specialists for due diligence, recordkeeping, reporting, and legal testimony are emphasized. *Prerequisites: ENGL 101 or 104 with a grade of C or higher, and completion of any reading courses required by the College Testing and Placement Program. Pre- or corequisite: ENSP 180 or ENVS 201 with a grade of C or higher, or permission of program coordinator.*

ENSP 225 – Aquatic Resource Management 3:2:3

Aquatic resource topics such as watershed management, stormwater management, erosion control, wetland protection, and wetland delineation. Laboratory activities include the application of techniques for site evaluation and management. *A laboratory fee is required. Prerequisites: BIOL 101 or 130*

and MATH 178 or 202 with grades of C or higher. *Pre- or corequisite: GEOL 201, ENSP 180, or ENVS 201 with grades of C or higher; or permission of the program coordinator.*

ENSP 230 – Pollution Prevention and Waste Management 3:2:3

Techniques for preventing pollution, minimizing waste, and increasing energy efficiency. Emphasis is on conducting site evaluations, waste audits, and program monitoring. Laboratory exercises cover assessment and management strategies for a facility. *A laboratory fee is required. Prerequisites: CHEM 100 or 101, and MATH 178 or 202 with grades of C or higher; or permission of program coordinator.*

ENSP 235 – Environmental Systems and Sustainability 3:3:0

Strategies for comprehensive management of environmental systems with the goal of sustainability. Approaches studied include environmental accounts, total quality environmental management, and ISO 14001 management systems. *Prerequisite: Permission of program coordinator.*

ENSP 260A – Environmental Internship 3:0:20

A minimum of 300 hours of work experience, over at least 15 weeks, in an approved internship applying the knowledge and skills acquired in the Environmental Specialist program. Written documentation of internship activities and other performance-evaluation measurements are used to determine the final course grade. A student may take the course more than once. *Enrollment is limited to students in the Environmental Specialist program. Prerequisite: Permission of the program coordinator.*

ENSP 260B – Environmental Internship 3:0:20

A minimum of 300 hours of work experience, over at least 15 weeks, in an approved internship applying the knowledge and skills acquired in the Environmental Specialist program. Written documentation of internship activities and other performance-evaluation measurements are used to determine the final course grade. *A student may take the course more than once. Enrollment is limited to students in the Environmental Specialist program. Prerequisite: Permission of the program coordinator.*

statements; sources of credit; long-term capital structure; capital budgeting; investment decisions; financial institutions. *Prerequisite: ACCT 101.*

FIN 202 – Money and Banking 3:3:0

Organization and operation of the Federal Reserve System; government regulations; theories and policies on control of money supplies; national and state banking systems; the role of commercial banks.

Fire Science • BHET Division

FIRE 101 – Introduction to Fire Protection Technology 3:3:0

Introduction to fire protection. Course topics include the history of loss of life and property by fire; the review of municipal fire defenses; the study of the organization and functions of federal, state, county, and private fire protection; and career opportunities.

FIRE 102 – Fire Protection Codes and Practices 3:3:0

The study of the codes and standards relating to fire prevention and life safety in structures. The course material is supplemented by case studies of actual building plans. Course topics also include relationships between municipal building officials and fire prevention personnel, code enforcement issues, and the future of fire prevention codes. *Prerequisite: FIRE 101 with a grade of C or higher.*

FIRE 103 – Risk Management in the Fire Service 3:3:0

The study of the principles of risk management and the aspects of loss, including safety committees, accident investigation and risk management on the fireground. A five-step process is used to develop a departmental risk management program. Case studies allow the study of specific incidents of risk exposure. *Prerequisite: FIRE 101 with a grade of C or higher; recommended: GP 202.*

FIRE 105 – Building Construction for Fire Service 3:3:0

Review of building construction and building systems. Crafting principles and plan reviews are introduced. This introduction exposes the student to problems as they exist in the field. Fire ratings of building components are studied and integrated with applicable building codes. Relationships between fire protection and life safety are reviewed. Modern high-rise structures are studied to determine the unique problems they present to life safety and firefighting. *Prerequisite: FIRE 102 with a grade of C or higher.*

Finance • BHET Division

FIN 100 – Personal Money Management 3:3:0

General principles of establishing personal financial goals managing resources.

FIN 201 – Principles of Finance 3:3:0

Management of funds; interpreting financial

Fire Science (continued) – Geographic Information Systems

FIRE 107 – Fire Service Management 3:3:0

Theory and practice of public management applied to fire protection. Organizational structure and command are examined, as are personnel development and management, budgeting and fiscal management, and management systems and techniques within the context of contemporary fire protection. Course also covers policy development and advocacy by fire protection administrators in the public and private sectors.

FIRE 201 – Fire Protection Hydraulics 3:3:0

The study of hydraulic principles related to fire protection systems, such as sprinklers, standpipes, hoses, nozzles, pumpers, and water supply systems. Demonstrations illustrate and supplement the principles developed in class. *Prerequisites: MATH 051 and FIRE 101 with grades of C or higher.*

FIRE 202 – Chemistry of Hazardous Materials 3:3:0

A survey of the physical and chemical hazards of materials and their relationship to the loss of property and life. Hazardous materials chemistry and identification. *Prerequisite: FIRE 101.*

FIRE 204 – Fire Cause and Investigation 3:3:0

An analysis of incendiary fire investigations from the viewpoint of the field investigator, with an emphasis on the value of various aids and techniques in the detection of arson, collection and preservation of evidence, investigation, interrogation, related laws of arson, court appearance, and testimony. Case studies illustrate course topics. *Prerequisite: FIRE 101 with a grade of C or higher.*

FIRE 205 – Fire Alarm/Detection Systems 3:3:0

A study of the nature of public and private fire protection, with an emphasis on analysis of systems of fire detection, fire alarm, and fire communications. *Prerequisite: FIRE 201 with a grade of C or higher.*

FIRE 207 – Educational Methodology 3:3:0

Methods of teaching adults in fire service. Included are knowledge through identification of the five senses, principles of learning, lesson plans, and the components of an instructional objective. Application of skills is demonstrated through teaching with the use of lesson plans. Feedback from peers, instructors, and supervisory fire personnel is included to stimulate continually improved teaching without direct supervision.

FIRE 208 – Fire Suppression Systems 3:3:0

The fundamentals of fire extinguishing systems including automatic sprinklers, standpipe systems, and non-water systems. *Prerequisite: FIRE 201 with a grade of C or higher.*

FIRE 210 – Community Risk Management 3:3:0

Designed to teach the student how to develop an emergency response contingency plan for a facility or community, in order to deal with fires and other emergencies. Compliance with applicable regulations is stressed, as well as minimizing risks. Preparedness includes analyzing hazards, writing and implementing contingency plans, training employees for an emergency, and evaluating the effectiveness of a contingency plan.

French • CASS Division

FRCH 101 – Elementary French I 4:4:1

Fundamentals of French grammar; drill in structure and pronunciation; development of vocabulary. Aural-oral and reading skills are introduced in the classroom and the language laboratory. *Prerequisite: Eligibility for enrollment in ENGL 101. (Core A)*

FRCH 102 – Elementary French II 4:4:1

Continuation of FRCH 101 with increased emphasis on speaking and reading. *Prerequisite: FRCH 101 or equivalent. (Core A)*

FRCH 201 – Intermediate French I 4:4:1

Review of the fundamentals of French grammar; practice in conversation and composition; extensive reading and analysis of works of acknowledged cultural and literary merit. *Prerequisite: FRCH 102 or equivalent. (Core A)(D)*

FRCH 202 – Intermediate French II 4:4:1

Continuation of FRCH 201. Further practice in oral and written skills; continued reading of works of literary and cultural merit. *Prerequisite: FRCH 201 or equivalent. (Core A)(D)*

General Technology • BHET Division

GTEC 101 – Safety in the Workplace 3:3:0

A general course on safety in the workplace for any craftsman or technician. Topics include general safety, injury protection, fire safety, electrical safety, tool safety, regulatory agencies, and First Aid/CPR. Students participate in classroom demonstrations dealing with safety precautions and procedures.

GTEC 104 – Engineering Materials and Processes 3:2:3

Mechanical properties of materials used in manufacturing. Basic principles of materials selection, manufacturing processes, and the relationship of materials to manufacturing methods are explored. Material properties are examined in laboratory sessions with destructive and nondestructive tests. *A laboratory fee is required. Prerequisite: MATH 051 with a grade of C or higher.*

GTEC 105 – Customer Service 1:1:0

The skills required to communicate effectively and efficiently with customers and the overall importance of good customer service to the company. Sound customer service decisions, accuracy in documentation and reporting, and the importance of personal and workplace appearances are also covered.

GTEC 111 – General Technology Orientation 1:1:0

This orientation for technology students presents engineering technology and engineering careers for discussion as well as an introduction to available computer resources and software.

GTEC 130 – Electrical Blueprint Reading 2:2:0

The skills necessary to read construction drawings and documents as they relate to electrical trades. Course covers blueprint reading fundamentals, construction drawings, dimensional computation, and estimating. *A fee is required.*

GTEC 201 – Statics 3:3:0

Force systems on rigid bodies and the response of those bodies to the applied forces; equilibrium of planar and non-planar force systems; friction; centroids; moments of inertia. *Prerequisite: MATH 103 with a grade of C or higher. Corequisite: MATH 104.*

GTEC 202 – Statistical Quality Control 3:3:0

An introduction to improving manufacturing effectiveness through the application of fundamental statistical concepts to production processes. Control charting, including mean (X) and range (R) charts, are studied and applied as a technique to improve productivity through the analysis of process variability. *Prerequisite: MATH 051 with a grade of C or higher.*

GTEC 208 – Strength of Materials Lab 1:0.25:2.2

Laboratory exercises to support theory of CVTE 208. Labs include measurement of mechanical properties of materials, and structural testing. *A laboratory fee is required. Prerequisite: GTEC 201 with a grade of C or higher.*

Geographic Information Systems • BHET Div.

GIS 141 – Introduction to Geographic Information Systems (GIS) 3:2:3

Introduction to Geographic Information Systems (GIS) through an overview of the principles of physical geography and database administration. Specific skills such as map and database editing, spatial operations, integration of multiple data sources, and basics of cartography are covered. Students are also introduced to related technologies, such as remote sensing and Global Positioning Systems (GPS).

Geographic Information Systems (continued) – Gerontology

Building upon the introduction of GIS, students explore applications in general business as well as environmental and civil technology. Practical examples from government, environmental studies, and the utility industry are discussed. Hands-on experience with the analytical tools provided by GIS, such as spatial analysis, is applied to solve case studies. The class culminates in individual projects using multiple sources of GIS data to solve problems in the student's area of interest. *Prerequisite: CIS 105 with a grade of C or higher.*

GIS 151 – Cartographic Design for GIS 3:2:3

Provides an introduction to the techniques of cartography (map making) applicable to geographic information systems. Students will be introduced to cartographic principles, map design, map interpretation, map projections, map scale, types of thematic maps, and map accuracy. Techniques of map production in a geographical information system, including scanning, digitizing, and coordinate geometry will be introduced. The course will include map production and presentation techniques in a computer assisted environment. *Prerequisites: CAD 124 and GIS 141 with a grade of C or higher.*

GIS 161 – Data Acquisition and Remote Sensing 4:3:3

Fundamentals of data acquisition and remote sensing for geographic information systems. Topics include acquisition of existing data, data mining, documentation and metadata, data format conversion, data acquisition by remote sensing, photogrammetry, digitizing, scanning, and global positioning systems (GPS). Laboratory experience includes practical exercises using and interpreting remote sensing data and acquiring, downloading, and correcting GPS data. *Prerequisites: CAD 124 and GIS 141 with a grade of C or higher.*

GIS 163 – Advanced Geographic Information Systems 4:3:3

Advanced techniques and applications of geographic information systems (GIS). Lectures will cover advanced technical issues in GIS including complex data issues, databases, spatial modeling and analysis, elevation and terrain modeling, geographic analysis, and GIS management. Laboratory exercises give students hands-on experience with GIS software packages to handle geospatial information. *Prerequisites: GIS 151 and 161 with a grade of C or higher.*

GIS 201 – Professional Issues 1:1:0

Covers the professional practice of geospatial technology. Topics include history, scope,

and trends in geospatial technology, professional ethics and expectations, career options, team participation, and professional communications.

GIS 291 – Cooperative Work Experience in GIS 3:0:15

Work experience in an approved business or government setting involving use of the knowledge and skills acquired in the GeoSpatial Technology program. *Students will be monitored by an advisor from the college. Enrollment is limited to students in the GeoSpatial Technology program.*

Prerequisites: Completion of at least 30 credits in the GeoSpatial Technology program and permission of the program coordinator.

Geography • CASS Division

GEOG 101 – Physical Geography 3:3:0

Elements of the physical environment—climate, vegetation, soil, and landforms—with particular emphasis on conservation of resources and the nature and distribution of geographical regions.

GEOG 201 – World Geography 3:3:0

Introduction to the world's cultural regions (Europe, Asia, Middle East, Africa, Latin America), their interactions and interdependence (migrations, conflict, commerce), and the relationship between their respective human aspects (settlements, culture, economics, political systems), and natural aspects (climate, soils, vegetation, landforms, resources). *(Core B)(D)*

GEOG 230 – Introduction to Human Geography 3:3:0

A survey of human settlement patterns and cultural activities throughout the world. Special emphasis is placed on the patterns of human distribution, adjustments to the natural environment, and land use practices. *(Core B)(D)*

Geology • MSAH Division

GEOL 101 – Physical Geology 4:3:3

A study of the composition of the earth and the physical processes which tend to alter and shape the surface of the earth. Laboratory includes field trips in the vicinity of Harrisburg, the identification of common rocks and minerals, and the study and interpretation of topographic and geologic maps. *A laboratory fee is required. (Core C)*

GEOL 102 – Historical Geology 4:3:3

Geologic history of the earth; development of plant and animal life through geologic time; development of various rock formations; study of the past, present, and possible future environments of man; an integration of

geologic findings with those of other sciences. *Several field trips through central and eastern Pennsylvania are taken as part of the laboratory experiences. A laboratory fee is required. (Core C)*

GEOL 201 – Environmental Geology 4:3:3

A study of natural resources, environmental processes and their impact on mankind, man's alteration of his physical environment, and the consumption of natural resources. Topics include: water, soils, and atmospheric environments; mineral and energy resources; geologic processes; mining; land evaluation; trace-element geology; and waste disposal. *Laboratory and field trips are part of the course. A laboratory fee is required.*

Prerequisites: MATH 103 or equivalent with a grade of C or higher and CHEM 100, 121, or 101 with a grade of C or higher. (Core C)

German • CASS Division

GRMN 101 – Elementary German I 4:4:1

Fundamentals of German grammar; drill in structure and pronunciation; development of vocabulary. Aural-oral and reading skills are introduced in the classroom and the language laboratory. *Prerequisite: Eligibility for enrollment in ENGL 101. (Core A)*

GRMN 102 – Elementary German II 4:4:1

Continuation of GRMN 101 with increased emphasis on speaking and reading. *Prerequisite: GRMN 101 or equivalent. (Core A)*

GRMN 201 – Intermediate German I 4:4:1

Review of the fundamentals of German grammar, practice in conversation and composition; extensive reading and analysis of works of acknowledged cultural and literary merit. *Prerequisite: GRMN 102 or equivalent. (Core A)(D)*

GRMN 202 – Intermediate German II 4:4:1

Continuation of GRMN 201. Further practice in oral and written skills; continued reading of works of literary and cultural merit. *Prerequisite: GRMN 201 or equivalent. (Core A)(D)*

Gerontology • MSAH Division

GERT 100 – Introduction to Gerontology: Overview 1:1:0

This course provides an introduction to the study of gerontology and relevant aging resources. Attention is given to demographic trends, ageism, global and cultural issues, longevity, the geriatric workforce, and health care and social policy issues.

Gerontology (continued) – Health Information Technology

GERT 101 – Introduction to Gerontology: Social Services 1:1:0

This course provides an overview of the changing demographics as they relate to the area of social services—including federal/state mandates, public/private funding/for aging services, retirement, powers of attorney and advanced directives, and housing options. The history of the development of aging social services will also be addressed.

GERT 102 – Introduction to Gerontology: Allied Health 1:1:0

This course provides an overview of the physiology and pathology of aging. It addresses the nutritional needs of the elderly, drug therapy in the elderly, and sexuality in aging.

GERT 103 – Introduction to Gerontology: Psychosocial Issues 1:1:0

This course provides an overview of mental health and aging, psychiatric mental disorders, organic mental disorders, as well as maintenance and enhancement of mental function in later life.

GERT 104 – Introduction to Gerontology: Service Learning 1:1:0

This course is designed to provide two hours per week in a community senior care setting for the student to develop a personal relationship with an aging individual. Through journaling and class discussions, the student will reflect upon the implications of this experience. *Four class sessions are required along with 20 hours of volunteering.*

GERT 200 – Legal and Ethical Aspects of Aging 3:3:0

Addresses both traditional and current legal/ethical issues which impact the process of aging in American society. Special attention will be given to the ethical and legal concerns associated with elder abuse and neglect. *Prerequisites: SHC 100, 101, 102 and 103 with a grade of C or higher, or permission of the instructor.*

GERT 201 – Psycho-Emotional Aspects of Aging 3:3:0

Explores adult psychological development theories as they integrate with the emotional aspects of aging. Class work will involve use of the arts, guest speakers, active learning, class discussions and lecture to explore crucial psychological, cognitive and emotional processes involved in aging.

Government and Politics • CASS Division

GP 201 – The National Political System 3:3:0

Introduction to American government. In-depth discussion of the U.S. Constitution, interest groups and political parties, voting patterns and public opinion, the Congress,

President and the Supreme Court, civil rights, and civil liberties, foreign policy and economic policy. Occasionally offered in a videocourse format. *(Core B)*

GP 202 – The Politics of States and Cities 3:3:0

Introduction to the government and politics of states, cities, counties and townships, with special emphasis on Pennsylvania. Topics include state legislatures, governors, criminal justice systems, lobby groups, budget and taxing policy, and the politics of education, housing and welfare. The class may include meetings with state representatives, city council members, administrative leaders, county commissioners and lobbyists. *(Core B)*

GP 205 – International Relations 3:3:0

An introduction to the major influences among nation-states. Emphasis is on the historical emergence of the international system and the internal and external influences on foreign policies. Special attention is paid to international economic relationships among industrialized countries and between those countries and the less developed countries of the world. *(D)*

GP 208 – Comparative Politics 3:3:0

Introduction to the political institutions and politics of both industrial and industrializing (“Third World”) countries. Study is conducted cross-nationally so students learn how various political systems are organized and how these systems cope with a variety of political problems. Comparative topics include parliaments, political leaders and political parties, social and economic policies, and geography, as well as capitalism, Marxism, revolution, and the impact of industrialism on traditional societies. Comparisons are made among Great Britain, France, Germany, Russia, Japan, China, South Africa, and Brazil. Special emphasis is placed on the changes in the former Soviet Union. *(D)*

Health • MSAH Division

HLTH 101 – Healthful Living 3:3:0

A study of current knowledge concerning attitudes and practices which promote and maintain the present and future health of the individual and the community. This course emphasizes the prevention of disease and a positive health attitude. Nutrition, fitness, drugs, and sexuality are some of the topics discussed.

Health Information Technology • MSAH Div.

HIT 101 – Health Information Science I 3:3:1

An overview of the U.S. Healthcare System with emphasis on the evolution of the health information management profession. Topics

include: definition of the medical records, patient numbering systems, filing, storage and retrieval methods, medical records routing, and basic health information management department functions. *Prerequisite: acceptance into the HIT program.*

HIT 102 – Health Information Science II 3:3:1

Explores the uses of healthcare information with an emphasis on abstracting methods, compiling and reporting healthcare data. Students learn how to calculate hospital statistics. Methods of assessing the quality of healthcare are studied. Students also visit healthcare sites. *Prerequisite: HIT 101 with a grade of C or higher.*

HIT 105 – Health Record Classification and Nomenclature Systems: (ICD-9-CM Coding) 3:3:0

Principles and practices of coding health records, utilizing the International Classification of Diseases. *Prerequisite: HIT 102 with a grade of C or higher.*

HIT 201 – CPT-4 Coding/Advanced ICD-9-CM Coding 3:3:1

Principles and practice of outpatient and ambulatory care coding utilizing the CPT-4 system. Advanced ICD-9-CM coding is taught through case studies and actual health records. Reimbursement systems are also covered. *Prerequisite: HIT 105 with a grade of C or higher.*

HIT 202 – Health Information Management 3:3:0

Overview of the management of health information resources. Topics covered are management of equipment, budget, policy and procedure development, job descriptions, quality/productivity monitoring, and outsourcing. Typical organizational charts of hospitals and health information management departments are studied. Information on hospital-wide committees and medical staff organizations is presented. *Prerequisite: HIT 102 with a grade of C or higher.*

HIT 203 – Legal Aspects of Health Information 3:3:0

Medicolegal aspects of health records, protecting patient confidentiality, and adhering to state and federal laws. Accreditation and licensing agencies are also covered. *Prerequisites: HIT 102, HIT 105, and HIT 201 with grades of C or higher.*

HIT 221 – Directed Practice I 1:0:4

On-site directed practice in a healthcare facility. Principles and practice in the use of Master Patient Index, medical record storage and retrieval systems. Also included is discussion of the assembly, analysis, completion, transcription, and release of information. *Prerequisite: HIT 102 with a grade of C or higher.*

Health Information Technology (continued) – History

HIT 222 – Directed Practice II 2:0:8

On-site directed practice in a healthcare facility. Principles and practice of ICD-9-CM and CPT-4 coding, Diagnosis Related Groupings assignment, hospital and vital statistics, Atlas abstracting, quality improvement, utilization-management and registries. *Prerequisite: HIT 221 with a grade of C or higher.*

HIT 223 – Directed Practice III 3:0:12

On-site directed practice in a healthcare facility designed to reinforce classroom and laboratory learning by exposing the student to the framework and management of health information resources in a healthcare facility. Directed Practice III illustrates the health information manager's role within the department and the healthcare organization. *Prerequisite: HIT 222 with a grade of C or higher.*

Heating/Ventilation/Air Condit • BHET Div.

HVAC 100 – EPA Refrigerant Handling, Preparation, and Testing 1:1:0

Designed to provide the HVAC student with the information necessary to successfully complete the certification test for safe refrigerant handling as required by the U.S. Environmental Protection Agency (EPA). The course covers the laws pertaining to Section 608 of the U.S. EPA Clean Air Act including the environmental impact of refrigerants, refrigerant venting and handling laws that pertain to CFC, HCFC, and HFC refrigerants. Upon successful completion of the core section of the test, and one or more of the four Certification Type Test sections, the student will become certified in one of the following U.S. EPA Certification Types: Type I – Small Appliance Refrigeration Systems; Type II – High Pressure and Very High Pressure Refrigerant Systems; Type III – Low Pressure Refrigeration Systems; and/or Type IV – Universal (Type I, Type II, and Type III) Refrigeration Systems. *This course may be taken only once for credit. A laboratory fee is required. Prerequisite: HVAC 107 or permission of the coordinator.*

HVAC 101 – Basic Electrical Fundamentals 4:2:4

Introduction to basic electricity fundamentals. Topics include circuitry, meter usage, reading or wiring diagrams schematics and automatic controls as related to HVAC. *A laboratory fee is required.*

HVAC 103 – Fundamentals of Air Conditioning I 4:2:4

Designed to introduce the physics and science theory relevant to the understanding of air-conditioning fundamentals. Emphasis is placed on components and controls used in air

conditioning equipment. CFC federal laws are reviewed. *A laboratory fee is required. Prerequisite: HVAC 101 or permission of coordinator.*

HVAC 104 – Print Reading for HVAC 3:2:3

Introduction to blueprint reading and specification for air conditioning, heating and plumbing for residential, commercial, and industrial applications. Students learn to read basic construction drawings and understand specifications, symbols, and information contained on HVAC construction drawings. Course provides the information necessary to read and interpret a combination of architectural, plumbing, HVAC, and electrical plans for the sizing and installation of a variety of building equipment. The course presents the information necessary to use various kinds of scales and measuring devices, and to recognize standard symbols and abbreviations used on building blueprints. The student learns to read and interpret information presented on blueprints for ductwork, piping, electrical wiring, controls, and related equipment layouts. *A laboratory fee is required.*

HVAC 105 – Fundamentals of Air Conditioning II 4:2:4

Residential and commercial air conditioning equipment and controls. Installation and repair of equipment are also covered. *A laboratory fee is required. Prerequisite: HVAC 103.*

HVAC 106 – Plumbing/Carpentry for Trades 3:2:3

Basic principles, layout skills, and techniques used in hand and machine operations of plumbing and carpentry necessary to perform the installation of HVAC&R equipment and systems. Students learn to install basic plumbing potable water supplies and drainage systems necessary for the successful installation of HVAC equipment. Students obtain a basic understanding of the BOCA Plumbing code as it pertains to the HVAC industry. *A laboratory fee is required.*

HVAC 107 – Fundamentals of Low and Medium Temperature Refrigeration 4:2:4

Introduction to low-temperature and medium-temperature refrigeration systems and applications including special electrical and pressure controls associated with this equipment. *A laboratory fee is required. Prerequisite: HVAC 105 or permission of coordinator.*

HVAC 109 – Heating Systems 4:2:4

The fundamentals of heating systems including installation, trouble-shooting, controls and servicing. *A laboratory fee is required. Prerequisite: HVAC 101 or permission of coordinator.*

HVAC 110 – Fundamentals of Air Conditioning and Heating System Design 3:2:3

Introduction to entry-level design skills, principles, and theory necessary to identify, install, and operate various central A/C and heating systems for residential and light commercial installations. Basic hands-on skills required to calculate, design, and lay out air conditioning, heat pump, forced-air, and hot-water heating systems and their components utilizing both hand and computer-software calculations. *A laboratory fee is required. Prerequisite: HVAC 101 or permission of the coordinator.*

HVAC 200 – HVAC Control Systems 3:3:0

Introduction to the design theory of practical, simple, and complex control systems and identification of the control hardware components necessary to meet specific control parameters. Students develop an understanding of electric and electronic, pneumatic, and fluidic controls and control systems and the air conditioning systems to which they are applied. *Prerequisites: HVAC 101, HVAC 105, and HVAC 109; or permission of the coordinator.*

HVAC 201 – HVAC Building Systems 3:3:0

The study of advanced HVAC systems and equipment used in commercial, institutional, and industrial buildings and processes. The course deals with special equipment topics that require special design needs such as liquid chillers, computer rooms, clean rooms, laboratories, and test chambers and their service and maintenance. The course shows the proper design and equipment selection for these systems and their differences in standard cooling applications as well as their relationship to other building systems. *Prerequisites: HVAC 101, HVAC 105, and HVAC 109; or permission of the coordinator.*

HVAC 291 – HVAC Cooperative Work Experience 3:0:15

Faculty-monitored training with an HVAC employer for a minimum of 15 hours per week. Students learn and practice technical skills on the job. *Open to HVAC majors who have completed 24 or more credit hours in the HVAC program, or with permission of the program coordinator.*

History • CASS Division

HIST 101 – World History I 3:3:0

An overview of the historical development and interrelationships of the civilizations of Asia, Africa, Latin America, and Eastern and Western Europe. An examination of the political, economic, social and cultural themes from the earliest eras to 1500 is included. Important ideas, significant persons, and world

History (continued) – Home Building and Remodeling

views are described in the context of each civilization. (Core B)(D)

HIST 102 – World History II 3:3:0

A continuation of the topics discussed in HIST 101, emphasizing world development since 1500. (Core B)(D)

HIST 103 – History of the United States I 3:3:0

History of persons and events that have contributed to the American way of life. Topics include settlement of the new continent, the American Revolution, construction of a constitution and government and the development of an economic system. Problems of reconciling differences among various groups are considered in relation to the Civil War. (Core B)

HIST 104 – History of the United States II 3:3:0

History of persons and events that have contributed to life in America from the Civil War to the present. Topics include Reconstruction of the South; building of an Industrialized America, 1865-1898; taming of the West; the Spanish-American War; the Progressive Era of Theodore Roosevelt and Woodrow Wilson; World War I; the uncontrolled Twenties; the Great Depression; World War II; rebuilding a Tired America, 1945-1961; the New America, 1961 to the present. (Core B)

HIST 107 – The United States Since 1918 3:3:0

Survey of America's social, political, economic, and military experience since 1918, with emphasis on the Roaring Twenties, Great Depression, Roosevelt's New Deal, World War II, post-war problems, Cold War, Kennedy and Johnson, civil rights, Vietnam, Nixon and Watergate, and the Ford, Carter and Reagan presidencies. (Core B)

HIST 110 – America in Vietnam 3:3:0

Brief survey of Vietnamese geography, history, and culture, followed by an examination of America's military involvement in Vietnam between World War II and 1973. Emphasis is on why the United States entered the war, how America fought the war, and why President Nixon withdrew American troops. (D)

HIST 111 – Twentieth Century Europe 3:3:0

Development of European history from World War I to the present with emphasis on the development of modern Britain, France, Russia, Italy, and Germany, including the relation of Europe to the new nations of Africa and Asia.

HIST 120 – Military History of World War II 3:3:0

An introductory survey of World War II military strategy and operations on the European, African, and Asian fronts, beginning

with Hitler's 1939 invasion of Poland and ending with the Japanese surrender six years later. Attention will be given to the causes and results of the war, and emphasis will be focused on decisive battles, important military leaders and various Allied and Axis weapons. *This course is designed to meet the interests and requirements of career and transfer students. (Occasional offering)*

HIST 161 – The American Civil War and Reconstruction 3:3:0

Detailed examination of America's greatest crisis, including causes of the war, military aspects, Union and Confederate administrations, and diplomacy, along with the economics, technology, and social history of the period.

HIST 201 – Western Civilization I 3:3:0

Survey of the development of civilization in the Middle East, Greece, Rome, and Europe from ancient times through the Reformation. (Core B)

HIST 202 – Western Civilization II 3:3:0

Survey of the growth of civilization in Western and Eastern Europe after the Reformation to the present. (Core B)

HIST 205 – Black History 3:3:0

The experience of Blacks in America and the ways in which historians have regarded it. Included are an analysis of African origins and the beginnings of slavery, a description of the Black socio-cultural existence in a racist America, an examination of the roots of Black rebellion, and speculation about possible and probable futures. (D)

HIST 218 – Hitler and Nazi Germany 3:3:0

In-depth study of the period 1920-1945 in German history, focusing on German social, political, and economic history in relation to the rise and fall of Nazism. Topics include the Jewish holocaust, Hitler's personality, the structure of Nazism, and World War II.

HIST 219 – American Folklore 3:3:0

Folklore in America and its impact on American life and culture. Covers the types of folklore and examines their variations in many American ethnic groups.

HIST 220 – Pennsylvania German History and Culture 3:3:0

The German settlement of Pennsylvania and its impact on life and culture in the state. Topics include the history of religious groups, customs and beliefs, material culture and folk life.

HIST 221 – History of England 3:3:0

A general historical survey of England from Roman times to the present. Key events and persons are studied by examining the sites and structures in southern England and London

that are associated with them. *This course is part of the College's international educational program and is taught in England. Special fees apply.*

Home Building and Remodeling • BHET Div.

HBR 101 – Introduction to Home and Building Remodeling 3:2:3

An introduction to the broad field of home and building remodeling. Students develop skills in the use of basic tools and power equipment, blueprint reading, workplace safety, and construction techniques. Topics include basic applications of carpentry, masonry, plumbing, electricity, and finishing. *A laboratory fee is required.*

HBR 110 – Carpentry I 3:2:3

The first in a two part sequence of courses that develops skills in carpentry. Emphasis is on the application of basic carpentry skills in the construction and/or reconstruction of a frame dwelling. Students build footer, foundation, floor, wall, and roof modules using appropriate tools, equipment, materials, and techniques. *A laboratory fee is required.*

HBR 115 – Carpentry II 3:2:3

The second in a two part sequence of courses that develops skills in carpentry. Emphasis is on the application of advanced carpentry skills in the construction and/or reconstruction of a frame dwelling. Students continue their learning with complex problems of framing floors, walls, ceilings, and roofs. Problems of roof trusses, stairways, and other relevant topics are introduced. *A laboratory fee is required. Prerequisite: HBR 110.*

HBR 130 – Plumbing I 3:2:3

The first in a two part sequence of courses that develops skills in plumbing. Emphasis is on the application of basic plumbing skills in the residence or small commercial facility. Students install sinks, water closets, and baths using appropriate tools, equipment, materials, and techniques. *A laboratory fee is required. Prerequisite: Completion of ENGL 002 with a grade of C if required by the College Testing and Placement program.*

HBR 135 – Plumbing II 3:2:3

The second in a two part sequence of courses that develops skills in plumbing. Emphasis is on the application of advanced plumbing skills in the residence or small commercial facility. Students install water treatment systems, spas, hot tubs, water heaters, lawn sprinklers, and waste treatment systems. Students learn procedures for inspection and maintenance of plumbing systems. *A laboratory fee is required. Prerequisite: HBR 130.*

Home Building and Remodeling (continued) – Horticulture

HBR 140 – Concrete and Masonry 3:2:3

Develops basic skills in brick laying, block laying, stone laying, and concrete construction. Students learn to mix and match mortar, cut bricks and blocks, build walls and foundations to specification, form concrete, repair masonry problems, and estimate jobs. *A laboratory fee is required. Prerequisite: Completion of ENGL 002 with a grade of C if required by the College Testing and Placement program.*

HBR 150 – Interior Finishing 3:2:3

An introduction to interior finishing techniques in a residential or light commercial facility. Students develop skills in the installation of insulating materials, and in the application of plaster, drywall, paneling, and paint to interior surfaces. Skills are also developed in the specification and installation of interior doors, flooring and cabinets. *A laboratory fee is required. Prerequisites: HBR 101 and 110, and completion of ENGL 002 with a grade of C if required by the College Testing and Placement program.*

HBR 155 – Exterior Finishing 3:2:3

An introduction to exterior finishing techniques in a residential or light commercial facility. Students develop skills in the installation of ventilation systems, roof trim, gutters and downspouts, windows, and exterior doors. Skills are also developed in the specification and installation of exterior siding, veneers, and finishes. *A laboratory fee is required. Prerequisites: HBR 101, 110, 115, and completion of ENGL 002 with a grade of C if required by the College Testing and Placement program.*

HBR 160 – Building Demolition 3:3:0

An introduction to the problems associated with the demolition of residential and light commercial facilities. Students learn the legal and health related guidelines for tearing down all or part of a structure, and removing the debris. Topics include asbestos, lead-based materials, OSHA regulations, fire hazards, explosive conditions, water pollution, and permits. *Prerequisites: HBR 101, 110, 115, 130, and 140.*

HBR 170 – Historic Preservation 3:3:0

Offers a general introduction to the practice of historic preservation. Students learn how the field developed over time, particularly in the United States, and focus on the broad range of techniques that professionals use to renovate and reuse historic buildings, structures, and neighborhoods. *Prerequisites: HBR 101, 110, 115, 155, and ARCH 110 and 130.*

HBR 205 – Field Work Practicum I 3:0:15

On-site directed practice taken during the first full term of study in a Home and Building

Remodeling program. Students practice the skills of the HBR technician for two days per week while under the supervision of a faculty member. Emphasis is on the application of new and acquired skills in a “live work” environment. *Corequisites: HBR 101 and 110.*

HBR 210 – Field Work Practicum II 3:0:15

On-site directed practice taken during the second full term of study in a Home Building and Remodeling program. Students practice the skills of the HBR technician for two days per week while under the supervision of a faculty member. Emphasis is on the application of new and acquired skills in a “live work” environment. *Prerequisite: HBR 205.*

HBR 215 – Field Work Practicum III 3:0:15

On-site directed practice taken during the third full term of study in the Home Building and Remodeling – AAS program. Students practice the skills of the HBR technician for two days per week while under the supervision of a faculty member. Emphasis is on the application of new and acquired skills in a “live work” environment. *Prerequisite: HBR 210.*

HBR 220 – Field Work Practicum IV 3:0:15

On-site directed practice taken during the fourth full term of study in the Home Building and Remodeling – AAS program. Students practice the skills of the HBR technician for two days per week while under the supervision of a faculty member. Emphasis is on the application of new and acquired skills in a “live work” environment. *Prerequisite: HBR 215.*

HBR 291 – Cooperative Work Experience 3:0:15

Faculty monitored on the job training with a Home Building and Remodeling employer for a minimum of 15 hours per week. Students learn and practice technical skills on-the-job. *Open to all Home Building and Remodeling students who have completed 24 or more credit hours in a Home Building and Remodeling program with an overall GPA of 2.0 or higher, or with permission of the Program Coordinator.*

Horticulture • BHET Division

HORT 101 – Introduction to Horticulture 3:2:2

Basic principles of horticulture and its practical application. Topics include: taxonomic classification, cultivation of specific crops, plant propagation, safe use of pesticides, integrated pest management, fundamentals of floral design, and care and cultivation of houseplants. Industry career opportunities are discussed. *A laboratory fee is required.*

HORT 102 – Integrated Pest Management 1:1:0

Principles of pest control. This course prepares the student to take and pass the test

for their Pennsylvania Public Pesticide Applicator’s Certification.

HORT 110 – Greenhouse Production I 3:2:2

Basic greenhouse production theory and techniques. Hands-on production of Poinsettia plants for the holiday season, techniques of pricing, and marketing are also covered. *A laboratory fee is required.*

HORT 120 – Landscape Design I 3:3:0

An overview of the landscape design process, design principles, and elements to create a professional landscape plan. The emphasis is on design concepts, reading blueprints, site analysis, landscape graphics, plant specifications, and scale. Students produce simple landscape designs.

HORT 130 – Nursery Management 3:3:0

Designed to introduce the daily tasks associated with a successful plant nursery. Topics covered include an overview of the nursery industry, plant propagation, plant culture and production, nursery inventory and management, marketing, and other aspects of successful plant production.

HORT 140 – Landscape Construction 2:1:2

Design and construction principles for installing hardscape features, including patios, decks, walls, and other site amenities. This is a hands-on class and students gain experience installing various types of building materials, reading blueprints, and operating equipment. *A laboratory fee is required.*

HORT 150 – Landscape Maintenance 2:1:2

Covers aspects of proper landscape maintenance in residential and commercial settings including a wide variety of maintenance skills such as plant culture, turf management, client relationships, task scheduling, and proper care and use of maintenance equipment.

HORT 161 – Woody Plants I: Tree Identification 3:3:0

Concentrates on the identification, cultural requirements, and landscape use of ornamental deciduous and coniferous trees. Emphasis is on trees useful in the landscape including small flowering trees. Classes include lecture and field study in the college’s arboretum.

HORT 163 – Woody Plants II: Shrub Identification 3:3:0

Concentrates on the identification and cultural requirements of ornamental deciduous, coniferous, and broad leaved evergreen shrubs.

HORT 165 – Herbaceous Plants I: Perennials, Grasses, Vines 3:3:0

Identification, culture, and landscape uses of perennials, grasses, groundcovers, and vines. The emphasis is on spring and summer bloom-

Horticulture (continued) – Hotel, Restaurant, and Institutional Management

ing perennials and their cultivars, succession of bloom, and longevity in the landscape.

HHORT 167 – Herbaceous Plants II: Perennials, Annuals, Tropicals 3:3:0

Identification, culture, and landscape uses of annuals, tropicals and perennials. There is an emphasis on summer and fall blooming selections. Annuals include vegetative cultivars and those with landscape and commercial merit.

HORT 210 – Greenhouse Production II 3:2:2

Advanced greenhouse production techniques of bedding plants such as Ageratum, Marigold, Impatiens, Coleus, Begonia, Celosia, Geranium, Dusty Miller, etc. Techniques of pricing and marketing are also covered. Students produce floral crops for HACC's Arboretum and for sale. *A laboratory fee is required. Prerequisite: HORT 110 with a grade of C or higher.*

HORT 220 – Landscape Design II 3:3:0

In-depth course using skills learned in Landscape Design I. The emphasis is on hardscape and architectural elements, design aesthetics, contracting and estimating, CAD design, specialty gardens, working with clients, and special considerations for commercial design sites. Students produce detailed landscape designs from the client interview to final presentation. *Prerequisites: HORT 120, 161, and 165 with a grade of C or higher.*

HORT 291 – Horticulture Practicum 3:0:15

A hands-on learning experience. Students work a total of 240 hours (approximately 20 hours per week) in a 12-week summer session with campus horticulturalists in order to master a variety of horticultural tasks including pruning, transplanting, dividing, watering, mulching, and other skills as they rotate through the HACC Arboretums' gardens and landscape areas. *Prerequisites: HORT 161 or 163, and HORT 165 or 176, and HORT 150 with a grade of C or higher.*

Hotel, Restaurant, and Ins. Mgt. • BHET Div.

HRIM 100 – The World of Wine 1:0.67:1

A lecture laboratory course intended to acquaint the student with the fundamentals of wine. The course focuses on basic terminology, service standards, wine and champagne service, types of wine and the major wine producing countries and regions around the world. *A laboratory fee is required. The Pennsylvania Liquor Control Board allows persons 18 years of age and older to serve wines and spirits. Since some course activities involve wine sampling, including in-class activities and winery tours, students must provide the same documentation of age*

as would be required by a public establishment to be served alcoholic beverages.

HRIM 101 – Introduction to the Hospitality Industry 3:3:0

A study of the background and magnitude of the hospitality industry. Included will be knowledge of the various types of hospitality organizations and their organizational structures. Future trends of the industry and career opportunities are discussed.

HRIM 102 – Applied Hospitality Math 2:2:0

Development of the crucial math skills needed for success in food service and hotels. Basic math essentials as well as industry specific applications. Includes decimals, fractions, percentages, measurements, yields, and costing. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 010 with a grade of C or higher.*

HRIM 103 – Hospitality Marketing 3:3:0

Principles of marketing applied to hospitality operations. The course covers merchandising of food and beverages, menu design, advertising, brochure development, making a sale, and convention sales.

HRIM 104 – Nutrition for Food Service 3:3:0

Basic nutrition principles including the digestive system, the six nutrients and their roles in the body, food sources, nutrient recommendations, nutritional needs during the life cycle, nutritional factors in food selection and preparation, and development of healthful recipes and menus. Nutrition and disease including weight control, diabetes, cardiovascular disease, and cancer. Computerized analysis of menus and diets. Evaluation of nutrition information for the public.

HRIM 106 – Professional Bartending 1:0.67:1

A lecture laboratory course intended to acquaint the student with the fundamentals of barkeeping. The course focuses on basic terminology, service standards, bartending service, product knowledge, legal aspects of serving alcohol, sales transactions and operations, and the art of mixology. *A laboratory fee is required. The Pennsylvania Liquor Control Board allows persons 18 years of age and older to serve wines and spirits. Since some course activities involve in-class mixology activities, brewery tours and a lab experience as a bartender, students must provide the same documentation of age to be served alcoholic beverages as would be required by a public establishment.*

HRIM 107 – Fundamentals of Baking 3:1:6

Fundamentals of preparation of quick breads, yeast breads, cakes, cookies, and pastries. Proper use and care of equipment and

sanitation and safety are emphasized. *A laboratory fee is required.*

HRIM 110 – Menu Design and Marketing 3:3:0

The principles of marketing as applied to menu design and product promotion in hospitality operation. This course includes principles and practices used to develop a variety of menus for a specific market group, merchandising food and beverages, physical menu design, pricing, and promotion.

HRIM 113 – Sanitation and Safety 2:2:0

Principles of personal hygiene and proper dress, sanitation and safety; the Hazard Analysis Critical Control Point system for controlling the flow of foods; state and local health laws as they apply to food service facilities and persons; procedures to assure safe food; pest control; reducing accident rates among employees; first aid techniques. *This course meets certification requirements of the PA Department of Agriculture for owners, operators, and managers. Upon successful completion of a National Restaurant Association Educational Foundation exam administered at the end of the course, students receive a SERVSAFE certificate.*

HRIM 114 – Hospitality Accounting 3:3:0

Basic accounting with a focus on the steps in the accounting cycle in the hospitality industry.

HRIM 122 – Food Purchasing, Receiving, and Storing 3:3:0

Grades and specifications to assure quality of meats, vegetables, fruits and seafoods; procedures for receiving and storing foods to retain maximum levels of quality and nutritive value. *Prerequisite: HRIM 102 with a grade of C or higher.*

HRIM 125 – Dining Room Management 3:3:0

An introduction to basic dining-room operations, including dining-room management, supervision, equipment, personnel responsibilities, customer relations, table set-ups and napkin folding. Methods of American, French and Russian service are addressed. Types of food service operations, leadership, menu development, facility design, sanitation, safety and legal issues, labor and revenue control are covered.

HRIM 131 – Culinary Fundamentals I 3:3:0

A lecture and demonstration course. The course introduces the student to culinary theories and techniques. The focus is on the preparation and presentation of basic recipes as well as techniques used in a professional kitchen. Topics covered include: professionalism, knife skills, mise en place, plate presentation, principles of cooking, vegetables, potatoes, grains and pastas, dairy and cheeses,

Hotel, Restaurant, and Institutional Management (continued)

stocks and sauces, soups, and meats including beef, veal, lamb, pork, and poultry.
Corequisites: HRIM 113 and 132.

HRIM 132 – Culinary Techniques I 2:0:4

A laboratory course. The course introduces the student to culinary theories and techniques. The focus is on the preparation and presentation of basic recipes as well as techniques used in a professional kitchen. Topics covered include: professionalism, knife skills, mise en place, plate presentation, principles of cooking, vegetables, potatoes, grains and pastas, dairy and cheeses, stocks and sauces, soups, and meats including beef, veal, lamb, pork, and poultry. *A laboratory fee is required. Corequisites: HRIM 113 and 131.*

HRIM 141 – Culinary Fundamentals II 3:3:0

A lecture and demonstration course. The course focuses on the preparation and presentation of recipes as well as techniques used in a professional kitchen. Topics covered include: fish and shellfish, egg cookery, principles of the bakeshop, quick breads, yeast breads, pies, pastries, cookies, cakes and frostings, custards, creams, frozen desserts, and sauces. There is also an introduction to the garde manger kitchen including salads, dressings, fruits, sandwiches, and hors d'oeuvres. *Prerequisites: HRIM 113, 131 and 132 with a grade of C or higher; Corequisite: HRIM 142.*

HRIM 142 – Culinary Techniques II 2:0:4

A laboratory course. The course focuses on the preparation and presentation of recipes as well as techniques used in a professional kitchen. Topics covered include: fish and shellfish, egg cookery, principles of the bakeshop including quick breads, yeast breads, pies, pastries, cookies, cakes and frostings, custards, creams, frozen desserts and sauces. There is also an introduction to the garde en manger kitchen including salads, dressings, fruit, sandwiches, and hors d'oeuvres. *A laboratory fee is required. Prerequisites: HRIM 113, 131, and 132 with a grade of C or higher; Corequisite: HRIM 141.*

HRIM 151 – Culinary Fundamentals III 3:3:0

A lecture class. The course provides an introduction to a variety of world foods. The class examines local cooking methods, culinary specialties, and indigenous ingredients and products. Students develop weekly presentations identifying cultural, topographical, and social circumstances that have created diverse regional cuisines. The class also outlines advanced charcuterie and garde manger. *Prerequisites: HRIM 141 and 142 with a grade of C or higher; Corequisite: HRIM 152. (D)*

HRIM 152 – Culinary Techniques III 2:0:4

A laboratory course. The course provides an introduction to a variety of world foods. The class produces and examines food from various regions and countries to develop an understanding of local cooking methods, culinary specialties, and indigenous ingredients and products. Students are responsible for a country or region for which they must plan and design a three course menu. Students prepare and sample unique regional specialties. The class also employs advanced garde manger and charcuterie techniques. *A laboratory fee is required. Prerequisites: HRIM 141 and 142 with a grade of C or higher; Corequisite: HRIM 151.*

HRIM 205 – Restaurant Operations I 2:0:12

A laboratory course. The course introduces the student to the expectations and demands in an industry setting. Students participate in a “hands-on” learning experience. The students are introduced to various dining room and kitchen rotations. Areas may include: front of the house, receiving/storeroom, dish room, and basic production. *Day and evening rotations are required. The course is offered at BRICCO, HACC's teaching restaurant. Students must pass a five panel instant drug test prior to start date of class. Prerequisites: HRIM 113, 131, and 132 with a grade of C or higher.*

HRIM 206 – Restaurant Operations II 2:0:12

An intermediate course. The course develops student skills in a commercial restaurant operation. Students are provided with “hands-on” learning experiences through rotations in garde manger, meat, poultry and fish fabrication and cookery; front of the house including hosting and expeditor; and bakery. Areas may include production kitchen, line stations, butcher shop, dish room, cocktail lounge, and dining room. *Day, evening, and weekend rotations are required. The course is offered at BRICCO, HACC's teaching restaurant. Prerequisites: HRIM 141, 142, and 205 with a grade of C or higher.*

HRIM 207 – Restaurant Operations III: Culinary 2:0:12

An advanced operations course. The course exposes the student to the opportunities and the demands of the industry. Students are exposed to various culinary practices and techniques throughout the operation. *Day, evening, and weekend rotations are required. The course is offered at BRICCO, HACC's teaching restaurant. Prerequisite: HRIM 206 with a grade of C or higher.*

HRIM 208 – Restaurant Op III: Management 2:0:12

An advanced operations course. The course exposes the student to the opportunities and

the demands of the industry. Students are exposed to various “front-of-the-house” rotations and operational techniques. *Day, evening, and weekend rotations are required. The course is offered at BRICCO, HACC's teaching restaurant. Prerequisite: HRIM 206 with a grade of C or higher.*

HRIM 221 – Basic Foods: Preparation and Production 4:3:2.5

A lecture/laboratory course intended to acquaint the student with culinary fundamentals, including nutritive value, food chemistry, and food preparation in a professional kitchen. Course covers all the food groups including appetizers, entrees, salads, sauces, vegetables and grains, and baking. *A laboratory fee is required.*

HRIM 223 – Catering: Principles 1:1:0

Introduction to the logistics of catering, including legal regulations, menu selection, client relations, and costing. *Participation in a catering event may be required.*

HRIM 225 – Catering: Garnishing 1:0:3

Introduction to the use of edible garnishes to enhance food presentations. The course is conducted through demonstration visuals, and hands-on experience. *Participation in a catering event may be required. A laboratory fee is required.*

HRIM 226 – Catering: Hors D'Oeuvres 1:0:3

Introduction to the selection, preparation, serving, and storage of hors d'oeuvres as used in food service operations. Material is presented through lecture, demonstration, and hands-on experience. *Participation in a catering event may be required. A laboratory fee is required.*

HRIM 231 – Cost Control: Food and Labor 3:3:0

Covers the principles and procedures involved in an effective food and beverage control system, including standards determination, the operating budget, cost-volume-profit analysis, income and cost control, menu pricing, theft prevention, labor cost control, and computer applications. *Prerequisite: HRIM 102.*

HRIM 251 – Hospitality Supervision 3:3:0

Issues in management as they relate to the hospitality field. The course covers responsibilities of the supervisor to employees, leadership, communication, motivational skills, hospitality organizational management, and current issues in hospitality human resources management.

HRIM 265 – Cooperative Seminar and Field Practice 3:1:40

Full-time employment for ten weeks or the equivalent in on-the-job training with a one-

Hotel, Restaurant, and Institutional Management (continued) – Human Development

hour weekly seminar giving student and instructor the opportunity to discuss problems, progress reports; work visitations by the instructor. *For internship sites over 50 miles from Harrisburg, a student must receive instructor permission; there is an additional fee for excessive distance. Prerequisite: HRIM 101, 113, and 122 with grades of C or higher.*

HRIM 273 – Dietary Manager I 3:3:0

Designed to qualify students as food service department supervisors in health-care facilities. Topics include introduction to the health-care system with emphasis on state and federal regulations and to the functions and sources of nutrients, digestion and absorption, nutrition through the life cycle, foods of various cultures, menu planning, diet therapy and modification, nutrition interviewing and assessment, and care planning. *Corequisite: HRIM 274.*

HRIM 274 – Dietary Manager Experience I 2:1:5

A minimum of 75 hours of practical clinical nutrition and sanitation work experience (minimum 5 hours per week). Theories, techniques, and procedures of diet therapy, menu planning and sanitation are practiced. *Twenty-five hours must be directly supervised by a Registered Dietitian who has at least one year of experience. Corequisite: HRIM 273.*

HRIM 275 – Dietary Manager II 2:2:0

Designed to qualify students as food service department supervisors in health-care facilities. Topics include food purchasing and storage, recipe standardization, portion control, principles of food preparation, quantity cooking, and cost control. *Corequisite: HRIM 276.*

HRIM 276 – Dietary Manager Experience II 2:1:5

A minimum of 75 hours of practical food production, management and supervisory work experience (minimum 5 hours per week). Theories, techniques, and procedures for quantity food preparation and supervision and management will be practiced. *Twenty-five hours must be directly supervised by a Registered Dietitian who has at least one year of experience. Corequisites: HRIM 251 and 275.*

HRIM 279 – Hospitality and Tourism in London/Paris 3:3:0

A study-tour designed to familiarize future hospitality and travel professionals with the complexity of hotel, restaurant, and travel and tourism operations outside of the United States.

HRIM 291 – Culinary Arts Internship 3:0:22

Hands-on internship. A food service industry internship designed to prepare students for full-time employment. Students

refine the skills developed throughout the Culinary Arts Program. *Students participate in a 320 hour internship (three 8 hour shifts per week) at BRICCO, HACC's teaching restaurant. Alternate internships are available and must be approved by the Restaurant Chef Coordinator. Prerequisite: HRIM 207 with a grade of C or higher.*

Hotel/Motel • BHET Division

HM 112 – Front Office Operations and Management 3:3:0

Principles of the organization and operation of public lodging facilities. Front office management and procedures covering duties of the front-office staff, including public relations, sales, cash-control procedures, services to guests, accounting, and emergency procedures.

HM 154 – Supervisory Housekeeping 3:3:0

The responsibilities and managerial functions of executive housekeepers, including staffing, managing supplies, and solving engineering and maintenance problems. Attention is given to productivity and performance standards and communications with the front office.

HM 203 – Hospitality Law 3:3:0

The legal rights and responsibilities of hotel/motel, travel/tour, and food service operators. Attention is given to typical requirements and the possible consequences of failure to satisfy obligations.

HM 252 – Resort Management 3:3:0

The types of resorts and the history of their development along with related management techniques. Timesharing and condominium arrangements are also discussed. Specialized software for resort management is employed.

HM 254 – Hospitality Leadership and Management 3:3:0

Designed to acquaint students with quality and leadership issues facing today's hospitality industry: continuous improvement of quality service, guest interactions, goal setting, managing organizational change, power and empowerment, community involvement, and guest and property safety and security. *Enrollment is limited to students in the following programs: Hotel and Lodging Management, Hospitality Management, HRIM Restaurant/Food Service Management, HRIM Health Care, and Travel and Tourism.*

HM 269 – Hospitality Industry Computer Systems 3:3:0

The information processing needs of hospitality and tourism operations. The hardware, specialized software, and generic applications employed in hospitality management are

discussed. *Prerequisite: CIS 105 with a grade of C or higher.*

HM 270 – Convention/Conference Management 3:3:0

The scope and segmentation of the convention/conference business. Discussion is included of marketing strategies and the development of plans to meet specific client needs. Specialized conference-management software is employed. *Prerequisite: CIS 105 with a grade of C or higher.*

HM 278 – Hotel/Motel Management Cooperative Seminar and Field Experience 3:1:40

Full-time employment in a hospitality facility for ten weeks along with a one-hour weekly seminar on campus. The student gains experience in the various areas of the facility, including check-in, check-out, night audit, housekeeping, and sales and marketing. *Prerequisites: HRIM 101, 103; HM 112 and 154 with grades of C or higher.*

HM 282B – Hospitality Management 3:3:0

Designed to acquaint students with quality and leadership issues facing today's hospitality industry: continuous improvement of quality service; guest interactions; goal setting; managing organizational change; power and empowerment; community involvement; and guest and property safety/security issues.

Human Development • ABED Division

HD 101 – Career Development and Decision Making 3:3:0

Explores the process of career and decision making through career planning, work world exploration, self awareness, occupational research, and goal setting. This is a personalized, interaction-based course that utilizes short lectures, group exercises, personal inventories, audio-visual aids, and field interviews to accomplish its objectives. *An assessment fee is required.*

HD 102 – College Success I 3:3:0

Designed as part one of a First Year Experience. This course helps students successfully make the transition to college level courses. It is a foundational level and practical study skills course including such topics as learning styles, time management, goal setting, test preparation, effective reading, and beginning information literacy skills.

HD 103 – Becoming a Master Student 3:3:0

Provides an opportunity for students to learn and apply the attitudes and behaviors that lead to success in both college and life. Topics covered include choosing meaningful academic and personal goals, creating effective action plans, building support networks, developing self-esteem, accepting personal

Human Development (continued) – Humanities

responsibility, and maximizing learning.
Corequisite: Placement into ENGL 003.

HD 104 – Building Self-Confidence in Mathematics 1:1:0

Small-group course for students who have difficulty learning mathematics, a problem commonly described as math anxiety or avoidance. To develop self-confidence in mathematics, students progress through three steps: increase awareness of past attitudes and behaviors, change self-defeating attitudes about the subject, accept responsibility for learning and build learning patterns that work. Problem-solving strategies, study skills, and test-taking techniques are discussed.
Corequisite: Any mathematics course or permission of the instructor.

HD 105 – Orientation: Tools for Academic Success 1:1:0

Assists new students in the transition to college. Students become more knowledgeable of HACC’s campus and its programs, policies and services. Skills to succeed and cope with college are introduced.

HD 106 – Online Success 1:1:0

Gives students an introduction to online learning. Students learn to adapt previously mastered learning skills and develop new study habits which can lead to success in online coursework. Students learn to use technology and online course management tools to communicate, do research, work collaboratively, and submit assignments within the online environment.

Human Services • CASS Division

HUMS 100 – Introduction to Human Services 3:3:0

The first course in the Human Service program curriculum. The course is designed to give students an opportunity to decide whether to pursue a career in Human Services. Students are required to travel throughout the local community to: observe social, political, and service conditions, determine the implications for social programming, meet local officials and agency representatives, and conduct planned activities with clients of social service agencies. All student activity is under the instructor’s direct supervision.

HUMS 120 – Social Welfare Programs and Policies 3:3:0

A research and writing course, with emphasis on computer skills. The course surveys historical developments in and current systems of social welfare services, emphasizing changing attitudes of society. Included in the course are causality theories, funding, policy developments, and current social problems including the social response to

these. *Prerequisites: ENGL 101 and HUMS with a grade of C or higher; and GPA of 2.0 or higher.*

HUMS 121 – Skills and Methods in Human Services I 3:3:0

Basic interviewing skills, with emphasis on listening, responding, discussing difficult topics, and resolving conflicts. Self-awareness and ethics in the practice of human services are emphasized. *Prerequisites: ENGL 101 and HUMS 100 with a grade of C or higher; and GPA of 2.0 or higher.*

HUMS 122 – Skills and Methods in Human Services II 3:3:0

Case management procedures from intake to termination, including individual goal planning, development of service plans, referrals, and record keeping. Students have the opportunity to apply case management skills to several high risk client populations. *Prerequisite: HUMS 121 with a grade of C or higher; and GPA of 2.0 or higher.*

HUMS 206 – Human Development in a Social Environment 3:3:0

Emphasizes diversity. Cultural, religious, racial, and ethnic diversity are discussed as well as the diverse populations served by human services. The course examines the ecological model, describing the effects of the social environment on human development and the reciprocal relationship between the individual and the environment. There is also a focus on changes across the lifespan and the uniqueness of the individual. Evaluation and assessment of problems faced by clients of human services are also discussed.

Prerequisites: ENGL 101 and HUMS 100 with a grade of C or higher; and GPA of 2.0 or higher. (D)

HUMS 215 – Field Work Practicum 4:2:16

Human services practicum. Students work in human services agencies for 16 hours each week for 15 weeks and meet on campus weekly to integrate classroom learning with job performance. The emphasis is on students assuming the human services worker role and working directly with clients. There is also a particular focus on the human services agency as an organization, working with agency staff, and goal planning. *Prerequisites: HUMS 122 and SOCI 211 with a grade of C or higher; and GPA of 2.0 or higher.*

Humanities • CASS Division

HUM 101 – Modern Culture and the Arts 3:3:0

Broadens the student’s perception of and appreciation for the humanities by exploring the contribution of the arts to the individual and to society. Emphasis is given to modern

developments in such areas as the visual, performing, literary, and environmental arts. Concepts basic to a systematic understanding of the humanities in relation to everyday life are examined through a variety of media and aesthetic experiences. *Prerequisite: Eligibility for enrollment in English 003 or higher. (Core A)*

HUM 113 – Cross-Culture Studies 3:3:0

The major cultures of the world and the philosophic, religious, and humanistic influences upon cultures. The course focuses on understanding the similarities and differences between the cultures and the culture of the United States and on developing the intercultural appreciation and understanding necessary to function effectively in the global community. (D)

HUM 114 – Chinese Arts and Culture 3:3:0

An overview of Chinese culture as revealed in religion, art, literature, drama, music and film. (D)

HUM 115 – Architecture: Aesthetics and History 3:3:0

An introductory class that seeks to create an awareness and appreciation of the built environment. Architecture is examined as a cultural phenomenon as well as an artistic and technological achievement. Function, structural principles, elements of design, and a chronological survey of western architecture development are covered. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (Core A)*

HUM 116 – Introduction to Lesbian and Gay Studies 3:3:0

An introductory interdisciplinary course in lesbian and gay studies. Emphasis is on literature, popular culture, and psychological and sociological perspectives in the field. *Prerequisite: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement Program. (D)*

HUM 201 – World Mythology 3:3:0

A cross-cultural consideration of the great myths of the world, including creation, fertility, and hero myths. The myths will be studied as unique expressions of individual cultures and also as universal ideas. *Prerequisite: Eligibility for enrollment in ENGL 101, or permission of the instructor. (Core A)*

HUM 216 – China Study Tour 3:3:0

Chinese culture and arts through reading, attending lectures, attending live Chinese opera and dance performances, and through guided study tours of the Great Wall of China,

Humanities (continued) – Industrial Automation

Tiananmen Square and the Forbidden City, the Temple of Heaven, the Terra Cotta Soldiers of the First Emperor of China, Ming Gardens, and more. The course covers Chinese traditional arts, painting, calligraphy, architectural design, performing arts, folklore, and the three dominant philosophic and religious beliefs, Confucianism, Taoism, and Buddhism. (D)

HUM 228 – Humanities in London/Paris 3:3:0

A survey of the basic genres of the humanities—art, architecture, literature, music and theatre, set in their philosophical, historical and cultural context. (D)

HUM 229 – Italian Art, Architecture and History 3:3:0

A travel course which explores the art, architecture and history of Italy from Classical Rome to the late Baroque era. These are the arts and ideas that shaped Western civilization. Students explore Classical and High Renaissance/Baroque style in Rome and the Vatican, Medieval and Early Renaissance style in Florence and the Baroque in Venice. (D)

Independent Electrical Contract. • BHET Div.

IEC 110 – Electrical Trade I 4:3:2

Provides the theoretical and laboratory concepts needed by first-year, first-semester IEC apprentices. Paralleling their on-the-job training, students are introduced to topics that include hand tools, first aid, electrical installations, applied lighting, ground-fault switches and conductors: their sizes, types, and applications. *Enrollment in this course is restricted to students who are approved through the IEC apprenticeship selection process.*

IEC 120 – Electrical Trade II 4:3:2

Provides the theoretical and laboratory concepts needed by first-year, second-semester IEC apprentices. Paralleling their on-the-job training, students are introduced to topics that include residential circuits, water pumps and heaters, electrical outlets, low-voltage systems, alarm systems, service entrances, and remote control systems. *Enrollment in this course is restricted to students who are approved through the IEC apprenticeship selection process. Prerequisite: IEC 110.*

IEC 130 – Electrical Trade III 4:3:2

Provides the theoretical and laboratory concepts needed by second-year, first-semester IEC apprentices. Paralleling their on-the-job training, students are introduced to topics that include an introduction to AC circuits, resistive-inductive AC circuits, capacitance, series and parallel resistive-capacitive circuits, single and three phase transformers, and measuring instruments. *Enrollment in this course is restricted to students who are approved*

through the IEC apprenticeship selection process. Prerequisite: IEC 120.

IEC 140 – Electrical Trade IV 4:3:2

Provides the theoretical and laboratory concepts needed by second-year, second-semester IEC apprentices. Paralleling their on-the-job training, students are introduced to topics that include DC generators and motors, single-phase and three-phase motors, alternators, sizing and troubleshooting motors, and general wiring techniques for home, commercial buildings, industrial plants, and health care facilities. *Enrollment in this course is restricted to students who are approved through the IEC apprenticeship selection process. Prerequisite: IEC 130.*

IEC 150 – Electrical Trade V 4:3:2

Provides the theoretical and laboratory concepts needed by third-year, first-semester IEC apprentices. Paralleling their on-the-job training, students are introduced to topics that include first aid and CPR review, blueprint reading for the electrical trade, multi-family construction, commercial construction, motor and transformer review, and grounding conductors and equipment. *Enrollment in this course is restricted to students who are approved through the IEC apprenticeship selection process. Prerequisite: IEC 140.*

IEC 160 – Electrical Trade VI 4:3:2

Provides the theoretical and laboratory concepts needed by third-year, second-semester IEC apprentices. Paralleling their on-the-job training, students are introduced to topics that include electrical quantities and circuits, logic and line diagrams, motor controls, contractors, starters, and solenoids, reversing circuits, power distribution systems, and basic fiber-optic technology. *Enrollment in this course is restricted to students who are approved through the IEC apprenticeship selection process. Prerequisite: IEC 150.*

IEC 170 – Electrical Trade VII 4:3:2

Provides the theoretical and laboratory concepts needed by fourth-year, first-semester IEC apprentices. Paralleling their on-the-job training, students are introduced to topics that include solid-state control devices, electromechanical and solid-state relays, photoelectric and proximity controls, programmable controls, AC reduced voltage starters, and preventative maintenance and troubleshooting. *Enrollment in this course is restricted to students who are approved through the IEC apprenticeship selection process. Prerequisite: IEC 160.*

IEC 180 – Electrical Trade VIII 4:3:2

Provides the theoretical and laboratory concepts needed by fourth-year, second-

semester IEC apprentices. Paralleling their on-the-job training, students are introduced to topics that include fire-protection signalling systems and devices, NEC and related standards, switchboards and panel boards, over-current protectors, branch and feeder systems, motor compressors, safety in hazardous locations, and load calculations. *Enrollment in this course is restricted to students who are approved through the IEC apprenticeship selection process. Prerequisite: IEC 170.*

Industrial Automation • BHET Division

IA 201 – Motors and Controls I 4:3:2

The theory and operation of AC and DC motors and controls. Topics include basic AC and DC motors, basic motor control devices, motor starters, and basic control circuits. Students wire control circuits for specific motors and applications. *A laboratory fee is required. Prerequisites: ELOC 153 and IMT 102, or permission of the program coordinator.*

IA 202 – Motors and Controls II 4:3:2

Advanced motors and controls. Content includes advanced DC and AC motors, design and analysis of control circuits, solid-state controls, and programmable controls. Students design and connect control circuits for specific applications. *A laboratory fee is required. Prerequisites: IA 201 and IMT 104, or permission of the program coordinator.*

IA 204 – Numerical Control 2:1:3

Application of computer control of manufacturing methods. Numerical control and computer numerical control machining processes are integrated with computer-aided drafting techniques. *A laboratory fee is required. Prerequisites: MDES 207 and CAD 154 or permission of the coordinator.*

IA 205 – Computer Numerical Control – CNC 3:1:6

Application of computer control of manufacturing methods. Numerical control and computer numerical control machining processes are integrated with computer-aided drafting techniques. Importing exchange files from CAD into a CAM program to create tool paths. *A laboratory fee is required. Prerequisites: MDES 207 and CAD 154.*

IA 208 – PLC's and Automation 2:1:3

Understanding ladder logic and its use in programming industrial programmable logic controllers (PLC's). Topics include using discrete I/O, timers, counters, and sequencers to control automated systems for manufacturing applications. Primary instruction is on Allen Bradley PLC's using AB software. *A laboratory fee is required. Prerequisite: ELEC 100.*

Industrial Automation (continued) – Management

IA 213 – Troubleshooting PLC's 3:2:3

An introduction to AB/PLC-5 hardware, addressing, and I/O control. Topics include introduction to relay logic commands searching, forcing I/O, editing, and troubleshooting. Local/remote I/O control schemes and data highway communication techniques are discussed. *A laboratory fee is required. Prerequisite: ELEC 100.*

IA 221 – Sensor Technology 3:2:2

An advanced course in electrical controls for automation and artificial intelligence systems. Students learn the types, characteristics, installation, and application of a variety of industrial sensors. These include micro-switches, reed sensors, temperature sensors, inductive sensors, capacitive sensors, and photoelectric sensors. Laboratory activities include the wiring of control circuits using sensor technology. *A laboratory fee is required. Prerequisite: IMT 104, or permission of the program coordinator.*

Industrial Maintenance Tech. • BHET Div.

IMT 102 – Industrial Electrical Systems 4:3:3

An in-depth look at industrial control systems with an emphasis on wiring and troubleshooting electrical systems. Course includes single-phase and 3-phase motors, industrial motor controls and variable frequency drives. *A laboratory fee is required.*

IMT 104 – Instrumentation Systems 4:3:3

Four major instrument systems used in industrial applications: pressure measurement, flow measurement, temperature measurement, and level control. *A laboratory fee is required. Prerequisite: IMT 102 or permission of coordinator.*

IMT 106 – Mechanical Technology I 3:2:2

Knowledge and skills required by technicians in industry. Course covers personal industrial safety, OSHA requirements, hardware, safe use of hand tools, shop and measuring tools, mechanical and engineering drawings, blueprint schematics, basic metal-work, and machine shop skills. *A laboratory fee is required.*

IMT 108 – Power Transmission 4:3:3

Knowledge and skills required by technicians in industry. Course covers gears, reducers, bearings and seals, drive belts, drive chains, alignment, adjusting speeds, lubrication, shaft couplings and alignment, and machine set-up. *A laboratory fee is required.*

IMT 110 – Fluid Power 4:3:3

Knowledge and skills in fluid power required by technicians in industry. Course covers basic fluid power theory and industrial applications of pneumatics and hydraulics.

Reading schematics, building fluid power circuits and troubleshooting circuit faults are also covered. Students will understand the different types of process pumps, their application, installation, operation, and maintenance. *A laboratory fee is required.*

IMT 202 – Mechanical Technology II 3:3:2

Knowledge and skills in industrial plumbing, pipefitting and servicing HVAC systems. Course covers safety, plumbing tools, basic pipefitting, repairs, valves, soldering and brazing, bending and flaring, fittings, PVC and CPVC, and Quest-type plumbing. HVAC systems operation, troubleshooting and basic service are also covered. *A laboratory fee is required.*

IMT 204 – Power Distribution Systems 2:2:0

Traces the path of power distribution in an industrial environment from the high voltage sub-station down to the 480-Volt motor control centers used in manufacturing. *Prerequisite: IMT 102 or permission of coordinator.*

IMT 291 – Industrial Maintenance Cooperative Work Experience 3:0:15

Faculty monitored on-the-job training with an industrial maintenance employer for a minimum of 15 hours per week. Students learn and practice technical skills on-the-job. *Open to IMT majors who have completed 24 or more credit hours in one of the IMT programs (over all "C" average required), or with permission of the Program Coordinator.*

Kinsley Carpentry Apprentice • BHET Div.

KCA 110 – Kinsley Apprentice Level I – A 5:2:6

An introductory course which offers core skills for the carpentry trade including safety, math, hand and power tools, and rigging. An overview of building materials is also covered.

KCA 120 – Kinsley Apprentice Level I – B 5:2:6

An introduction to concrete and its properties. The course also includes construction, finishing, and equipment used in the application of concrete. Framing methods for roofs and walls, ceiling and floor systems, and placement and installation of windows and doors are also covered. *Prerequisite: KCA 110 with a grade of C or higher.*

KCA 130 – Kinsley Apprentice Level II – A 5:2:6

Focuses on plan reading for site layout and preparation of the foundation. The emphasis is placed on pipes and includes safety, proper rigging, delivery, and joinery. The study of concrete continues and includes estimating. Concrete cranes and rigging for ironwork are also covered. *Prerequisite: KCA 120 with a grade of C or higher.*

KCA 140 – Kinsley Apprentice Level II – B 5:2:6

Emphasizes concrete, including reinforced concrete and patented forms. Structural iron working is introduced. The study of previously introduced topics continues. *Prerequisite: KCA 130 with a grade of C or higher.*

KCA 150 – Kinsley Apprentice Level III – A 5:2:6

Exterior finishing including roofing application. Forming, site concrete and architectural finishes are covered. Industrial floors and stairs are also covered. *Prerequisite: KCA 140 with a grade of C or higher.*

KCA 160 – Kinsley Apprentice Level III – B 5:2:6

Framing and drywall. The emphasis is on interior finishing of doors, ceilings, windows, floors, and trim. Cabinet installation is also covered. *Prerequisite: KCA 150 with a grade of C or higher.*

KCA 170 – Kinsley Apprentice Level IV – A 5:2:6

Super flat floor and surface treatments. Quality control and basic repairs are also covered. *Prerequisite: KCA 160 with a grade of C or higher.*

KCA 180 – Kinsley Apprentice Level IV – B 5:2:6

Advanced systems for roof, floor, wall, and stairs. Welding applications and an introduction to project management and supervision are also discussed. *Prerequisite: KCA 170 with a grade of C or higher.*

Library Technology • LBRY Division

LIBR 110 – Introduction to Information Literacy 1:1:0

Students explore information resources and develop information literacy skills. Emphasis is on locating, evaluating, and presenting information in an academic environment. This course prepares students for the practical application of information literacy across the curriculum.

LIBR 210 – The Research Process 1:1:0

The concepts and methods for determining information needs and planning efficient strategies to locate information for academic research. Emphasis is on the identification, online and manual retrieval, and evaluation of print and non-print resources. This course is designed for students taking courses that require a research project or component. The course emphasizes resources available to both traditional and distance-learning students.

Management • BHET Division

MGMT 119 – Dynamics of Supervision I 3:3:0

A realization to the supervisor or potential supervisor that proficiency in supervisory techniques and fundamentals will better equip them to contribute effectively to their own

Management (continued) – Marketing

growth and hence, to the overall goals of the organization.

MGMT 121 – Small Business Development and Management 3:3:0

The environment of small business enterprise; initial problems in starting a business; financial and administrative controls in small business; legal and governmental control in small business; operating a small business.

MGMT 201 – Principles of Management 3:3:0

Knowledge and skills needed for planning, organizing, leading and controlling in modern organizations. Among current developments in management practices discussed are Management by Objectives, Theory Z, Quality Circles, and organizational development as they relate to managerial decision-making. Also discussed are information systems, international management, CAD/CAM, and robotics. *Occasionally offered as a video course.*

MGMT 202 – Office Management 3:3:0

Work flow systems: communication service, duplicating processes; filing; source data automation; computerized office applications; and motivating personnel.

MGMT 203 – Human Resources Management 3:3:0

Planning personnel requirements: recruitment; selection; training and development; job evaluation; wage and salary administration; employee benefits and services; labor relations; career development; safety and health; performance appraisal; disciplinary action; employee morale; and international human resources management.

MGMT 204 – Human Relations in Business 3:3:0

Application of psychological and sociological concepts as they relate to management situations; development of skills in perceiving, diagnosing, and understanding behavior in organizations; leadership; motivation; decision making; interpersonal and intergroup relations; and case studies.

MGMT 206 – Labor Relations 3:3:0

History of the labor movement; structure and operations of labor organizations; collective bargaining; contract negotiations and the labor agreement; handling grievances; the role of government in labor relations; and current issues and labor problems.

MGMT 226 – Principles of Leadership 3:3:0

Effective leadership attitudes and styles: successful leader's traits, motives, skills and characteristics. Additional topics include charismatic, transformational, contingency, situational leadership, and the relationships among leadership and teamwork, culture, communications, quality, technology, conflict resolution and problem solving.

MGMT 227 – Project Management 3:3:1

Basic methods of handling projects from start to completion, as well as fundamentals of project management. Hands-on activities are emphasized with projects being analyzed to determine the required parts, materials, tools or equipment, and manpower. Also covered are cost estimates of material and equipment needs, and time estimates for manpower. Creation of purchase orders, development of worksheets and sequential schedule of activities, documentation update, and evaluation of a completed project are all included in the course, as is measurement of the outcomes or results obtained from a project.

MGMT 230 – Principles of Supply Chain Management 3:3:0

Designed to acquaint students with modern supply chain management concepts. Some of the topics covered include purchasing and inventory management, supplier relationships, using strategic sourcing, demand forecast and replenishment, aggregate planning and process management integration. The impact upon supply chain management of other theories such as Total Quality Management, Just in Time, and Customer Relationship Management are also discussed.

MGMT 235 – Business Logistics Management 3:3:0

Issues in management as they relate to business logistics and related fields. The course covers the different dimensions of logistics, demand management, customer service, procurement, global logistics, transportation systems, transportation management, logistics relationships and third-party logistics.

MGMT 240 – Enterprise Resources Planning (ERP) 3:3:0

A study of the background and magnitude of enterprise resources planning. The course includes ERP company-wide implementation challenges, use of software, preparations, project launching, process definition, data integrity, basic ERP, and Quick-Slice ERP. Future strategic trends and career opportunities in this field are discussed.

MGMT 245 – Mall Management 3:3:0

Provides a systematic learning approach aimed at understanding the functions and responsibilities of a shopping center manager. The students obtain knowledge about financial aspects, maintenance, marketing, security, lease negotiation and strategies, risk management and insurance coverage, and the corresponding legal ramifications. Also, those students considering careers in shopping center management are instructed on how actual anchor stores and in-line specialty stores create values for the center's ownership.

MGMT 291 – Cooperative Work Experience in Management 3:0:15

Faculty monitored employment of at least 15 hours per week in an approved cooperative management work experience applying the knowledge and skills acquired as a student in a management curriculum. Written documentation of the cooperative work experience activities and other performance-evaluation measurements will be used to determine the grade. *Prerequisites: Completion of at least 30 credits in a business major with a GPA of 2.0 or higher; instructor approval of work plan.*

Marketing • BHET Division

MKTG 111 – Music Business and the Internet 3:3:0

Students learn the use of the Internet as a tool to merchandise recordings and performances.

MKTG 201 – Principles of Marketing 3:3:0

The functions involved in the marketing of consumer and industrial goods to their users. Emphasis is placed upon management's development of marketing strategies concerning product, place, promotion, and price.

MKTG 204 – Sales Management 3:3:0

Management of selling function, including forecasting, organization of the sales force, recruiting, selection, training, compensation, retention and territory management.

Prerequisite: MKTG 212

MKTG 205 – Visual Merchandising 3:2:2

Interior decorating; window displays; use of color, size, and form; art laboratory. Students will secure their own supplies.

MKTG 209 – Marketing Internship 3:1:15

Students are employed full-time or part-time in a retail store, professional sales position, or another marketing setting under College supervision. Seminars include discussion of problems and contemporary issues. *(Available as independent study.) Prerequisite: MKTG 201.*

MKTG 210 – Marketing Application and Analysis 3:3:0

Current literature in marketing, utilizing the case problem approach toward solutions of the total marketing effort. *Prerequisite: MKTG 201.*

MKTG 212 – Personal Selling 3:3:0

Buyer-seller relations; use of product samples; descriptive printed materials; sales demonstrations; interviewing customers; personal approaches to selling.

MKTG 216 – Retail Merchandising 3:3:0

The study of the background and knowledge necessary to buy merchandise profitably with emphasis on the role of the buyer, profit, markup, markdowns, inventory methods, stock

turn, planned sales, planned stocks, planned purchases, open-to-buy, fashion merchandise, negotiations with vendors and use of the computer in merchandising. *Field trips are a part of this course and may require additional payment by the student to defray costs.*

MKTG 217 – Retail Management 3:3:0

The concepts and practices in successful retail management. Emphasis on basic structure and environment, store management, careers, store location and layout, types of organizational structure, personnel, merchandise management, pricing, advertising and display, salesmanship, customer services, credit and collection, accounting and expense control, and community relations. *Field trips are part of this course and may require additional payment by the student to defray costs.*

MKTG 218 – Advertising 3:3:0

Determining appropriations; allocating among media; advertising layout and copy; measuring advertising effectiveness; the role of advertising in our economy.

MKTG 225 – Music Merchandising 3:3:0

An examination of the music merchandising and music products industry. Marketing and sales techniques as applicable to music merchandising, equipment, sales and record promotion and distribution are studied. Students prepare a semester report on merchandising or participate in an internship with an area music retailer or related music professional.

MKTG 226 – Music Computer Applications 3:3:0

Introduction to computer hardware and software (including MIDI) used by producers to create new music and distribute music-related products and services.

MKTG 227 – Studio and Performance Production Operations 4:3:2

The technical and artistic sides of recording studio activities. Students experience the workings of a real recording studio during the laboratory portion of the course. *(Students are required to participate in laboratory sessions at off-campus recording studios and are responsible for their own transportation.)*

MKTG 228 – Audio Technology 4:3:2

An overview of the music production industry. Experimentation with the current technology of the audio trades fosters an appreciation of the complexity involved in the recording studio and at live performances.

MKTG 229 – Commercial Songwriting and the Music Industry 3:3:0

The business of songwriting. This integrative course combines the foundations of songwriting theory and songwriting design to

reflect current industry standards for publishing, recording, jingle advertisement, television, theatre, and film. *Prerequisite: MUS 119 with a grade of C or higher.*

MKTG 230 – Contemporary Issues in the Music Industry 3:3:0

A course on contemporary issues in the music industry. Issues are researched, examined, and discussed. Criterion for commercial songwriting structure is explored in relationship to the music industry. Commercial music styles and their relationship to music marketing is examined.

MKTG 235 – Internet Marketing 3:3:0

Study of the effects of the Internet on modern business. The course covers the similarities and differences between the digital economy and traditional marketing practices as well as industry-specific terminology. Development and growth of the Web; e-business and e-commerce are studied. Students learn how to integrate electronic media into marketing and business processes. Topics include building customer relationships on the Web, Web business models, product development and branding, and pricing and security.

MKTG 245 – Principles of International Marketing 3:3:0

The implications of the expanding international market for U.S. products and the increasingly competitive international business environment. Students study the global marketplace and skills needed to make marketing decisions in a global context with special emphasis on political and cultural influences that distinguish U.S. and foreign markets. *Prerequisite: MKTG 201 or permission of coordinator.*

Mathematics • MSAH Division

MATH 005 – Basic Mathematics 3:3:0

Designed to thoroughly review the basic operations of Arithmetic with applications. *Corequisite: ENGL 001.*

MATH 007 – Basic Math with Algebra 5:5:0

Designed to thoroughly review the basic operations of arithmetic with applications and introduce algebraic representation and application. *Corequisite: ENGL 001 if required by the College Testing and Placement Program.*

MATH 010 – Pre-Algebra 3:3:0

Designed to review the basic operations of arithmetic and introduce algebraic representation and applications. *Prerequisite: ENGL 001 with a grade of C or higher for students required to take reading by the College Testing and Placement Program, and completion of MATH 005 with a grade of C or higher.*

MATH 020 – Beginning Algebra 3:3:0

Designed to develop basic algebraic skills through a study of fundamental properties of numbers: fundamental operations in arithmetic and algebra, including polynomials and linear equations. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 010 with a grade of C or higher.*

MATH 045 – Pre-College Algebra 6:6:0

Combines the topics of MATH 020 and MATH 051 into a single course. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 010 with a grade of C or higher.*

MATH 051 – Intermediate Algebra 3:3:0

Designed to augment the knowledge of the student who has limited background in algebra: fundamental operations, special products and factors, functions and fractional equations, exponents, radicals, quadratic equations. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 020 with a grade of C or higher.*

MATH 100 – College Mathematics for Business 3:3:0

Basic operations of arithmetic with emphasis on percentage, trade and cash discounts, merchandising, depreciation, property and sales taxes, payroll, income tax, insurance, simple and compound interest, notes, credit and time-buying, the metric system, and basic descriptive statistics. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 010 with a grade of C or higher. (Core C)*

MATH 101 – Fundamentals of Trigonometry 1:1:0

A basic study of the trigonometric functions, including applications to the solution of right and oblique triangles. *This course is designed primarily for Architectural Technology career students. Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 051 with a grade of C or higher.*

MATH 102 – Technical Math for Electrical Technology 3:3:0

Application of fundamental mathematical, algebraic, and trigonometric concepts to electrical circuits. This course provides training in the use of mathematics for solving problems in electrical technology. *Prerequisites: Placement through the College Testing and Placement Program, or completion of MATH 051 with a grade of C or higher.*

MATH 103 – College Algebra 3:3:0

Fundamental algebraic operations, exponents and radicals, systems of equations,

Mathematics (continued)

higher degree equations, logarithms, matrices, inequalities. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 051 with a grade of C or higher. (Core C)*

MATH 104 – Trigonometry 3:3:0

Trigonometric functions, relationships, and graphs; identities and trigonometric equations; composite, multiple, and half-angle formulas; complex numbers; DeMoivre's theorem. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 051 with a grade of C or higher. MATH 103 with a grade of C or higher is strongly recommended. (Core C)*

MATH 110 – Applied Calculus for Business

Designed for students in various business or social science programs. Topics to be considered include quadratic, polynomial, rational, exponential and logarithmic functions, differential calculus of a single variable and of several variables, techniques of integration. Numerous applications to business and economics will be considered. *Prerequisite: MATH 103 with a grade of C or higher. (Core C)*

MATH 111 – Principles of Mathematics 3:3:0

Intended to meet general transfer or degree requirements in fields other than mathematics, physical science, and engineering; conceptual treatment of number theory, modern algebra, geometry, fundamentals of logic and sets, and other topics. *(Core C)*

MATH 113 – Principles of Mathematics for Elementary Teachers I 3:3:0

Designed to provide the mathematical topics for prospective elementary school teachers. These topics include basic concepts of logic, sets, counting numbers, numeration systems, integers, rational numbers, real numbers, descriptive statistics, and modular arithmetic. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 051 with a grade of C or higher.*

MATH 114 – Principles of Mathematics for Elementary Teachers II 3:3:0

Topics include geometry with computer applications, measurement of geometric figures, the metric system, and an introduction to probability. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 051 with a grade of C or higher.*

MATH 119 – Pre-Calculus

Designed to augment background in algebra and trigonometry with material selected to improve chances for success in calculus: elementary algebraic and transcendental functions, conic sections, linear and non-linear

systems of equations, matrices, vectors in the plane, polar coordinates and mathematical induction, sequences, series, and limits. *Prerequisite: Placement through the College Testing and Placement Program, or MATH 103 and MATH 104 with grades of C or higher, or equivalent. (Core C)*

MATH 121 – Calculus I 4:5:0

Plane analytic geometry; functions, limits and continuity; differentiation and integration of algebraic and trigonometric functions with applications. *Prerequisite: MATH 119 or equivalent with a grade of C or higher. (Core C)*

MATH 122 – Calculus II 4:5:0

A continuation of MATH 121. Transcendental functions; further techniques of integration with applications; polar coordinates; infinite series. *Prerequisite: MATH 121 with a grade of C or higher. (Core C)*

MATH 125 – Discrete Mathematics 3:3:0

Designed for students majoring in mathematics or computer science and others desiring a broader mathematical perspective. Topics include logic, sets, methods of proof, relations, functions, mathematical induction, counting techniques, recurrence equations, mathematical systems. *Prerequisite: MATH 119 or the equivalent with a grade of C or higher.*

MATH 141 – Mathematics Seminar 2:2:0

The role of the mathematician in an economic society; areas of specialization and functions of the mathematician. Ethics, career suitability, and problems of transfer are discussed. Guest speakers and off-campus events augment the course. *Prerequisites: MATH 051 and ENGL 051 with grade of C or higher.*

MATH 172 – Applied Mathematics for Automotive Technicians 3:3:0

Review of the basic operations of arithmetic and beginning algebra applied to the automotive trade. Other topics include calculation of markup and markdown, insurance premiums, payroll deductions and taxes. *Prerequisite: MATH 010 with a grade of C or higher.*

MATH 174 – Applied Mathematics for Machinists 3:3:0

Arithmetic and algebra as commonly applied in the machinist trade. Topics include a review of signed numbers, fractions, decimals and percents; algebraic representation; equation solving; ratio, proportion, trigonometric functions; and geometry and measurement. *Prerequisite: ENGL 001 or eligibility to enroll in a higher-level English course.*

MATH 176 – Applied Mathematics for Computer Technicians 3:3:0

Designed to review operations of algebra

with special emphasis on topics essential for computer technicians: signed numbers; algebraic representation; equation solving; systems of equations including solution via determinants; ratio, proportion, trigonometric functions (sine and cosine and their graphs), right triangle solution and introduction to vectors. *Prerequisites: MATH 010 or higher, ENGL 001 or higher; equivalent English and mathematics placement by the College Testing and Placement Program.*

MATH 178 – Applied Mathematics for Environmental Specialists 3:3:0

Review of basic arithmetic, algebraic, geometric, statistical, and trigonometric operations with emphasis on applications in environmental technology. *Prerequisite: MATH 051 with a grade of C or higher, or placement through the College Testing and Placement Program.*

MATH 202 – Introduction to Statistics 3:3:0

Designed for students enrolled in technical, business and liberal arts curricula. Topics include describing and summarizing data both graphically and numerically, probability, various distributions, parametric estimation and tests of significance, and exploration of bivariate data. *Prerequisite: Placement through the College Testing and Placement Program or completion of MATH 051 with a grade of C or higher. (Core C)*

MATH 203 – Mathematical Statistics 4:3:3

Descriptive statistics, probability theory, discrete and continuous probability distributions, and statistical inferences for means and proportions. *Prerequisite: MATH 121 with a grade of C or higher.*

MATH 220 – Linear Algebra

Linear systems; matrix algebra; finite dimensional vector spaces including function spaces; linear transformations, and their matrix representations including coordinates, change-of-basis, real spectral theorem, orthogonal diagonalization, principal axes theorem. *(For students of Mathematics, Science, and Engineering.) Prerequisite: MATH 122 with a grade of C or higher.*

MATH 221 – Calculus III 4:5:0

A continuation of MATH 122. Vectors and vector-valued functions; partial differentiation; multiple integrals; space geometry; vector calculus. *Prerequisite: MATH 122 with a grade of C or higher.*

MATH 222 – Differential Equations 4:5:0

Ordinary differential equations of the first and second orders with physical and geometrical applications; operators; the Laplace Transform matrices; solutions in

Mathematics (continued) – Medical Assisting

series, numerical methods. *Prerequisite:* MATH 221 with a grade of C or higher.

MATH 242 – Actuarial Science Seminar 1:1:0

Preparation to take the Society of Actuaries Examination Number 1. *Prerequisites:* MATH 122 and ECON 101 with a grade of C or higher. *Corequisite:* MATH 203.

MATH 911 – Basic Applied Mathematics I 1:1:0

Basic arithmetic, algebra, trigonometry, and other topics emphasizing application to specific technical areas. Topics will be selected according to the needs of a particular diploma program. *This course may not be used for credit in a certificate or a degree program.*

MATH 912 – Basic Applied Mathematics II 2:2:0

The topics of MATH 911 considered at greater length as needed by students in a particular diploma program. *This course may not be used for credit in a certificate or a degree program.*

MATH 913 – Basic Applied Mathematics III 3:3:0

The topics of MATH 911 considered at greater length as needed by students in a particular diploma program. *This course may not be used for credit in a certificate or a degree program.*

Mechanical Design • BHET Division

MDES 201 – Dynamics 3:3:1

Graphical and mathematical analysis of relative motions in mechanisms. Velocities and accelerations in linkages, crank mechanisms, cams, gears, and gear trains are discussed. The student studies the principles of dynamics as applied to linear and angular motions including Newton's Laws of Motion and Work and Energy. *Prerequisites:* GTEC 201 and CAD 154 with a grade of C or higher.

MDES 204 – Product Design 3:2:3

Design of machine elements, including levers, clutches, springs and gears, shaftings, and housings. Design of small mechanical devices. The computer is used in solving problems. *Prerequisite:* CVTE 208 with a grade of C or higher; or permission of the Coordinator.

MDES 206 – Fluid Flow 3:2:3

Elementary theory of fluid flow, measurement of flow, and fluid machinery. Primary emphasis is on the topics of fluid statics, flow of fluids in pipes and open channels, flow measurement, and forces developed by fluids in motion. Laboratory work demonstrates principles and applications of fluid mechanics. The computer is used in solving problems. *Prerequisite:* GTEC 201 with a grade of C or higher.

MDES 207 – Machine Shop Theory and Practice 1:0:3

Theory and hands-on experience with machine tools, such as the lathe and the milling machine.

Mechanical Drafting • BHET Division

MDRF 101 – Engineering Drawing 2:1:3

Basic drafting techniques, lettering, orthographic drawing, assembly drawings, auxiliary views, sections and conventions and basic dimensioning. Drawings are made using drafting instruments and freehand sketching. Students are introduced to a CAD system.

MDRF 103 – Geometric Tolerancing 1:0.5:1.5

Dimensional and geometric tolerancing and true-position tolerancing presented as part of advanced drafting and production techniques. The student learns symbology for expressing allowable variations in part sizes. *Prerequisite:* MDRF 101 with a grade of C or higher; or permission of the Coordinator.

Media Studies • CASS Division

MDST 101 – Introduction to Mass Media and Society 3:3:0

An examination of the process of mass communication, the effects of mass media on society, and the structures society imposes on the media. *Prerequisite:* Eligibility for ENGL 101.

MDST 111 – Introduction to News Writing and Reporting 3:3:0

Nature and function of printed mass media; journalistic principles; news gathering and the writing of stories; journalistic media, ranging from metropolitan dailies to rural weeklies and associated publications. Professional journalists are invited as guest lecturers. *Prerequisite:* ENGL 101.

MDST 112 – News Editing and Makeup 3:3:0

The study of copy editing, layout of newspapers and magazines, typography, head-writing, proofreading, page design, and the use of photographs in publications. *Prerequisite:* MDST 111 with a grade of C or higher.

MDST 113 – Workshop in Media Studies 1:1:0

First-hand experience of the demands of a journalism or a broadcasting career. Students may specialize in individual aspects of mass communication, such as newswriting, advertising, or radio programming. *The workshop includes the student's participation on the staff of the College's student newspaper or radio station for one semester.*

MDST 114 – Workshop in Media Studies 1:1:0

First-hand experience of the demands of a journalism or a broadcasting career. Students

may specialize in individual aspects of mass communication, such as newswriting, advertising, or radio programming. *The workshop includes the student's participation on the staff of the College's student newspaper or radio station for one semester.*

MDST 121 – Introduction to Broadcasting 3:3:0

A survey of the history and development of radio and television in the United States with emphasis on special interest groups, government regulations, ethical considerations, operational procedures, and the impact of electronic media on society. *Prerequisite:* ENGL 101.

MDST 213 – Workshop in Media Studies 1:1:0

First-hand experience of the demands of a journalism or a broadcasting career. Students may specialize in individual aspects of mass communication, such as newswriting, advertising, or radio programming. *The workshop includes the student's participation on the staff of the College's student newspaper or radio station for one semester.*

MDST 214 – Workshop in Media Studies 1:1:0

First-hand experience of the demands of a journalism or a broadcasting career. Students may specialize in individual aspects of mass communication, such as newswriting, advertising, or radio programming. *The workshop includes the student's participation on the staff of the College's student newspaper or radio station for one semester.*

Medical Assisting • MSAH Division

MA 201 – Medical Assisting Pharmacology Laboratory 1:0:3

An introduction to pharmacology laboratory; application of principles covered in AH 209 including preparing, administering, and dispensing medications. Special focus is on dosage calculations and patient instruction. Emphasis is placed on characteristics of the major drug classifications and the most commonly prescribed medications within each category. *A laboratory fee is required. Corequisite:* AH 209.

MA 212 – Ambulatory Care Clinical Procedures 4:3:3

An introduction to general clinical procedures performed in an ambulatory care setting, including preparing patients and assisting with physical examinations, minor office surgery, and specialized procedures. Topics include the principles of aseptic technique, infection control, and basic first aid. The course expands on patient data-collection techniques introduced in AH 140 and includes limited experience in an outpatient setting. *A laboratory fee is required. Prerequisites:* AH

Medical Assisting (continued) – Medical Laboratory Technology

140, BIOL 111, and AH 150 with a grade of C or higher.

MA 220 – Medical Office Administration I 3:3:0

Provides a fundamental understanding of the professional and administrative responsibilities of the medical assistant. Emphases are on the development of effective verbal and written communication skills necessary in medical assisting, and on the establishment and maintenance of patient records. *Prerequisite: CIS 105 with a grade of C or higher.*

MA 221 – Medical Office Administration II 3:3:0

Provides a fundamental understanding of the financial management responsibilities of the medical assistant. Emphases are on the proper procedures for banking, billing, collections, accounts payable, payroll, and the use of medical-management accounting software to maintain patient records. *Prerequisite: MA 220 with a grade of C or higher.*

MA 230 – Medical Assisting Externship 3:0:16

Supervised applications of clinical and administrative skills during a 240-hour externship in an ambulatory care facility. Students discuss their experience in a seminar format. *Liability insurance is required. Prerequisites: completion of all program specific and science courses with grades of C or higher; successful completion of a comprehensive skills examination.*

Medical Laboratory Technology • MSAH Div.

MLT 100 – Orientation to Medical Laboratory Technology 3:2:3

The role of the Medical Laboratory Technician in the health-care system. Topics include microscopy, a general overview of the departments of the clinical laboratory and laboratory personnel, laboratory safety, infection control, glassware and equipment, medical terminology, and mathematics as they apply to laboratory science. Students acquire the skills needed to draw blood and prepare blood specimens for testing. *The course is appropriate for students considering laboratory science as a career. Laboratory and liability insurance fees are required. Corequisite: BIOL 122.*

MLT 101 – Serology and Blood Banking 4:5:3/4:5

The study of serum-immunity and reactions to antigens and antibodies as these topics apply to blood. Serologic and blood-banking procedures are considered. *A laboratory fee is required. Prerequisite: MLT 100; corequisites: BIOL 122, CHEM 101, and MATH 103.*

MLT 102 – Urine Analysis and Chemistry 4:5:3/4:5

The study of the urinary tract system, including the chemical and morphological characteristics of urine. Chemistry topics

include the applicable basic principles and techniques of biochemistry, enzymes, hormones, proteins, lipids, carbohydrates, electrolytes, and acid-base balance. *A laboratory fee is required. Prerequisites: MLT 100, CHEM 101, and MATH 103; corequisite: CHEM 102.*

MLT 103 – Hematology and Coagulation 4:3:3

The study of blood-cell maturation, morphology, and function. Blood diseases, diagnostic procedures relating to whole blood, and the theory of blood coagulation are considered. *A laboratory fee and a liability insurance fee are required. Corequisite: MLT 100.*

MLT 104 – Clinical Chemistry 4:3:3

Basic principles and techniques of biochemistry for clinical and laboratory applications. Topics include enzymes, hormones, proteins, lipids and carbohydrates, electrolytes, and acid-base balance. *A laboratory fee and a liability insurance fee are required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/ Clinical Laboratory Technician Program. Prerequisites: MLT 100 and CHEM 101 with a grade of C or higher. Corequisite: CHEM 102 or 200.*

MLT 105 – Urine Analysis 1:0.75:0.75

The study of the urinary system, including the chemical and morphological characteristics of urine. *A laboratory fee and a liability insurance fee are required. Enrollment in this course is restricted to students in the Clinical Laboratory Technician Program. Prerequisite: MLT 100 with a grade of C or higher.*

MLT 120 – Hematology and Coagulation 4:3:3

The study of blood-cell maturation, morphology, and function. Blood diseases, diagnostic procedures relating to whole blood, and the theory of blood coagulation are considered. *Laboratory and liability insurance fees are required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisite: MLT 100 with a grade of C or higher; Corequisites: MLT 122 and 124.*

MLT 122 – Immunology 2:2:1

The study of serum-immunity and reactions to antigens and antibodies as these topics apply to blood. Serologic procedures are considered. *Laboratory and liability insurance fees are required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisite: MLT 100 with a grade of C or higher; Corequisites: MLT 120 and 124.*

MLT 124 – Immunohematology 3:2:3

The study of blood-group antigens and antibodies. Laboratory procedures for typing and compatibility testing are emphasized. Donor screening and processing of blood are also covered. *Laboratory and liability insurance fees are required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisite: MLT 100 with a grade of C or higher; Corequisites: MLT 120 and 122.*

MLT 201 – Clinical Experience I 6:0:36

Supervised application of laboratory skills at affiliated hospitals or health-care agencies. The student learns to function competently in a variety of laboratory areas. *A liability insurance fee is required. Prerequisites: MLT 103, 104, and 105 with a grade of C or higher.*

MLT 202 – Microbiology, Parasitology, and Mycology 5:3:6

The study of bacteria, parasites, and fungi that cause human disease. Diagnostic procedures are discussed. *A laboratory fee is required. Prerequisites: MLT 100 and BIOL 221.*

MLT 203 – Clinical Experience II 6:0:36

Supervised application of laboratory skills at affiliated hospitals or health-care agencies. The student learns to function competently in a variety of laboratory areas. *A liability insurance fee is required. Prerequisites: MLT 204, 205, 206, and 207 with a grade of C or higher.*

MLT 204 – Immunohematology 3:2:3

The study of blood-group antigens and antibodies. Laboratory procedures for typing and compatibility testing are emphasized. Donor screening and processing of blood are also covered. *A laboratory fee and a liability insurance fee are required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisite: MLT 100 with a grade of C or higher. Corequisite: MLT 205.*

MLT 205 – Immunology 2:1.9:0.3

The study of serum-immunity and reactions to antigens and antibodies as these topics apply to blood. Serologic procedures are considered. *A laboratory fee and liability insurance fee are required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/ Clinical Laboratory Technician Program. Prerequisite: MLT 100 with a grade of C or higher.*

MLT 206 – Clinical Microbiology 4:3:3

The study of bacteria that cause human disease. Diagnostic procedures are discussed. *A laboratory fee is required. Enrollment in this*

Medical Laboratory Technology (continued) – Metalwork Technology

course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisite: BIOL 221 with a grade of C or higher.

MLT 207 – Parasitology and Mycology 1:1:0

The study of parasites and fungi that cause human disease. Diagnostic procedures are discussed. Enrollment in this course is restricted to students in the Clinical Laboratory Technician Program. Prerequisite: BIOL 221 with a grade of C or higher.

MLT 208 – Management and Education in the Clinical Laboratory 1:1:0

Introduction to management and education in the clinical laboratory. Topics include overview of healthcare reimbursement, job design, cost accounting, performance appraisals, compliance, budgets, staffing and scheduling, education and training, and preparing for inspections. Prerequisite: MLT 100 with a grade of C or higher.

MLT 220 – Clinical Microbiology 4:3:3

The study of bacteria that cause human disease. Diagnostic procedures are discussed. Laboratory and liability insurance fees are required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisites: MLT 100 and BIOL 221 with a grade of C or higher; Corequisites: MLT 222 and 224.

MLT 222 – Clinical Chemistry 4:3:3

Basic principles and techniques of biochemistry for clinical and laboratory applications. Topics include enzymes, hormones, proteins, lipids and carbohydrates, electrolytes, and acid-base balance. Laboratory and liability insurance fees are required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisites: MLT 100, CHEM 101, and BIOL 121 with a grade of C or higher; Corequisites: MLT 220 and 224.

MLT 224 – Urinalysis 2:2:1

The study of the urinary system, including the chemical and morphological characteristics of urine. Laboratory and liability insurance fees are required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisites: MLT 100, CHEM 101, and BIOL 121 with a grade of C or higher; Corequisites: MLT 220 and 222.

MLT 226 – Clinical Experience I 3:0:36

First clinical experience. Supervised application of laboratory skills at affiliated hospitals or health-care agencies. The student learns to function competently in a variety of

laboratory areas. A liability insurance fee is required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisite: MLT 120 with a grade of C or higher.

MLT 228 – Clinical Experience II 3:0:36

Second clinical experience. Supervised application of laboratory skills at affiliated hospitals or health-care agencies. The student learns to function competently in a variety of laboratory areas. A liability insurance fee is required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisites: MLT 122 and 124 with a grade of C or higher.

MLT 230 – Parasitology and Mycology 1:1:0

The study of parasites and fungi that cause human disease. Diagnostic procedures are discussed. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisites: MLT 100 and BIOL 221 with a grade of C or higher.

MLT 232 – Clinical Experience III 3:0:36

Third clinical experience. Supervised application of laboratory skills at affiliated hospitals or health-care agencies. The student learns to function competently in a variety of laboratory areas. A liability insurance fee is required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisite: MLT 220 with a grade of C or higher.

MMLT 234 – Clinical Experience IV 3:0:36

Fourth clinical experience. Supervised application of laboratory skills at affiliated hospitals or health-care agencies. The student learns to function competently in a variety of laboratory areas. A liability insurance fee is required. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Laboratory Technician Program. Prerequisites: MLT 222 and 224 with a grade of C or higher.

MLT 236 – Clinical Laboratory Management 1:1:0

Introduction to management and education in the clinical laboratory. Topics include overview of healthcare reimbursement, job design, cost accounting, performance appraisals, compliance, budgets, staffing and scheduling, education and training, and preparing for inspections. Enrollment in this course is restricted to students in the Medical Laboratory Technician/Clinical Technician Program. Prerequisites: MLT 100 with a

grade of C or higher; Corequisites: MLT 232 and 234.

Metalwork Technology • BHET Division

MWT 102 – Blueprint Reading: Metalworking 2:1:3

Students develop the basic skills required for interpreting industrial prints.

MWT 111 – Introduction to Metalworking 3:2:3

The layout equipment, benchwork equipment, measurement procedures, safety practices, tools, materials, and skills of the machine trade. Students learn to (1) use blueprints and layout tools; (2) make parts to specification using arbor presses, hand tools, files, reamers, taps/dies, finishing tools, and assembly tools; (3) measure devices accurately; and (4) identify and use proper materials. Students are prepared to take the National Institute of Metalworking Skills (NIMS) Level I certification in layout and benchwork.

MWT 112 – Basic Power Tools 1:0.5:1.5

Basic power tools including drill presses, power saws, pedestal grinders, and hand power tools. Students learn to machine parts to specification using these tools. Students are prepared to take the National Institute of Metalworking Skills (NIMS) Level I certification in drilling.

MWT 212 – Turning Technology 2:1:3

Basic and advanced skills in the use of the metal lathe. Students learn a variety of metal lathe operations, with stock held in chucks and between centers to make parts to specification. Students are prepared to take the National Institute of Metalworking Skills (NIMS) Level I certification in turning. Prerequisite: MWT 111 or permission of coordinator.

MWT 213 – Milling Technology 3:2:3

The milling machine. Students learn basic and advanced milling operations to make parts to specification. Students are prepared to take the National Institute of Metalworking Skills (NIMS) Level I certification in milling. Prerequisite: MWT 111 and MWT 112 or permission of coordinator.

MWT 214 – Metrology 2:1:3

The use of precision instruments for measurement and inspection of manufactured parts. The course includes the use of comparators, micrometers, surface plates and accessories, microscopes, hardness testing instruments, and other related equipment. Students gather and analyze quality assurance data and inspect parts using non-destructive testing techniques (NDT). Students are prepared to take the National Institute of Metalworking Skills (NIMS) Level I certification in measurement,

Metalwork Technology (continued) – Nanofabrication

materials and safety. *Prerequisite: MATH 174 or permission of coordinator.*

MWT 215 – Grinding Technology 3:2:3

Precision grinding operations. Students use a variety of surface and form grinders and techniques to make parts to specification. Students are prepared to take the National Institute of Metalworking Skills (NIMS) Level I certification in grinding. *Prerequisites: MWT 111 and MWT 112 or permission of coordinator.*

MWT 216 – Specialized Industrial Processes 3:2:3

Advanced manufacturing technologies, including electrical discharge machining (EDM), automatic screw machining, and precision assembly. *A laboratory fee is required. Prerequisites: MWT 212, 213, and 215 or permission of coordinator.*

MWT 217 – Advanced CNC Programming 2:1:3

A continuation of IA 204 including XYZ three-axis motion and the use of shop-floor programming systems. *Prerequisite: IA 204 or permission of coordinator.*

MWT 218 – Manufacturing Seminar 1:1:0

Introduction to the manufacturing environment. One or more manufacturing industries are targeted for study and analysis. During visits to local companies, students investigate and assess the key elements of quality assurance, customer service, productivity, and cost control.

MWT 291A – Cooperative Work Experience 3:0:300

Students perform machining tasks in a professional environment and are paid as part-time employees. *Basic hand tools and measuring instruments must be purchased by the student as is customary in the trade.*

Meteorology • MSAH Division

METR 101 – Weather and Climate 3:3:1

A study of the basic elements of weather and climate along with new developments in meteorology such as the high-speed digital computers, weather satellites, and weather radar; some day-to-day observations and analyses; field trip. *A laboratory fee is required. (Core C)*

Military Science • CASS Division

MSCI 101 – Introduction to Military Science (Leadership Laboratory) 1:0:2

Emphasis on developing self-confidence and bearing. Instruction and weekly practical training in basic skills such as map reading, rappelling, weapons, communications, first aid, tactical movements, customs and courtesies, public speaking, and leadership.

Meets one hour per week each semester. Also includes four to six Saturdays of voluntary training and one formal social event each semester.

MSCI 102 – Introduction to Military Science (Leadership Laboratory) 1:0:2

A continuation of MSCI 101.

MSCI 203 – Army Leadership and Management I 1:0:2

A continuation of Military Science 102.

MSCI 204 – Army Leadership and Management II 1:0:2

A continuation of Military Science 201.

Music • CASS Division

MUS 102 – Introduction to Music 3:3:0

How music is created and the highlights of its historical development from ancient times to the present. Students are encouraged to become involved with music either by actively participating or by becoming better-informed listeners. Whenever possible, classwork is arranged to relate to local performances. *(Core A)*

MUS 103 – Introduction to Elementary Music 3:3:0

The current trends in music education. Materials and techniques for the elementary school teacher. Fundamentals of music are presented and applied to the materials used.

MUS 104 – Introduction to World Music 3:3:0

How music is created and expressed around the world, including description, analysis, and comparisons of selected world music in both ancient and modern traditions. Whenever possible, classwork is arranged to relate to local performances. *(Core A)*

MUS 110 – History of Rock and Related Styles 3:3:0

History of rock music. The course focuses specifically on rock, but also includes related styles, such as blues, country, and rap. Topics include roots, influences, and current trends of popular music within a historical context of political and social events.

MUS 111 – Choir I 1:0:3

The study, rehearsal, and performance of standard works of choral literature. *Open to any student without audition.*

MUS 112 – Choir II 1:0:3

The study, rehearsal, and performance of standard works of choral literature. *Open to any student without audition.*

MUS 115GU – Private Lessons: Guitar 1:1:0

For students who desire to study privately. The College will arrange through the Communications, Arts, and Social Sciences

Division for lessons in guitar, piano, and voice. *See Tuition and Fees for charges.*

MUS 115PI – Private Lessons: Piano 1:1:0

MUS 115VO – Private Lessons: Voice 1:1:0

MUS 116GU – Private Lessons: Guitar 1:1:0

MUS 116PI – Private Lessons: Piano 1:1:0

MUS 116VO – Private Lessons: Voice 1:1:0

MUS 119 – Introduction to Music Theory 3:3:0

Designed for the student with a minimum background in music but who exhibits a desire to either complete the regular sequence of theory courses offered by the College and thereby transfer to a four-year music college or simply increase knowledge and appreciation of music in general.

MUS 120 – Music Theory I 3:3:0

Principles of elementary harmony as developed in the Baroque and Classical eras. These include diatonic triads as used in major and minor keys.

MUS 201 – The History of Music I 3:3:0

A critical analysis and survey of music and composers from the beginning of the history of music to 1800.

MUS 202 – The History of Music II 3:3:0

A critical analysis of music and composers from 1800 to the present.

MUS 211 – Choir III 1:0:3

The study, rehearsal, and performance of standard works of choral literature. *Open to any student without audition.*

MUS 212 – Choir IV 1:0:3

The study, rehearsal, and performance of standard works of choral literature. *Open to any student without audition.*

MUS 215GU – Private Lessons: Guitar 1:1:0

MUS 215PI – Private Lessons: Piano 1:1:0

MUS 215VO – Private Lessons: Voice 1:1:0

MUS 216GU – Private Lessons: Guitar 1:1:0

MUS 216PI – Private Lessons: Piano 1:1:0

MUS 216VO – Private Lessons: Voice 1:1:0

Nanofabrication • BHET Division

NFAB 211 – Material, Safety, and Equipment Overview for Nanofabrication 3:2:3

Overview of basic nanofabrication processing equipment and materials handling procedures. The focus is on procedural, safety, environment, and health topics in equipment operation and materials handling. Topics include clean-room operation, safety, and health topics; vacuum pump systems operation, environmental, safety, and health topics (covering direct-drive mechanical, roots

blowers, turbomolecular, and dry mechanical systems); furnace operation, safety, environmental, and health topics (covering horizontal, vertical, rapid thermal annealing tools); chemical vapor deposition system operation, safety, environmental, and health topics (covering gas delivery, corrosive and flammable gas storage and plumbing, regulators, and mass flow controllers); and vacuum deposition/etching system operation, safety, environment, and health topics (covering microwave and radio frequency power supplies and tuners, heating and cooling units, vacuum gauges, valves, and process controllers). Specific materials handling topics include solvents; cleansers; ion implantation sources; diffusion sources; photoresists; developers; metals; dielectrics; and toxic, flammable, corrosive, and highly purity gases as well as packaging materials. *Prerequisite: Restricted, see program coordinator.*

NFAB 212 – Basic Nanofabrication Processes 3:2:3

Overview of basic processing steps in nanofabrication. The majority of the course details a step-by-step description of the equipment and processes needed to fabricate devices and structures. Processing flow is examined for structures such as micro-electromechanical machine (MEM) devices, biomedical “lab-on-a-chip” structures, display devices, and microelectronic devices including diode and transistor structures. Students learn the similarities and differences in both equipment and process flow for each configuration by undertaking “hands-on” processing. *Prerequisite: Restricted, see program coordinator.*

NFAB 213 – Thin Films in Nanofabrication 3:2:3

Thin film deposition and etching practices in nanofabrication. The deposition techniques included in the first part of the course include atmospheric, low-pressure, and plasma-enhanced chemical vapor deposition and sputtering, thermal-evaporation, and beam-evaporation physical vapor deposition. Materials considered include dielectrics (nitride, oxide), polysilicon (doped and undoped), metals (aluminum, tungsten, copper), adhesion promoters and diffusion barriers. The second part of the course focuses on etching processes and emphasizes reactive ion etching (single wafer, batch), high-ion-density reactors, ion-beam etching and wet-chemical etching. Students receive hands-on experience in depositing and etching dielectric, semiconductor, and metal materials using state-of-the-art tools and practicing many of the steps critical to nanofabrication of semiconductor devices including microelectronic, MEM devices, display structures, and structures used in the biotechnology fields.

Prerequisite: Restricted, see program coordinator.

NFAB 214 – Lithography for Nanofabrication 3:2:3

All aspects of lithography from design and mask fabrication to pattern transfer and inspection. The course is divided into three major sections. The first section describes the lithographic process from substrate preparation to exposure. The emphasis is on understanding the nature and behavior of photoresist materials. The second section examines the process from development through inspection (both before and after pattern transfer). This section introduces optical masks, aligners, steppers and scanners. In addition, critical dimension (CD) control and profile control of photoresists are investigated. The last section discusses advanced optical lithographic techniques such as phase-shifting masks and illumination schemes as well as e-beam, x-ray, extreme ultraviolet (EUV), and ion beam lithography. *Prerequisite: Restricted, see program coordinator.*

NFAB 215 – Materials Modification in Nanofabrication 3:2:3

The process used in modifying material properties in nanofabrication. Included are growth and annealing processes utilizing horizontal and vertical furnaces as well as rapid thermal annealing. The impact of thermal processing and thermal processing on defects; gettering; impurities; and overall electrical, mechanical, optical, electrical, and chemical properties are studied. Students grow and measure gate and field oxides, implant and activate source and drain regions, and evaluate thermal budget requirements using state-of-the-art tools. Included also are other modification technologies such as ion implantation, diffusion and surface preparation and treatment. Substrate preparation processing such as slicing, etching, polishing and epitaxial growth are covered. *Prerequisite: Restricted, see program coordinator.*

NFAB 216 – Characterization, Packaging, and Testing of Nanofabricated Structures 3:2:3

Techniques and measurements essential for controlling device fabrication and final packaging. Monitoring techniques such as residual gas analysis (RGA), optical emission spectroscopy (OES) and end-point detection are discussed. Characterization techniques such as scanning electron microscopy (SEM), x-ray photoelectron spectroscopy (XPS)/Auger, surface profilometry, advanced optical microscopy, optical thin film measurements, ellipsometry, and resistivity/conductivity measurements are used on real samples. Basic electrical measurements on device structures for yield analysis and process control are also

stressed. These include breakdown measurements, junction testing, and simple transistor characterization. In addition, students examine mechanical as well as electrical characteristics of some simple MEMs devices, and chemical and biological responses of nanofabricated biomedical structures. Students also learn about the manufacturing topics involved in subjects such as interconnects, isolation, and final device assembly. Aluminum, refractory metals and copper deposition techniques and characterization are discussed in detail along with topics such as diffusion barriers, contact resistance, electromigration, corrosion, stress effects, and adhesion. The importance of planarization techniques such as deposition/etchback and chemical/mechanical polishing are emphasized. Packaging procedures such as die separation, inspection bonding, sealing and final testing for both conventional integrated circuits and novel MEM and biomedical devices are examined. *Prerequisite: Restricted, see program coordinator.*

Nursing • MSAH Division

NURS 100 – Fundamentals of Practical Nursing 10:5:20

Introduction to practical nursing, including nursing skills, communication, nursing process, and legal issues. Human physiological and psychosocial needs as related to health are studied in the classroom and campus nursing laboratory and through clinical experiences. *Laboratory and insurance fees are required. Prerequisite: MATH 020 with a grade of C or higher. Corequisites: BIOL 100, BIOL 111, and ENGL 101.*

NURS 101 – Concepts in Practical Nursing I 10:5:20

Builds on concepts studied in NURS 100. The role of the practical nurse in maternal and child health and mental health nursing is studied. Specific needs of infants and adults are studied as they relate to the individual’s stage of growth and development. Development of therapeutic communication and patient teaching skills is emphasized through selected clinical experiences. *Laboratory and insurance fees are required. Prerequisite: NURS 100 with a grade of C or higher; corequisite: PSYC 101.*

NURS 102 – Concepts in Practical Nursing II 10:5:20

Builds on concepts studied in NURS 100 and NURS 101. Experience in administration of medications, leadership skills, and organization of nursing care is emphasized. Nursing care of the adult experiencing common health problems is studied through classroom and clinical experiences. Conferences relevant to

Nursing (continued)

the transition into practice are included.

Laboratory and insurance fees are required.

Prerequisite: NURS 101 with a grade of C or higher. Corequisite: SOCI 201.

NURS 103 – Nursing Process in Family Health 7:5:6

Introduction to the fundamentals of patient care. Emphasis is placed on treating the patient both as an individual and as a family member and on developing an appreciation of the patient's right to choose and the role of cultural values in health care decisions. *Laboratory and insurance fees are required. Pre- or corequisites: Permission of the nursing program faculty, BIOL 121, BIOL 221, PSYC 101 and ENGL 101. (D)*

NURS 103A – Nursing Process in Family Health I 3:2:3

Initial introduction to the fundamentals of patient care. Emphasis is placed on treating the patient both as an individual and as a family member and on developing an appreciation of the patient's right to choose and the role of cultural values in health care decisions. *Laboratory and insurance fees are required. Prerequisite: BIOL 121 with a grade of C or higher, and permission of the Nursing faculty. Corequisites: BIOL 221, PSYC 101, and ENGL 101. (D)*

NURS 103B – Nursing Process in Family Health II 4:3:3

Continuation of NURS 103A. The emphasis continues to be placed on treating the patient both as an individual and as a family member and on developing an appreciation of the patient's right to choose and the role of cultural values in health care decisions. *Laboratory and insurance fees are required. Prerequisites: BIOL 121 and NURS 103A with a grade of C or higher, and permission of the Nursing faculty. Corequisites: BIOL 221, PSYC 101 and ENGL 101. (D)*

NURS 104 – Nursing Process in Common Life Experiences 8:4:12

Builds on concepts studied in NURS 103. Considers events common in the normal life cycle. The nursing process is used to assist persons during birth and normal growth and development from infancy to maturity and aging. *Laboratory and insurance fees are required. Pre- or corequisites: Permission of the nursing program faculty, BIOL 122, ENGL 102, SOCI 201, and NURS 103 with grades of C or higher.*

NURS 104A – Nursing Process in Common Life Experiences I 4:2:6

Builds on concepts studied in NURS 103 or NURS 103A and NURS 103B. The course considers events common in the normal life

cycle. The nursing process is used to assist persons in normal growth and development from young adulthood through maturity and aging. *Laboratory and insurance fees are required. Prerequisites: BIOL 122 and NURS 103 or NURS 103A and NURS 103B, and permission of the Nursing program faculty. Corequisites: SOCI 201 and ENGL 102.*

NURS 104B – Nursing Process in Common Life Experiences II 4:2:4.5

Continuation of NURS 104A. The emphasis continues to be on events common in the normal life cycle. The nursing process is used to assist persons during birth and normal growth and development from infancy to adolescence. *Laboratory and insurance fees are required. Prerequisites: NURS 104A with a grade of C or higher, and permission of the Nursing program faculty. Corequisites: SOCI 201 and ENGL 102.*

NURS 121 – Nursing Process in Maternal and Child Health 6:6:0

Assesses knowledge of maternal and child health as a result of prior learning in a nursing education program. Credit is by examination or transfer. *Prerequisites: pre- and corequisite courses for NURS 104 and permission of the nursing faculty.*

NURS 122 – Concepts in Nursing Processes in Common Life Experiences 2:1:3

The nursing process as used to assist persons experiencing common events requiring nursing intervention throughout their life-spans. *An insurance fee is required. Prerequisites: NURS 121 and permission of the nursing faculty.*

NURS 125 – Dosage Calculations 2:2:0

Systems of measurement employed, and review of the basic mathematics required, in calculating drug dosages for adults and children. Additional topics include interpretation of drug orders and labels, the equipment used in dosage measurement, and oral and parenteral dosages. *Corequisite: Enrollment in the pre-nursing or nursing program or permission of the instructor.*

NURS 203 – Nursing in Society I 1:1:0

An overview of the development of nursing as a profession. Current issues and problems are viewed in historical perspective. The leadership role of the nurse is emphasized. *Prerequisites: Permission of the nursing program faculty, and NURS 104 with a grade of C or higher.*

NURS 204 – Nursing in Society II 1:1:0

A continuing look at current issues and problems in nursing, including the changing health care delivery system and modern ethical and legal issues. Emphasis is also placed upon

the problems, responsibilities, and accountability engendered in the changing role from the student to the graduate.

Prerequisites: Permission of the nursing program faculty, and NURS 203 and NURS 205 with grades of C or higher.

NURS 205 – Nursing Process in Common Health Problems I 9:4:15

Builds on concepts studied in NURS 104. Focuses on the use of the nursing process to assist persons experiencing common health problems requiring acute or long-term health care. *Laboratory and insurance fees are required. Pre- and corequisites: Permission of the nursing program faculty; NURS 104, BIOL 121, BIOL 122, and BIOL 221 with grades of C or higher; PSYC 213; NURS 203. (D)*

NURS 205A – Nursing Process in Common Health Problems IA 4.5:2.5:3.75

Builds on concepts studied in NURS 104 or NURS 104A and NURS 104B. This course focuses on the use of the nursing process to assist persons experiencing common health problems requiring acute or long term care. *Laboratory and insurance fees are required. Prerequisites: NURS 104 or NURS 104A and NURS 104B, and BIOL 122 with a grade of C or higher, and SOCI 201 and ENGL 102. Corequisites: NURS 203 and PSYC 213. (D)*

NURS 205B – Nursing Process in Common Health Problems IB 4.5:2.5:3.75

A continuation of NURS 205A. There is continued focus on the use of the nursing process to assist persons experiencing common health problems requiring acute or long-term health care. *Laboratory and insurance fees are required. Prerequisites: NURS 205A and BIOL 122 with a grade of C or higher, ENGL 102, SOCI 201, and permission of the Nursing program faculty. Corequisites: NURS 203 and PSYC 213. (D)*

NURS 206 – Nursing Process in Common Health Problems II 9:5:12

A continuation of NURS 205. The student applies the nursing process to the care of persons with health problems that require more advanced nursing intervention. *Laboratory and insurance fees are required. Pre- and corequisites: Permission of the nursing faculty; NURS 203 and NURS 205 with grades of C or higher; NURS 204, SPCH 101, Core A elective, free elective, and PE elective.*

NURS 206A – Nursing Process in Common Health Problems IIA 3.5:2:4.5

A continuation of NURS 205 or NURS 205A and NURS 205B. The student begins to apply the nursing process to the care of persons with health problems that require more advanced nursing intervention. *Laboratory and*

insurance fees are required. Pre- and corequisites: NURS 203, 204, and 205 or 205A and 205B, and permission of the Nursing program faculty.

NURS 206B – Nursing Process in Common Health Problems IIB 5.5:3:3

Continuation of NURS 206A. The student continues to apply the nursing process to the care of persons with health problems that require more advanced nursing interventions. Laboratory and insurance fees are required. Pre- and corequisites: NURS 203, 204, and 205 or 205A and 205B, and permission of the Nursing program faculty.

NURS 220 – Pharmacology for Nurses 3:3:0

An introduction to pharmacology and safe administration of drugs. Emphasis is placed on the study of groups of drugs, their actions, and their side effects with special focus on nursing implications and pharmacokinetics. Prerequisite: NURS 103 with a grade of C or permission of the nursing faculty.

NURS 225 – Advanced Dosage Calculations 1:1:0

Advanced dosage calculations for administering pediatric and intravenous medications. Builds on concepts of basic dosage calculations. Emphasizes critical thinking skills required for administering pediatric and intravenous medication. Prerequisite: NURS 104 or permission of the instructor.

NURS 260 – Concepts in Perioperative Nursing I 6:6:0

A theoretical overview of principles and concepts relevant to the practice of nursing in the perioperative setting. This course includes the study of perioperative standards of patient care, values, ethics and professionalism. An additional fee is required. Prerequisite: Permission of the Program Director; Corequisite: NURS 261.

NURS 261 – Concepts in Perioperative Nursing Practicum I 2:0:6

A practicum developing the concepts learned in NURS 260. Students are assigned to affiliated agencies where they are oriented to the perioperative nursing environment and begin to practice the necessary skills related to care of the patient in the operating room. A liability insurance fee is required. Corequisite: NURS 260.

Nutrition • MSAH Division

NUTR 104 – Nutrition 3:3:0

Introduction to nutrition principles including the digestive system; the six nutrients and their roles in the body; food sources with an emphasis on the anatomy, physiology and biochemical processes. Nutrient recommenda-

tions; nutritional needs during the life cycle. Nutritional factors in food selection and preparation of foods with an emphasis on the nutritional and chemical properties of foods. Nutrition in health and disease; weight control, diabetes, cardiovascular disease, dental health, cancer and nutrition. Conducting a diet history. Development of healthful recipes and menus. Evaluation of nutrition information for the public. Exercises include evaluation of the diet and recipes using computerized analysis; evaluation of body composition and sampling of foods with healthful properties such as vegetarian items, low fat, and foods with particular phytochemicals.

Office Information Systems • BHET Division

OIS 115 – Computer Skills for Medical Professionals 3:3:0

The use of computers in medical practice management including an overview of computer terminology, word processing, spreadsheets and databases as they pertain to medical assisting. Emphasis is on using word processing to transcribe and produce medical documents. (Occasional offering.) Prerequisite: AOS 101 with a grade of C or higher.

Paralegal Studies • CASS Division

PLGL 101 – Introduction to Paralegal Studies 3:3:0

Introduction to the American legal system. Topics covered include an outline of the organization and jurisdiction of federal and state courts; introduction to legal terminology; discussion of the role of the paralegal and the responsibilities of lawyer and paralegal; introduction to legal ethics as they apply to both lawyer and paralegal; introduction to legal research; survey of the general law areas, including contracts, torts, criminal law, property law, family law, business organizations, and estate law. Pre- or corequisite: ENGL 101.

PLGL 102 – Legal Research and Writing I 3:3:0

Examination of the law library. An introduction to research in the various reference sources available to lawyers in determining applicable law; study of the processes of legal research and the writing of memoranda. Students gain practical experience by completing research and writing assignments. Prerequisite: PLGL 101 with a grade of C or higher.

PLGL 104 – Legal Research and Writing II 3:3:0

Continued examination of various legal reference sources, including computer-assisted legal research. The course includes extensive drafting of legal memoranda, correspondence, and briefs. A laboratory fee is required.

Prerequisite: PLGL 102 with a grade of C or higher.

PLGL 201 – Civil Litigation I 3:3:0

Training for work with an attorney throughout the course of a civil case, including the initial pleadings. Emphasis is placed on performance of special tasks, including investigative techniques, client and witness interviews, preparation of the initial fact sheet, and drafting of initial pleadings. The course also includes an introduction to rules of evidence as they apply to civil actions as well as a review of state and federal court structure and instruction in Rules of Civil Procedure. Prerequisite: PLGL 101 with a grade of C or higher.

PLGL 202 – Civil Litigation II 3:3:0

Continuation of PLGL 201. The emphasis is on motion practice, discovery, settlements, trial preparation, and post-trial procedures. The course requires extensive drafting of relevant legal documents, including instruction in the use of form books. Prerequisite: PLGL 201 with a grade of C or higher.

PLGL 203 – Family Law 3:3:0

A study of legal problems pertaining to the formation and dissolution of the family unit. Topics include marriage, separation, annulment, divorce, custody and support of children, legitimacy, adoption, protection from abuse, and change of name. There is a special emphasis on skills involving client interviews and preparation of documents and pleadings. Prerequisite: PLGL 101 with a grade of C or higher.

PLGL 204 – Estate Planning and Administration 3:3:0

An introduction to the more common forms of wills, trusts, powers of attorney, advanced directives for healthcare (living wills), other estate planning documents, and a survey of the fundamental principles of law applicable to each. Also included is a review of Pennsylvania's Intestate Succession law and a detailed analysis of the administration of estates, including the impact of applicable death transfer taxes. Students gain practical experience in preparing estate planning documents and inheritance tax returns. Prerequisite: PLGL 101 with a grade of C or higher.

PLGL 205 – Business Organizations 3:3:0

The study of the legal organization of business entities and the role of the paralegal in the formation of various business organizations. This includes a survey of the fundamental principles of law applicable to each type of business organization and the preparation of the documents necessary to the

Paralegal Studies (continued) – Physical Education

organization and operation of each.

Prerequisite: PLGL 101 with a grade of C or higher.

PLGL 206 – Employment Law 3:3:0

An introduction to employment law terms and concepts. The course includes instruction in specific statutory law related to the workplace, including Americans with Disabilities Act, Family and Medical Leave Act, Age Discrimination in Employment Act, Title VII (Race, Gender, Nationality Discrimination), Worker's Compensation, immigration law, and OSHA. Students receive instruction in the appropriate procedural law used in the different forums in which employment issues are litigated. *Prerequisite: PLGL 101 with a grade of C or higher.*

PLGL 207 – Bankruptcy Law 3:3:0

Overview of consumer bankruptcy law and procedures featuring practice in document preparation. *Prerequisite: PLGL 101 with a grade of C or higher.*

PLGL 209 – Real Estate Law for Paralegals 3:3:0

Overview of the law relating to the transfer of residential real property. A survey of multiple forms of ownership, agreements of sale, title searching procedures, and mortgage documents. Students learn to draft deeds and prepare settlement sheets. *Prerequisite: PLGL 101 with a grade of C or higher.*

PLGL 210 – Paralegal Ethics and Professionalism 3:3:0

In depth analysis of legal ethics, including unauthorized practice of law, confidentiality, and conflicts of interest. The course includes instruction in computer-assisted legal research. There is also discussion of professionalism and job interview preparation. *This course is designed to be taken at the end of the student's course of study. Corequisite: PLGL 102.*

PLGL 251 – PLGL Internship I 3:1:14

At least 200 hours of work experience in an approved law firm or law office. A comprehensive daily diary is required, and students meet on campus to discuss their experiences. *Limited to qualified students enrolled in the Paralegal Studies degree or certificate program. Prerequisites: PLGL 102 and PLGL 201 with a grade of C or higher, and permission of the Program Coordinator or Internship Instructor.*

PLGL 252 – PLGL Internship II 3:3:0

At least 200 hours of work experience in an approved law office. A comprehensive daily diary is required, and students meet on campus to discuss their experiences. *Limited to qualified students enrolled in the Paralegal Studies degree or certificate program. Prerequisites: PLGL 251 with a grade of C or*

higher and permission of the Program Coordinator or Internship Instructor.

Philosophy • CASS Division

PHIL 101 – Introduction to Philosophy 3:3:0

Classic philosophical problems are examined through classroom discussions and a wide range of historical readings. The foundations of Western philosophical thought are explored from such thinkers as Socrates, Descartes, Nietzsche, and Martin Luther King, Jr. *Corequisite: ENGL 101. (Core A)*

PHIL 102 – Logic 3:3:0

Learning to think clearly by examining the logical principles of right reasoning. Practice in creating valid inductive and deductive arguments and spotting arguments and misleading ploys increase the student's powers of writing, speaking and critical thinking. *(Core A)*

PHIL 200 – Comparative Religion 3:3:0

The central beliefs of such major world religions as Hinduism, Buddhism, Judaism, Christianity, and Islam. The varieties of religious experience from both Eastern and Western cultural traditions are explored to determine their similarities and differences. *(Core A)(D)*

PHIL 215 – Philosophy of Science 3:3:0

An investigation into the conceptual structures and methods used in scientific thinking; the logic of scientific assumptions, theories, and laws; and the relation between scientific facts and ethical values.

PHIL 225 – Ethics: Belief and Action 3:3:0

Everyday moral problems are investigated through the insights of Aristotle, Kant, Mill, Sartre, and other philosophers to help students form their own philosophies of life. *(Core A)*

Phlebotomy • MSAH Division

PBT 100 – Introduction to Phlebotomy for Allied Health 1:0.5:1.5

The proper collection of blood specimens by venipuncture. Topics include safety procedures, infection control, collection equipment, point of care testing, and specimen handling and transport. *Students are required to perform venipuncture in class. Laboratory and liability insurance fees are required. Corequisite: Permission of the Program Coordinator.*

PBT 101 – Phlebotomy 4:3:3

Students acquire the skills necessary to properly obtain blood specimens for laboratory testing. Topics include safety procedures, infection control, medical terminology, specimen collection, collection equipment, point-of-care testing, customer service, and the role of the phlebotomist in the health care

system. *Students are required to perform venipuncture in this class. Laboratory and liability insurance fees are required.*

Prerequisite: Eligibility for enrollment in ENGL 101; Corequisites: AH 140 and BIOL 111.

PBT 102 – Phlebotomy Clinical Experience 2:0:8

Supervised application at an affiliated clinical training site of skills acquired in PBT 101. The student learns to function competently as a phlebotomist. *The clinical is 120 hours (15 consecutive days). A liability insurance fee is required. Prerequisite: PBT 101 or AH 142 or MLT 100 with a grade of C or higher, or permission of the instructor.*

Physical Education • MSAH Division

PE 102 – Golf/Tennis 1:1:1

Golf – Golf fundamentals with emphasis on grip, stance, and swing. The etiquette of play, and purchase and care of equipment are also introduced. Tennis – Players learn beginner's skills; forehand, backhand grip and stroke, serve, volley, scoring, rules, purchase and care of equipment.

PE 108 – Golf/Racquetball 1:1:1

Golf – Golf fundamentals with emphasis on grip, stance, and swing. The etiquette of play, and purchase and care of equipment are also introduced. Racquetball – Techniques of racquetball, including rules, strategy, strokes, and play.

PE 109 – Golf/Physical Fitness 1:1:1

Golf – Golf fundamentals with emphasis on grip, stance, and swing. The etiquette of play, and purchase and care of equipment are also introduced. Physical Fitness – Total physical conditioning; emphasis is on the isokinetic theory (CAM II). Use of Universal and free-weights is optional.

PE 110 – Tennis/Volleyball 1:1:1

Tennis – Players learn beginner's skills: forehand, backhand grip and stroke, serve, volley, scoring, rules, purchase and care of equipment. Volleyball – Skills of passing, setting, spiking, serving, blocking and defense in order to prepare students for game situations. The course includes conditioning exercises for the major muscle groups and joint actions involved in volleyball. Emphasis is also on the importance of cardiovascular conditioning and the prevention of injury.

PE 115 – Archery/Badminton 1:1:1

Archery – Basic skills of target archery: selection and care of equipment; safety; bracing a bow; grip, aiming using a pin site, and releasing the arrow. This course includes muscular conditioning exercises for archery and the prevention of injury. Badminton –

Physical Education (continued)

Basic skills of serving, forehand and back-ground strokes, volley, lob and overhead smash shots in order to prepare students for game situations. Rules, etiquette and strategy are also covered. Emphasis is also on cardiovascular and muscular conditioning exercises and the prevention of injury.

PE 118 – Tennis/Badminton 1:1:1

Tennis – Players learn beginner’s skills: forehand, backhand grip and stroke, serve, volley, scoring, rules, purchase and care of equipment. Badminton – Basic skills of serving, forehand and backhand strokes, volley, lob and overhead smash shots introduced in order to prepare students for game situations. Rules, etiquette and strategy are also covered. Emphasis is also on cardiovascular and muscular conditioning exercises and the prevention of injury.

PE 119 – Tennis/Physical Fitness 1:1:1

Tennis – Players learn beginner’s skills: forehand and backhand grip and stroke, serve, volley, scoring, rules, purchase and care of equipment. Physical Fitness – Total physical conditioning; emphasis is on the isokinetic theory (CAM II). Use of the Universal and free-weights is optional. (W)

PE 122 – Tennis/Racquetball 1:1:1

Tennis – Players learn beginner’s skill: forehand and backhand grip and stroke, serve, volley, scoring, rules, purchase and care of equipment. Racquetball – Techniques of racquetball including rules, strategy, strokes, and play.

PE 131 – Aquatics I – Beginning 1:1:1

Basic swimming skills presented include floats, recoveries, rhythmic breathing, elementary swim strokes, deep water adjustments, and treading water. Also, survival swimming skills, elementary diving skills, and non-swimming rescues will be presented. (W)

PE 132 – Aquatics II 1:1:1

Swimming skills, including the crawl, elementary back stroke, breast stroke, back crawl, butterfly, side stroke, survival swimming, and elementary forms of rescue. *Prerequisite: Successful completion of PE 131 or the ability to pass a swimming test given during the first week of class. (W)*

PE 133 – Aquatics III – Lifeguard Training 2:1.5:1.5

Water rescue and current spinal-injury management techniques. Special emphasis is placed on accident prevention, rescue skills, special-equipment rescues, pool maintenance, and administrative responsibilities. *The American Red Cross Lifeguard Certificate and First Aid and CPR certification may be earned upon successful completion of the course. Prerequisite: Demonstration of strong swim*

ming skills in a pre-test given during the first week of class.

PE 135 – Fitness and Dance Variations 1:1:1

Continuous movement for cardiovascular and muscular fitness. Various forms of dance are taught, including dance aerobics, jazz, folk, and country line dances. Particular emphasis is on dance as an activity that enhances the health-related components of physical fitness. (W)

PE 137 – Dance/Slimnastics 1:1:1

Continuous movement for cardiovascular and muscular fitness. Basic locomotor movements and dance steps are choreographed to music for a vigorous and fun workout. Activity also includes an introduction to progressive resistance training and stretching exercises. Special attention is placed on nutrition and the role of exercise in weight management. (W)

PE 138 – Basic Fitness I 1:1:1

Current information about lifestyle factors affecting the participants’ health, in particular the role of physical activity, exercise, and fitness. Strategies on how to improve health-related components of physical fitness are covered. Other topics include goal setting, motivation, and stress management. This course also involves participation in a variety of activities. (W)

PE 139 – Beginning Self – Defense 1:1:1

Fundamentals of self-defense—introducing basic strikes, blocks, throws, chokes, locks, and holds necessary to subdue an individual engaged in a self-defense situation. (W)

PE 140 – Intermediate Self – Defense 1:1:1

Techniques presented are strikes, kicks, blocks, and throws as applied in self-defense situations on an intermediate level. Judo free-style and counter techniques to judo throws and holds are also taught. *Prerequisite: PE 139.*

PE 141 – Cardio Kickboxing and Resistance Training 1:1:1

Designed to focus on the health-related benefits of moderate to vigorous exercise through the development of safe and effective kicks and punches. Flexibility, strength, and conditioning exercises for all major muscle groups are included as well as an emphasis on cardiovascular health through a kickboxing workout. An additional focus is on muscular strength and endurance exercises using free weights and other resistance training equipment. (W)

PE 142 – Aerobic Fitness I 1:1:1

Development of flexibility and muscular strength and endurance of the major muscle groups and the joint actions involved in a

variety of aerobic conditioning activities. In addition, a strong emphasis is placed on the importance of the health benefits of cardiovascular conditioning and on the prevention of injury. (W)

PE 143 – Aerobic Fitness II 1:1:1

Designed for the student who desires a more vigorous exercise program and/or is interested in teaching group fitness classes. Emphasis is on the design of fitness programs that improve the health-related components of fitness: flexibility, muscular strength, muscular endurance, cardiovascular-respiratory endurance and body composition. Participants are also introduced to concepts related to the teaching of group exercise classes, including effective communication, basic locomotor skills, contraindicated exercises, and the care and prevention of injuries. (W)

PE 146 – Basketball/Soccer Beginning 1:1:1

Basketball – Basic skills of shooting, rebounding, passing, dribbling, defensive techniques. Classes are oriented to game situations. Soccer – The basic skills of soccer: trapping, passing, kicking, heading, offensive and defensive strategy, rules of the game. The course offers the opportunity to apply the skills under game conditions.

PE 147 – Introduction to Ballet and Jazz 1:1:1

The fundamentals of dance. Floor work includes technical steps of the classical ballet, and various styles of jazz dance. Dancewear or similar attire is strongly recommended.

PE 148 – Ballet I 1:1:1

This course defines and executes the technical steps of classical ballet. Grade I level includes exercise au milieu, grand adage, allegro, port de bras. Dancewear or similar attire is strongly recommended.

PE 150 – Skiing I 0.5:0.5:0.5

Skills for novice to experienced skiers, including conditioning, selection and care of equipment, beginning to advanced skills, safety and conduct on the slopes. *A laboratory fee is required.*

PE 152 – Basic Scuba and Open Water Diver 3:3:1

Skills for the use of self-contained underwater breathing apparatus. Topics covered are diving skills, equipment needs, use and care, safety, medical and physiological aspects of diving, and decompression tables. Students will have the optional opportunity to schedule open water SCUBA dives for PADI certification. *A laboratory fee is required. Prerequisite: Students must pass a swimming test conducted during the first week of class.*

PE 154 – Skiing I/Skiing II 1:1:1

Designed for the beginner, intermediate or

Physical Education (continued) – Physical Science

advanced level skier. This course teaches the American skiing method. Conditioning, selection and care of equipment, safety and conduct on the slope and beginning to advanced skiing skills comprise the course.

PE 156 – Sports Medicine I 3:3:1

Provides a basic understanding of the prevention, treatment, and care of athletic injuries. The course includes the fundamentals of emergency medical care as it relates to trauma and transportation of the sick and injured.

PE 162 – Canoeing 1:1:1

Skills and strategies of flat-water canoeing. Emphasis is on safety and skill development in solo and tandem paddling. *Approved for American National Red Cross Basic Canoeing certification.*

PE 165 – Fitness for Life 2:1.5:1.5

Designed to develop concepts of total fitness. Principles of cardiovascular fitness, strength, flexibility, weight control and stress management are presented in order that the student may do a self-assessment. The student will design an exercise program enabling the achievement and maintenance of an adequate level of wellness for life. (W)

PE 166 – Fitness Walking and Resistance Training 1:1:1

Designed to focus on the health-related benefits of moderate to vigorous exercise through walking and resistance training. Flexibility, strength, and conditioning exercises for all major muscle groups are included, as well as an emphasis on cardiovascular health through a variety of walking activities. (W)

PE 169 – Water Exercise I 1:1:1

A stimulating, high energy, water workout that combines both shallow and deep water exercise. It is appropriate for both swimmers and non-swimmers. Activities are performed in deep water with the aid of flotation belts that allow participation without submerging. Emphasis is on improving health-related components of physical fitness: flexibility, muscular strength and endurance, cardiovascular-respiratory endurance, and body composition. (W)

PE 170 – Beginning Horsemanship 1:1:1

A recreational riding course, offering English and Western styles for the novice to the intermediate rider. Emphasis is on safety and skill development around and on the horse. Practical skills include grooming, saddling, horse anatomy, and controlling the horse up to the gait of the trot. An all-day trail ride is held on the last day of class. Students who successfully complete the level-one requirements receive a certificate of accomplishment from

the Certified Horsemanship Association.

Classes are held off-campus. A laboratory fee is required. Prerequisite: An interest in horses and a body weight of 250 pounds or less.

PE 171 – Intermediate Horsemanship 2:1:2

An intermediate riding course for English and Western disciplines taught in a safe and controlled environment. While developing riding skills, students gain a better understanding of the horse's nature and behavior. The focus is on developing physical skills to improve the aids given to the horse at the walk, trot, and canter. Control and proper riding position become more proficient. An all-day level-two trail ride is held on the last day of class. Students who successfully complete the level-two requirements receive a Certified Horsemanship Association certificate of accomplishment. Students achieve a better defined awareness of the equine world and begin to develop individual tastes for horse activities. *A laboratory fee is required. Classes are held at a nearby equestrian farm. Prerequisite: PE 170 or completion of C.H.E. Level 1 riding and written tests.*

PE 172 – Tap and Jazz Dance I 1:1:1

Designed for the student who is interested in learning the basic techniques of tap and jazz. Instruction includes the history of tap and jazz, as well as knowledge of anatomy and physiology as they relate to dance. A particular focus is on dance as a viable form of lifetime physical activity, contributing to overall optimal health and wellbeing.

PE 174 – Introduction to Backpacking 1:1:1

Designed to give students an introduction to the sport of backpacking. The objective of the course is to provide students with the information to determine the differences, advantages, and disadvantages of the equipment necessary for backpacking. In addition to covering such topics as boots, packs, sleeping bags, and tents, the course presents students with the concept of low-impact camping and mental and physical preparation for an outdoor adventure. *Class meets four days in the classroom. The fifth day consists of a short day-hike lasting approximately three hours. An overnight backpacking trip takes place over a Saturday and Sunday.*

PE 176 – The Art and Sport of Judo 3:2.5:2.5

Introduction to Judo, an Olympic sport and a system of self-defense. Students learn various throwing, choking, joint locking, and holding (pinning) techniques. Before throwing techniques are introduced, students learn falling techniques in order to protect themselves when they are thrown. After basic techniques are learned, the student applies

techniques against a partner who is offering resistance and who is attempting to apply techniques against the student. *The course is introductory; however, it involves vigorous physical activity and contact.*

PE 177 – Indoor and Outdoor Rock Climbing 1:1:1

Designed for first-time and intermediate-level rock climbers looking to build techniques, strength, and endurance in both indoor and outdoor climbing. This physically rigorous course emphasizes stretching, balance, movement and training to allow students to progress to more difficult moves associated with more complex climbs. The technical emphasis of the course is limited to the top-rope belay system, tie-in, and belay techniques. *This course does not cover anchor systems and advanced rope work. The culminating project involves an outdoor top-rope-climbing day-trip. A laboratory fee is required.*

PE 178 – Yoga I 1:1:1

The foundation of a Hatha yoga practice. The class focuses on stretching, postures and alignment, breathing exercises, body/mind awareness, relaxation, meditation techniques, health benefits of practice, and key philosophical concepts in the yoga tradition. (W)

PE 179 – Power Yoga 1:1:1

Includes a challenging workout composed of sun salutations, standing postures, balance postures, and floor work to increase strength and flexibility. Also, there is a focus on controlled breathing and stabilization exercises to release tension and stress. A special emphasis is on the incorporation of stretching and relaxation techniques that contribute to stress management and overall health. (W)

PE 180 – Introduction to Pilates 1:1:1

Introduces the Pilates method of body conditioning that uniquely combines stretching and strengthening exercises. The emphasis of the course is to develop an appreciation for the mind/body connection through exercises that improve posture, provide flexibility and balance. (W)

Physical Science • MSAH Division

PHSC 103 – Automotive Physical Science 3:3:1

An introduction to Physics and Chemistry, principally for the Automotive Technician. Students gain an understanding of mechanics, waves, electricity and magnetism, nuclear/atomic physics, chemical elements, chemical bonding and reactions, and organic chemistry as applied to automotive systems.

PHSC 113 – Introduction to Physical Science I 3:3:1

An introduction to Physics and Chemistry

for the non-science major. Students develop problem-solving skills and an understanding of the scientific method via an introduction to mechanics, waves, electricity and magnetism, nuclear/atomic physics, chemical elements, chemical bonding and reactions, and organic chemistry. Practical applications of scientific concepts in business and education are emphasized. *Prerequisite: MATH 010 with a grade of C or higher; or demonstrated equivalent competency in mathematics. A laboratory fee is required. (Core C)*

PHSC 114 – Introduction to Physical Science II 3:3:1

An introduction to Astronomy, Geology, and Meteorology for the non-science major. Students develop problem-solving skills and an understanding of the scientific method via an introduction to the universe and solar system, earth materials and processes, weather, and the environment. Practical applications of scientific concepts in business and education are emphasized. *A laboratory fee is required. (Core C)*

Physics • MSAH Division

PHYS 105 – Concepts in Physics 3:3:1

Designed for students who are not majoring in the sciences. The course provides a conceptual view of major topics in classical and modern physics with a limited mathematical approach. Topics include mechanics, energy, heat, optics, light, special relativity, models of the atom, and electricity and magnetism. *A laboratory fee is required. Prerequisite: Math 051.*

PHYS 151 – Physics for Technicians 4:3:3

Intended for students interested in pursuing careers as technicians. Major topics include mechanics, static and dynamic fluids, atomic structure, radioactivity and its production, electromagnetic waves, direct and alternating current, circuits and magnetism. *A three-hour laboratory is required with the course. Prerequisite: MATH 103 or the equivalent.*

PHYS 152 – Physics for Radiographers 4:3:3

Designed for students who wish to become radiographers. Major topics include electromagnetic applications, diagnostic radiographic imaging systems, nuclear medicine, radiation therapy, and ultrasonography with major emphasis in the field of diagnostic radiology. *Prerequisite: PHYS 151.*

PHYS 201 – General Physics I 4:3:3

Designed for students who are not majoring in the physical sciences. Course includes mechanics, heat, and sound. *A laboratory fee is required. Prerequisite: MATH 104 or the equivalent, or MATH 105. (Core C)*

PHYS 202 – General Physics II 4:3:3

A continuation of PHYS 201. Electricity and magnetism, waves, some optics, light, introduction to modern physics. *A laboratory fee is required. Prerequisite: PHYS 201.*

PHYS 211 – Physics for Engineers and Scientists I 4:3:3

Designed for students who are majoring in physics or engineering; topics include mechanics and heat. Calculus oriented. *A laboratory fee is required. Prerequisite: MATH 121 or equivalent with a grade of C or higher. (Core C)*

PHYS 212 – Physics for Engineers and Scientists II 4:3:3

A continuation of PHYS 211. Topics include electricity and magnetism; light and wave mechanics. Calculus oriented. *A laboratory fee is required. Prerequisites: MATH 122 and PHYS 211 or the equivalent with a grade of C or higher.*

PHYS 215 – Modern Physics 3:3:0

Relativity; relativistic mechanics, electric and magnetic fields as seen from charges; quantum properties, elementary particles; nuclear atom; radioactivity. *Corequisites: PHYS 202 or 212, and Math 122 or equivalent with a grade of C or higher.*

Psychology • CASS Division

PSYC 101 – General Psychology 3:3:0

Examination and application of major principles of psychology including: an introduction to scientific and research methods, biological foundations, sensation and perception, learning and conditioning, human development, motivation and emotion, thinking, memory and intelligence, personality theories, stress and coping, social psychology, psychological disorders and their treatment. *Prerequisite: Completion of ENGL 003 with a grade of C or higher. (Core B)*

PSYC 102 – Introduction to Psychology Laboratory 1:0:3

Designed to acquaint students with a wide range of experimental procedures and experiences in the use of laboratory equipment, including Skinner boxes, biofeedback perception devices, human and animal mazes. *Usually taken simultaneously with PSYC 101 to obtain a more thorough introduction to the field. Prerequisite: PSYC 101 or permission of the instructor.*

PSYC 111 – Stress Management Using Biofeedback 1:0:3

Use of biofeedback equipment designed for teaching control of hand temperature, muscle tension, and brain waves. Specific relaxation exercises parallel the biofeedback training, and

a group session is conducted each week. Topics include basic biofeedback theory and its relation to anxiety and fear reduction, tension and stress relief, and applied medical uses. Biofeedback as a methodology is related to traditional methods, including transcendental meditation, yoga, Lamaze training, and meditative practices in many religions.

PSYC 201 – Educational Psychology 3:3:0

Nature of the child; motivations; ability to adjust; capacity to learn on elementary and secondary levels; individual differences; use of standardized testing devices. *Prerequisite: PSYC 101 with a grade of C or higher.*

PSYC 202 – Psychology of Adjustment 3:3:0

An examination of personality, psychological health, and interpersonal relations. Emphasis on applying knowledge for stress reduction, personal growth, and the prevention and resolution of problems. *(Core B)*

PSYC 209 – Life Cycle Development 3:3:0

Overview of human development, covering the lifespan of the individual. Includes integration of the basic concepts and principles of physical, cognitive and psychosocial development at each major stage of life; prenatal, infancy, toddlerhood, preschool, middle childhood, adolescence, young adulthood, middle adulthood, and old age. *Prerequisite: PSYC 101.*

PSYC 211 – Psychology of Adolescence 3:3:0

Growth and development; peer cultures; capacity to deal with emotions; personality; sex; and moral behaviors. *(Occasional offering.) Prerequisite: PSYC 101.*

PSYC 212 – Child Growth and Development 3:3:0

The combined process of mental development and physical growth of the child, including the nature of children and of learning at various levels of development from the prenatal to the adolescent stage. *Prerequisite: PSYC 101.*

PSYC 213 – Abnormal Psychology 3:3:0

Survey of theories and etiology of abnormal behavior and its social significance; description of symptoms; consideration of techniques of therapy and theories of prevention. *Prerequisite: PSYC 101. (Core B)*

PSYC 215 – The Exceptional Child 3:3:0

Theory and practice of dealing with maladaptive and superior childhood behaviors. Topics include gifted and talented children and children with mental retardation, autism, emotional disturbances, physical disabilities and learning disabilities. *(Occasional offering.) Prerequisite: PSYC 101.*

PSYC 216 – Human Sexuality 3:3:0

Comprehensive review of the biological,

Psychology (continued) – Radiologic Technology

emotional, and psychosocial aspects of human sexual behavior. (Occasional offering.)
Prerequisite: PSYC 101.

PSYC 221 – Social Psychology 3:3:0
Dynamics of interpersonal behavior in various social contexts. Topics include communication; attitude measurement and change; interpersonal attraction; aggression; altruism and prosocial behavior, conformity, compliance and obedience; small-group behavior; leadership; prejudice; and community assessment. Prerequisite: PSYC 101 with a grade of C or higher. (Core B)

PSYC 232 – The Psychology of Death and Dying 3:3:0
Designed to identify and discuss attitudes and feelings toward death; to examine and experiment with common defense mechanisms of dying persons; to acquaint students with typical psychological stages of the terminally ill; and to expose students to the reality of human finiteness. Topics include cultural attitudes and behavior regarding death, mourning rituals, ethics and the right to die, and children and death. (Occasional offering.) Prerequisite: PSYC 101 or permission of the instructor.

PSYC 241 – Research Design and Analysis I 4:3:3
Introduction to statistics used in the behavioral sciences; use of descriptive and inferential statistical tests. Students learn to analyze both by hand and using Statistical Package for the Social Sciences. Basic research design is introduced as it applies to data analysis. Students conduct simple research projects in order to gain experience applying the various statistical tests they learn. Prerequisites: PSYC 101 with a grade of C or higher, and eligibility for enrollment in MATH 103.

PSYC 242 – Research Design and Analysis II 4:3:3
Investigation of techniques required to conduct valid research in the social sciences. Topics include formulation of research ideas, development of research studies, analysis of the results, and presentation of the findings. Prerequisite: PSYC 241 with a grade of C or higher.

Radiologic Technology • MSAH Division

RADT 100 – Introduction to Radiographic Procedures 2:1:3
Didactic instruction and laboratory demonstration and practice of the fundamentals of basic radiographic imaging and procedures. Limited to students accepted into the clinical component of the Radiologic Technology program. A laboratory fee is required. Prerequisites: AH 140 and BIOL 121 with a grade of C or higher; Corequisites: RADT 101,

103, 105, 106, and PHYS 151 with a grade of C or higher.

RADT 101 – Imaging Equipment 2:2:0.2
Provides a knowledge-base of stationary and mobile radiographic, fluoroscopic and tomographic equipment. Quality assurance as it relates to radiographic equipment is also included. Limited to students enrolled in the Radiologic Technology program. A laboratory fee is required. Prerequisites: PHYS 151, RADT 103 and 105.

RADT 103 – Imaging and Processing 3:3:0.33
Provides students with knowledge of factors that govern and influence the production and recording of radiologic images. The emphasis is placed on film and electronic imaging with related accessories. Class demonstrations/labs are used to demonstrate application of theory. Limited to students enrolled in the Radiologic Technology program. A laboratory fee is required. Corequisites: PHYS 151, RADT 101 and 105.

RADT 105 – Radiation Protection and Biology 2:2:0
Provides the student with an overview of the principles of radiation protection and the interaction of radiation with living systems. Laws and regulations governing radiation health and safety are discussed. Limited to students enrolled in the Radiologic Technology program. Corequisites: PHYS 151, RADT 101 and 103.

RADT 106 – Radiologic Technology Clinical Introduction 1:0:8
Theory learned in RADT 100 applied to the clinical setting. The student spends 120 hours of clinical time at a healthcare facility. Limited to students accepted into the clinical component of the Radiologic Technology program. A laboratory fee is required. Prerequisites: AH 140 and CIS 105 with a grade of C or higher. Corequisites: RADT 100, 101, 103, and 105.

RADT 107 – Radiographic Procedures I 2:1:3
Builds upon knowledge and skills obtained in RADT 100. This course is designed with both a didactic and laboratory component. Emphasis is placed on the demonstration and practice of fluoroscopic and intermediate radiographic procedures. Limited to students accepted into the clinical component of the Radiologic Technology program. A laboratory fee is required. Prerequisites: RADT 100, 101, 103, 105, 106, and PHYS 151 with a grade of C or higher. Corequisites: RADT 109 and PHYS 152.

RADT 109 – Radiologic Technology Clinical I 2:0:24
Theory learned in RADT 107 applied in the clinical setting. The student spends 24 hours a week of clinical time at a healthcare facility.

Limited to students accepted into the clinical component of the Radiologic Technology program. A laboratory fee is required. Prerequisites: RADT 100, 101, 103, 105, and 106 with a grade of C or higher; Corequisite: RADT 107.

RADT 201 – Radiographic Procedures II 2:1:3
Builds upon knowledge and skills obtained in RADT 107. This course is designed with both a didactic and laboratory component. Emphasis is placed on the demonstration and practice of advanced and special radiographic procedures. Limited to students accepted into the clinical component of the Radiologic Technology program. A laboratory fee is required. Prerequisites: RADT 107, 109, and PHYS 152 with a grade of C or higher; Corequisites: RADT 203 and 205.

RADT 203 – Radiologic Technology Clinical II 3:0:24
Theory learned in RADT 201 applied in the clinical setting. The student spends 24 hours a week of clinical time at a healthcare facility. Limited to students accepted into the clinical component of the Radiographic Technology program. A laboratory fee is required. Prerequisites: RADT 107 and 109 with a grade of C or higher. Corequisites: RADT 201 and 205.

RADT 205 – Radiographic Pathology 2:2:0
Introduces theories of disease causation and the pathophysiologic disorders that compromise health systems. Etiology, pathophysiology responses, clinical manifestations, radiographic appearance, and management of alterations in body systems are presented. Limited to students enrolled in the Radiologic Technology program. Prerequisites: RADT 109 and BIOL 122 with a grade of C or higher. Corequisites: RADT 201 and 203.

RADT 207 – Radiologic Technology Clinical III 3:0:24
Clinical experience gained under the direct supervision of a college and/or agency clinical instructor for a total of 360 hours. Clinical experience includes observation, patient care, radiographic procedures and simulation. Limited to students enrolled in the Radiologic Technology program. A liability insurance fee is required. Prerequisite: RADT 203 with a grade of C or higher. Corequisite: RADT 209.

RADT 209 – Image Analysis 2:1:3
Provides a basis for analyzing radiographic images. Included is the importance of minimum imaging standards, discussion of a problem-solving technique for image evaluation, and the factors that can affect image quality. Actual images are included for analysis. Limited to students enrolled in the

Radiologic Technology (continued) – Respiratory Care

Radiologic Technology program. A laboratory fee is required. Prerequisites: RADT 201, 203, and 205 with a grade of C or higher. Corequisite: RADT 207.

RADT 211 – Radiologic Technology Clinical IV 3:0:26

Clinical experience gained under the direct supervision of a college and/or agency clinical instructor for a total of 384 hours. The clinical experience includes observation, patient care, radiographic procedures, and simulation. *Limited to students enrolled in the Radiologic Technology program. A liability insurance fee is required. Prerequisites: RADT 207 and 209 with a grade of C or higher.*

Real Estate • BHET Division

RE 101 – Real Estate Fundamentals 3:3:0

The practices of real estate in Pennsylvania. A springboard for further study, the course is designed to familiarize the student with the language, principles, and laws that govern the real estate profession. Emphasis is on the fundamental concepts of land, property, and rights in realty and the practices, methods, and laws that govern the conveyance of these rights.

RE 102 – Real Estate Practice 3:3:0

The role of a real estate agent in the field of residential brokerage. The student is introduced to all facets of the real estate business, including fields of specialization. The course is designed to acquaint the student with the basic techniques, procedures, regulations, and ethics involved in a real estate transaction along with a working knowledge of the necessary forms and documents, including real estate mathematics. *Pre- or corequisite: RE 101.*

RE 108 – Appraisal of Residential Property 3:3:0

The principles and theory of appraising industrial, commercial, and residential real estate. Various approaches are examined: cost, income, replacement, and a combination of these approaches are given careful analysis.

RE 201 – Real Estate Finance 3:3:0

The analysis of financial institutions, techniques, and instruments necessary in real estate finance. Sources of funds, loan contracts, mortgage risks, placement, and cost are examined. In addition, the role of government agencies is discussed. *(May be applied toward licensing requirements for broker only.)*

RE 203 – Real Estate Law 3:3:0

Legal aspects of real estate as they pertain to the sale, purchase, and management of real property. Titles, deeds restrictions, agreements of sale, mortgages, liabilities for injuries, brokerage law, and judgements and liens are also examined. *(May be applied toward licensing requirements for broker only.)*

RE 204 – Real Estate Investment 2:2:0

Advantages and disadvantages of real estate as an investment. Topics include feasibility studies for various categories of properties, forms of ownership, modes of finance, taxes, and principles of cash flow analysis. *(May be applied toward licensing requirements for broker only.)*

RE 205 – Residential Real Estate Construction 2:2:0

Tracing the process of the construction of a house. Topics include construction terminology, laws and contracts, subdivision development, design, cost estimation, site preparation, and building components, including mechanical systems. *(May be applied toward licensing requirements for broker only.)*

RE 206 – Non-Residential Property Management 3:3:0

The policies and principles which provide the foundation for the effective management of residential, commercial, and industrial properties. Examination and analysis of the problems of collection, maintenance, services, records, and tenant relationships. *(May be applied toward licensing requirements for broker only.)*

Respiratory Care • MSAH Division

RESP 100 – Introduction to Respiratory Care 2:2:0

Respiratory care as an allied health specialty with emphasis on role delineation, a brief history and the organization of the profession, the metric system, and basic science concepts including gas physics. Cleaning and sterilization of equipment and computer technology in respiratory care are also covered. *Prerequisite: Admission into the Respiratory Therapist program or permission of the program director.*

RESP 110 – Medical Terminology 1:1:0

Terminology, abbreviations, and symbols related to human anatomy, physiology, and pathophysiology. Emphasis is placed on the respiratory and cardiovascular systems and on diagnostic tests and procedures used in pulmonary physiology and respiratory care. *Prerequisite: Admission into the Respiratory Therapist program or permission of the program director.*

RESP 120 – Cardiopulmonary Anatomy and Physiology 3:3:0

Anatomy and physiology of the heart and lungs. Factors influencing ventilation, ventilation and perfusion relationships, regulation of ventilation, and gas transport are covered. *Enrollment is limited to students in the Respiratory Therapist program or permission of the program director. Prerequisite: CHEM 100 with a grade of C or higher. Corequisites:*

RESP 100, 110, and BIOL 122, or permission of the program director.

RESP 130 – Hospital Orientation 2:1:4

The practitioner/patient relationship, patient rights, and the teamwork of healthcare workers. The student spends four hours per week under the direct supervision of an instructor in a clinical affiliate. Topics include isolation techniques, patient positioning, lifting and moving, vital signs, charting, and patient interaction. Students rotate through various departments in order to gain an understanding of the roles of auxiliary services. *Liability insurance is required. Prerequisites: RESP 100, RESP 110 with grades of C or higher; and CPR certification through the American Heart Association; corequisite: RESP 140 with a grade of C or higher; or permission of the program director.*

RESP 140 – Oxygen Administration 5:4:3

Basic respiratory care equipment and procedures with an introduction to medical gas therapy, humidification and nebulization devices, and oxygen analyzers. Emphasis is on humidity/aerosol therapy and oxygen delivery systems with discussion of rationale for use, proper administration, and theory of operation and maintenance. *Enrollment is limited to students in the Respiratory Therapist program. A laboratory fee is required. Prerequisites:*

RESP 100, 110, and 120 with a grade of C or higher. Corequisites: RESP 130, 150, and 160; or permission of the program director.

RESP 150 – Pharmacology 3:3:0

The safe use of therapeutic drugs. Emphasis is on drug actions, routes of administration, dosage calculation, and adverse reactions. *Enrollment is limited to students in the Respiratory Therapist program. Prerequisites: RESP 100, 110, and 120 with a grade of C or higher. Corequisites: RESP 130 and 140, or permission of the program director.*

RESP 160 – Patient Assessment 2:2:0

Patient history, chest assessment, principles of chest roentgenology and interpretation, and ECG interpretation. *Enrollment is limited to students in the Respiratory Therapist program. Prerequisites: RESP 100, 110, and 120 with grades of C or higher. Corequisites: RESP 130 and 140, or permission of the program director.*

RESP 170 – Therapeutics 4:3:3

Procedures such as incentive spirometry (SMI), intermittent positive pressure breathing (PPB), and the use of therapeutic gases. Indications, contraindications and objectives for administration are covered. In addition, bronchopulmonary drainage and exercise therapy, airway care, and resuscitators are

Respiratory Care (continued) – Social Science

discussed. *A laboratory fee is required.*

Enrollment is limited to students in the Respiratory Therapist program. Prerequisites: RESP 140, 150, and 160, with grades of C or higher. Corequisite: RESP 175, or permission of the program director.

RESP 175 – Clinical Practice I 2:0:16

Experience under the direct supervision of a clinical instructor for an average of sixteen hours per week for twelve weeks. Topics include oxygen administration, humidity/aerosol therapy, patient assessment, and ECGs. Clinical experience includes observation, patient rounds, clinical simulation, and practical work situations. Case studies are assigned. *Liability insurance is required. Enrollment is limited to students in the Respiratory Therapist program. Prerequisites: RESP 130, 140, 150, and 160 with grades of C or higher. Corequisite: RESP 170, or permission of the program director.*

RESP 181 – Cardiopulmonary Diseases I 1:1:0

The pathophysiology, clinical signs and symptoms, treatment and prognosis of cardiopulmonary disorders. *Prerequisites: RESP 130, 140, 150 and 160 with a grade of C or higher. Corequisites: RESP 170 and 175, or permission of the Program Director.*

RESP 190 – Acid – Base Physiology 2:2:0

Metabolic and respiratory acid-base balance with stress on arterial blood gas interpretation. Clinical laboratory studies are also included. *Enrollment is limited to students in the Respiratory Therapist program. Prerequisites: RESP 170, 175, and CHEM 100 with grades of C or higher. Corequisites: RESP 200, 205, and 210, or permission of the program director.*

RESP 200 – Cardiopulmonary Diseases II 1:1:0

A continuation of RESP 181. The pathophysiology, clinical signs and symptoms, treatment and prognosis of cardiopulmonary disorders. *Prerequisite: RESP 181 with a grade of C or higher. Corequisites: RESP 190, 205, and 210, or permission of the Program Director.*

RESP 205 – Clinical Practice II 2:0:16

Experience under the direct supervision of a clinical instructor for an average of sixteen hours per week for fifteen weeks. Therapeutic modalities include incentive spirometry (SMI) intermittent positive pressure breathing (IPPB), therapeutic gases, bronchopulmonary drainage, and exercise therapy. Airway care is emphasized. Indications, contraindications, and objectives for administration are stressed. Clinical experience includes observation, patient rounds, clinical simulation, and

practical work situations. Case studies are assigned. *Liability insurance is required. Prerequisites: RESP 170, 175, with grades of C or higher. Corequisites: RESP 190, 200, 210; or permission of the program director.*

RESP 210 – Critical Care 5:4:4

Patient management, weaning techniques, monitoring, and a comprehensive study of ventilators commonly used in hospitals. Hemodynamics and chest drainage are covered. *Enrollment is limited to students in the Respiratory Therapist program. A laboratory fee is required. Prerequisites: RESP 170 and 175 with a grade of C or higher. Corequisites: RESP 190, 200, 205 and BIOL 221; or permission of the program director.*

RESP 230 – Cardiopulmonary Laboratory Procedures 2:2:1

Theory, application, and interpretation of pulmonary laboratory studies, including an introduction to the theory and application of non-invasive cardiovascular diagnostic techniques and sleep studies. Intubation and arterial blood gas sampling and analysis are covered. *A laboratory fee is required. Enrollment is limited to students in the Respiratory Therapist program. Prerequisites: RESP 190, 200, 205, and 210 with grades of C or higher. Corequisite: RESP 235, or permission of the program director.*

RESP 235 – Clinical Practice III 3:0:24

Experience under the direct supervision of a clinical instructor for an average of twenty-four hours per week for fifteen weeks. Topics include mechanical ventilation, arterial blood gas sampling, analysis and interpretation, cardiopulmonary laboratory, pulmonary rehabilitation, and home-care and hemodynamic monitoring. Clinical experience includes observation, patient rounds, clinical simulation, and practical work situations. Case studies are assigned. *Enrollment is limited to students in the Respiratory Therapist program. A liability insurance fee is required. Prerequisites: RESP 190, 200, 205, and 210 with a grade of C or higher. Corequisites: RESP 230 and 250.*

RESP 240 – Current Topics 1:1:0

Review of current topics and new equipment in respiratory care. *Enrollment is limited to students in the Respiratory Therapist program, or permission of the program director.*

RESP 245 – Clinical Practice IV 3:0:24

Experience under the direct supervision of a clinical instructor for an average of twenty-four hours per week for fifteen weeks. Topics include neonatal and pediatric respiratory care, intubation, and management. A research

project is required for presentation and publication. Clinical experience includes observation, patient rounds, clinical simulations, and practical work situations. An educational in-service talk is developed and presented by the student to the clinical staff. *Enrollment is limited to students in the Respiratory Therapist program. Liability insurance is required. Prerequisites: RESP 235, 260, and 270 with grades of C or higher.*

RESP 250 – Pulmonary Rehabilitation and Home Care 2:2:0

Care of respiratory patients in the home and pulmonary rehabilitation in the hospital and in long-term care facilities. Emphasis is on design of a rehabilitation program, including patient education, exercise, activities of daily living, and nutrition. Discussion of geriatric patients is included. *Prerequisite: RESP 205 with a grade of C or higher; corequisites: RESP 230, 235; or permission of the program director.*

RESP 260 – Education and Management Techniques 1:1:0

The techniques and responsibilities involved in respiratory care management; respiratory care education. *Enrollment is limited to students in the Respiratory Therapist program, or permission of the program director.*

RESP 270 – Neonatal/Pediatric Respiratory Care 3:2:3

Fetal development, assessment of the newborn, and pathophysiology of cardiopulmonary diseases common to neonates and pediatric patients. Emphasis is on treatments commonly used. *Enrollment is limited to students in the Respiratory Therapist program. A laboratory fee is required. Prerequisites: RESP 230, 235, and 250 with a grade of C or higher; and acceptance into the 392A curriculum.*

Social Science • CASS Division

SOSC 108 – Drugs and Alcohol: Use and Abuse 3:3:0

Introductory study of the use of alcohol and drugs in historical and social perspective. Acquaints students with models of prevention and community treatment facilities. Particularly relevant for work in human services, corrections, and law enforcement.

SOSC 213 – Field Work Practicum I 3:2:10

Students work in human services agencies for 10 hours each week for 14 weeks and meet on campus weekly to integrate classroom learning with job performance. Emphasis is placed on students assuming the human services worker role and upon working directly with clients. *Students must be enrolled in*

major code 5060, 5430, or 5550. Prerequisite: SOCI 122 with a grade of C or higher.

SOSC 214 – Practicum II 6:2:20

Continuation of SOSC 213 with special emphasis on the human services agency as an organization, working with agency staff and goal planning. *Students work for 20 hours each week for 12 weeks and meet on campus weekly. Prerequisite: SOSC 213, or permission of the instructor.*

Sociology • CASS Division

SOCI 100 – Introduction to Human Services 3:3:0

Students gain experience with a variety of client populations. Students plan activities in class and take field trips to conduct these activities with clients in such agencies as those concerned with aging, drug and alcohol abuse, and mental health/mental retardation. In addition to contact with agencies, the class conducts an inventory of a community, observes local conditions, and meets with officials. All student activity is under the instructor's direct supervision.

SOCI 120 – Social Welfare Programs and Policies 3:3:0

Survey of the historical development and current systems of social welfare services, emphasizing changing attitudes of society. Topics include poverty, racism, legislation, health care, child abuse, single-parent families, mental illnesses, developmental disabilities, criminal offenders, and aging. *Prerequisite: SOCI 110 or SOCI 201.*

SOCI 121 – Skills and Methods in Human Services I 3:3:0

Basic interviewing and recordkeeping skills, listening, responding, and resolving conflicts. Self-awareness and ethics in the practice of human services are emphasized.

SOCI 122 – Skills and Methods in Human Services II 3:3:0

Intake and case management procedures for mental retardation, mental health, aging, women's issues, welfare, and drug and alcohol programs. *Prerequisite: SOCI 121 with a grade of C or higher.*

SOCI 201 – Introduction to Sociology 3:3:0

Focuses on the relations between people and their social institutions, including problems that derive from these relations. Topics include culture, society, groups, social change, institutions (family, education, religion, etc). *(Core B)(D)*

SOCI 202 – Social Problems 3:3:0

Problems of society considered in the context of such concepts as social change, social disorganization, conflict, and deviant

behavior. Emphasis on the need to develop strategies for confronting problems such as poverty, racial discrimination, sexual discrimination, and crime. *(Core B)(D)*

SOCI 203 – Marriage and Family 3:3:0

A comparative study of the family as a social institution, including a functional approach to questions related to both premarital and postmarital aspects of married and family life. *(Core B)(D)*

SOCI 205 – Race and Cultural Relations 3:3:0

The nature and dynamics of the relationship between minority and majority groups and the relation of these groups to social stratification, economics, political and educational institutions in the culture. *Prerequisite: SOCI 201 recommended. (D)*

SOCI 206 – Human Development in a Social Environment 3:3:0

Examines the ecological model describing the effects of the social environment on human development. Emphasis is on the uniqueness of the individual. Topics include changes across a lifespan and techniques of evaluation and assessment of problems faced by clients of human services agencies.

SOCI 211 – Group Dynamics 3:3:0

Introduction to dynamics of small-group functioning, with emphasis on developmental stages of group life. Examination of leadership processes in the context of interpersonal relations. Students learn group dynamics by functioning as a small group.

SOCI 226 – Perspectives on Aging 3:3:0

Designed to provide students with basic knowledge of the concepts, theories, and problems in the study of aging. Emphasis on social problems of aging and the impact aging has on the individual. Topics include the scope of gerontology, retirement, health, leisure, independence, and primary relationships, as well as larger issues of aging in relation to economics, government, and community programs.

Spanish • CASS Division

SPAN 101 – Elementary Spanish I 4:4:1

Fundamentals of Spanish grammar; drill in structure and pronunciation; development of vocabulary. Aural-oral and reading skills are introduced in the classroom and the language laboratory. *Prerequisite: Eligibility to enroll in ENGL 101. (Core A)*

SPAN 102 – Elementary Spanish II 4:4:1

Continuation of SPAN 101 with increased emphasis on speaking and reading. *Prerequisite: SPAN 101 (Core A)*

SPAN 201 – Intermediate Spanish I 4:4:1

Review of the fundamentals of Spanish

grammar; practice in conversation and composition; extensive reading and analysis of works of acknowledged literary and cultural merit. *Prerequisite: SPAN 102 or equivalent. (Core A)(D)*

202 – Intermediate Spanish II 4:4:1

Continuation of SPAN 201. Further practice in oral and written skills; continued reading of works of literary and cultural merit. *Prerequisite: SPAN 201 or equivalent. (Core A)(D)*

Speech • CASS Division

SPCH 101 – Effective Speaking 3:3:0

An introduction to oral communication with emphasis on helping the student increase competence as a communicator in interpersonal, small group, and public speaking contexts. *Prerequisites: Eligibility for enrollment in ENGL 101 and completion of any reading courses required by the College Testing and Placement program.*

SPCH 102 – Psychology of Speech 3:3:0

Studies in communication techniques; persuasion, logic, audience analysis and adaptation, speech analysis, communication breakdown, and a selective study of contemporary speeches. *Prerequisite: SPCH 101 or permission of the instructor.*

SPCH 104 – Interpersonal Communication 3:3:0

A study of formal and informal communication between individuals with emphasis on developing more effective communication skills in interpersonal contexts. *Prerequisite: Eligibility for ENGL 101*

SPCH 201 – Argumentation and Debate 3:3:0

Familiarity with and practice in logical reasoning and formal discourse. *Prerequisite: SPCH 101 or permission of the instructor.*

Surgical Technology • MSAH Division

SURG 110 – Introduction to Surgical Technology 4:3:3

Introduces the fundamentals of operating room techniques, emphasizing principles and practices of asepsis and sterilization. Physical and psychosocial aspects of patient care are explored. Included are the roles and responsibilities of the surgical technologist and other surgical team members; accountability and legal aspects; identification of common equipment; surgical application of computers, electricity, physics and surgical robotics; instruments and supplies; scrubbing; gowning; gloving; draping and creating a sterile field. *A laboratory fee is required. Prerequisites: High school biology and chemistry, or BIOL 111 and CHEM 100 with grades of C or higher; placement through the College Testing*

Surgical Technology (continued) – Theatre

and Placement Program; permission of program faculty. Corequisites: BIOL 100, 121, and AH 209.

SURG 111 – Surgical Procedures I 4:3:3

A lecture/laboratory course designed to develop the concepts learned in SURG 110. Includes the theory and practice for general, gynecology, genitourinary, orthopedic, otolaryngology and endoscopy surgical procedures, with emphasis on the steps and instrumentation for these interventions. A laboratory fee is required. Prerequisites: BIOL 100 and 121; AH 209; SURG 110; all with grades of C or higher. Corequisites: BIOL 122 and SURG 210.

SURG 112 – Surgical Procedures II 4:3:3

A lecture/laboratory course designed to further the student's knowledge of surgical specialties and clinical practice, including cardiovascular, thoracic, neurological, oral, ophthalmic, and reconstructive procedures. Considerations for pediatric and geriatric procedures are discussed. A laboratory fee is required. Prerequisites: BIOL 100, 121, 122; AH 209; SURG 110, 111, 210; all with grades of C or higher.

SURG 210 – Surgical Clinical Externship I 4:0:16

A practicum developing concepts learned in SURG 110 and 111. Students are assigned to affiliated agencies where they practice skills related to surgical techniques and principles. They participate actively as members of the surgical team, developing the skills necessary to scrub and assist in circulating during surgical procedures under supervision. Liability insurance is required. Prerequisites: BIOL 100, 121; AH 209; SURG 110; all with grades of C or higher. Corequisites: BIOL 122 and SURG 111.

SURG 220 – Surgical Clinical Externship II 6:0:24

A practicum that further develops clinical proficiency. Students are assigned to affiliated agencies where they practice skills related to surgical techniques and principles with the goal of scrubbing independently for common surgical procedures. They participate as members of the surgical team, building on the skills developed in SURG 210. Liability insurance is required. Prerequisites: BIOL 100, 121, 122; AH 209; SURG 110, 111, 112, 210; all with grades of C or higher.

SURG 230 – Surgical Clinical Externship III 9:2:28

A clinical practicum in which students participate as members of the surgical team in common surgical procedures and in all clinical specialties. Students participate in seminars with classmates and beginning students. This course prepares the student for entry-level

independent practice and certification as a surgical technologist. Liability insurance is required. Prerequisites: BIOL 100, 121, 122; AH 209; SURG 110, 111, 112, 210, 220; all with grades of C or higher.

Theatre • CASS Division

THTR 101 – Introduction to Theatre 3:3:0

The role of the performing arts in society from primitive times to the present. Students explore the functions of actors, directors, researchers, designers, playwrights, and audiences. (Core A)

THTR 110 – Acting I 3:2:3

Introduction to the theory and techniques of the actor's art through exercises, improvisations, and movement. Exploration of appropriate voice and interpersonal relationships is emphasized. Prerequisite: Eligibility for ENGL 101. Corequisites: THTR 120 and 130 for Theatre majors.

THTR 111 – Acting II 3:2:3

Covers the transition between exercises involving student actors' portrayal of self and their subsequent portrayal of characters. Prerequisites: THTR 110, THTR 120, and THTR 130. Corequisites: THTR 121 and 131

THTR 120 – Theatre Voice I 1:1:1

Introduction of techniques that allow actors to develop a natural on-stage speaking voice and to interpret written materials effectively. Corequisites: THTR 110 and THTR 130.

THTR 121 – Theatre Voice II 2:1:3

Development of vocal skills directly related to specific stage problems. Students are expected to prepare and present recitations in class as part of their practical experience. Prerequisite: THTR 120. Corequisite: THTR 131.

THTR 130 – Theatre Movement I 1:1:1

Basic stage movement for the actor, emphasizing motion and alignment. Corequisites: THTR 110 and 120.

THTR 131 – Theatre Movement II 2:1:3

The development of a character through whole-body movement. Included is an introduction to the basic skills of stage combat. Prerequisites: THTR 120 and 130. Corequisites: THTR 121 and 111.

THTR 142 – Scenography 3:1:3

Exploration of the aesthetics of scene design as students learn the fundamentals of construction, painting, rigging, and mounting of a theatrical production.

THTR 143 – Theatre Makeup 3:1:3

A study of the application of makeup including straight, corrective and prosthetic

types based on character analysis. Emphasis is placed on the design and implementation of special effects makeup including life masks and casting of prosthetics.

THTR 144 – Costuming for the Theatre 3:1:3

An introduction to the study and practical application of costume construction techniques including fabric study, script analysis, patterning, draping, fitting, and specialized topics such as millinery, dyeing, and jewelry construction.

THTR 145 – Introduction to Musical Theatre 3:3:0

The history of the American musical stage from early opera to the hits of Broadway with emphasis on production and performing skills. The course culminates in a student revue.

THTR 210 – Acting III 3:2:3

Prepares students by means of projects to analyze plays, to develop characterizations, and to discuss pivotal scenes. Prerequisites: THTR 110, THTR 111, THTR 121, and THTR 131.

THTR 211 – Directing I 3:2:3

The role of the director and the director/actor relationship discussed in three units. The first unit considers the historical role of the director, the criteria for selection of a play, and the principles of audition and casting. Unit two covers the techniques of blocking, ground plans, composition, and picturization. The final unit emphasizes the individual and collaborative efforts of actor and director through the student's preparation of scene projects. Prerequisite: THTR 210.

THTR 216 – Acting IV 3:2:3

A course of study in the histrionic theories, techniques, and performance practices of Period Acting. Prerequisite: THTR 210 with a grade of B or higher.

THTR 224 – Theatre in Society 3:3:0

The study of socially and culturally diverse literature, plays, and films. The course focuses predominantly on the American Theatre and is taught in three main units: Theatre of Identity, Theatre of Protest, and Cross Cultural Theatre. Prerequisites: ENGL 101, and THTR 101 or THTR 110 with a grade of C or higher. (D)

THTR 230 – Theatre/Performing Arts in London 3:3:0

Highlights the best of Britain with tours and performances including theatre, dance, concerts and musicals. In addition, students travel to Stratford, Cambridge, and other historically significant sites to gain a better understanding of England's rich heritage. Emphasis is placed upon examining why London is considered to be cultural epicenter, particularly in the area of performing arts.

Transmission/Distribution Technology – Ultrasound Technology

Transmission/Distribution Tech • BHET Div.

TDT 101 – Safety Awareness and Compliance 3:3:0

Covers all aspects of personal and equipment safety to make the student aware of hazards and ways to avoid injury. Topics include personal protective equipment, electrical safety, application and use of fire extinguishers, OSHA regulations, power and hand tools, and more. Enrollment is restricted to students enrolled in the Transmission and Distribution Technology program.

TDT 103 – Pole Climbing and Groundhandling 3:2:3

How to identify, inspect, and climb various types of wooden poles safely and accurately. Other topics include identifying line hardware and hot wire tools, basic rigging, knot tying and the proper methods for using a hand line. Enrollment is restricted to students enrolled in the Transmission and Distribution Technology program. *Prerequisite: TDT 101.*

TDT 104 – Pole and Anchor Installation 2:1:3

How to install and remove poles. The students physically set, install, and remove line poles and anchors by hand or with the use of auxiliary equipment such as diggers and derricks. Also included is the instruction and use of pole hauling trailers. Enrollment is restricted to students in the Transmission and Distribution Technology program. *Prerequisite: TDT 103.*

TDT 120 – Summer Internship 6:0:30

Full-time, paid internship lasting approximately 12 weeks. The internship is designed to allow the student the opportunity to put theory into practice. The internship provides the student “hands-on,” personal experience by working side by side with a professional from a local company who performs service or installation work. *Students are required to assist the line workers during the routines of a typical workday. Enrollment is restricted to students enrolled in the Transmission and Distribution Technology program. Prerequisite: TDT 104.*

TDT 200 – Power Equipment Operation 3:2:3

How to safely use power equipment employed every day by the lineman. Specialized equipment such as PTO’s, power lift gates, and pneumatic tools are covered in depth. The students operate bucket trucks and knuckle booms. Students are also taught how to perform a rescue using the bucket truck. *Enrollment is restricted to students enrolled in the Transmission and Distribution Technology program. Prerequisite: TDT 104.*

TDT 201 – Service Installation 4:3:3

How to work safely near electrical facilities, and make electrical connections on

secondaries and services, overhead drops, and mid-span taps. Telecommunication hazards, outdoor lighting and servicing meters are also covered. *Enrollment is restricted to students enrolled in the Transmission and Distribution Technology program. Prerequisite: TDT 200.*

TDT 202 – Overhead Line Construction 6:4:6

The safety aspect of working on overhead lines including temporary grounding, traffic control, and what to do in an emergency while on the pole. The student is taught how to frame poles, install new conductors and guy wires, repair sagging conductors, and splice into existing lines. *Enrollment is restricted to student enrolled in the Transmission and Distribution Technology program. Prerequisite: TDT 201.*

TDT 203 – Overhead Transformer Installation 4:3:3

The safety considerations needed when working overhead, the theory behind the workings of single- and 3-phase transformers, and how to wire transformers in parallel. *Enrollment is restricted to students enrolled in the Transmission and Distribution Technology program. Prerequisite: TDT 202.*

TDT 204 – Underground Distribution Systems 4:3:3

The safety considerations needed when working with underground systems, cable pulling techniques, operating principles of underground systems, splicing and terminating cables, making service connections, and properly grounding underground distribution systems. *Enrollment is restricted to students enrolled in the Transmission and Distribution Technology program. Prerequisite: TDT 203.*

Travel and Tourism • BHET Division

TOUR 102 – Principles of Travel Selling 3:3:0

Successfully selling travel products to business and pleasure travelers, and demonstrating techniques for selling air, hotel, car rental, rail, cruise, tour and other travel-related products.

TOUR 125 – Destination Geography 3:3:0

International travel destinations, attractions, and accommodations. Emphasis is on major ports of entry and transportation hubs, throughout the world with attention to climate, physical, social, and economic conditions. Discussion of visitor documentation is included. (D)

TOUR 201 – Tourism: Theories and Practices 3:3:0

Theoretical and practical applications of basic knowledge of tourism-related concepts. Types of practical experience that enable one to effectively apply those concepts to the travel and tourism industry.

TOUR 203 – Group Travel Planning 3:3:0

Group travel planning involving many

skills: understanding group dynamics, itinerary planning, rate negotiation, marketing, and customer service. Also focuses on profitability. *Prerequisite: TOUR 102 with a grade of C or higher.*

TOUR 279 – Travel Reservation Systems

Experience in the operation of two widely used airline reservation systems. The student learns to display flight schedules, arrange itineraries, access fares, assign seats, and generate tickets, and create passenger records. Making hotel reservations and arranging car rentals are discussed. *Prerequisites: CIS 105 and TOUR 128 with grades of C or higher.*

Ultrasound Technology • MSAH Division

ULSO 201 – Abdominal Ultrasound I 4:3:3

Details the normal anatomy and physiology of the liver, gallbladder, biliary system, pancreas, urinary system, spleen, adrenal, retroperitoneum, peritoneal cavity, and abdominal vasculature. Ultrasound findings regarding the pathology of the spleen, peritoneal cavity and retroperitoneum are explained. Abdominal Doppler principles and uses in the clinical setting are described. Laboratory instruction includes sonographic appearance of the abdominal organs and basic scanning techniques including the use of Doppler. *A laboratory fee is required. Prerequisite: Admission into the Diagnostic Medical Sonography program or permission of the Program Director. Corequisites: ULSO 208, 220, and 225.*

ULSO 202 – Abdominal Ultrasound II 4:3:3

Introduces students to the pathologic processes of the liver, gallbladder, biliary system, pancreas, urinary system, and abdominal vasculature. The relationship of abdominal Doppler findings with pathology is described. Pediatric abdominal pathology is also presented. Laboratory instruction includes sonographic appearances of pathology involving abdominal organs and associated disease processes. *A laborator fee is required. Prerequisites: Admission into the Diagnostic Medical Sonography program; ULSO 201, 208, 220, and 225 with a grade of C or higher. Corequisites: ULSO 206, 215, 221, and 226.*

ULSO 206 – Obstetrics I 3:3:0

Introduces students to anatomy and physiology of the first, second, and third trimesters of pregnancy. The first trimester includes fertilization and development of the normal and abnormal embryo through the first twelve weeks. The second and third trimesters include normal fetal development through term, fetal measurements, multiple gestation, placental development, amniotic fluid, and fetal testing.

Ultrasound Technology (continued) – Web

A course fee is required. Prerequisites: Admission into the Diagnostic Medical Sonography program; ULSO 201, 208, 220, and 225 with a grade of C or higher. Corequisites: ULSO 202, 215, 221, and 226.

ULSO 207 – Obstetrics II 3:3:0

Introduces students to morphologic and pathologic processes of the second and third trimesters. Instruction includes maternal diseases and complications, an assessment of fetal well-being, and fetal structural abnormalities. Doppler principles related to obstetrics are included. Overviews of fetal cardiac anatomy and pathology are presented. A course fee is required. Prerequisites: Admission into the Medical Diagnostic Sonography program; ULSO 202, 206, 215, 221, and 226 with a grade of C or higher. Corequisites: ULSO 216 and 223.

ULSO 208 – Gynecology 4:3:3

Introduces students to the anatomy, physiology, and pathology of the pelvic organs, to include the uterus, vagina, cervix, ovaries, pelvic musculature and vasculature. Pelvic Doppler principles and uses in the clinical setting are described. Both transabdominal and transvaginal techniques are presented in classroom and laboratory settings. Laboratory instruction includes normal and pathologic organs and scanning techniques for transabdominal and transvaginal imaging including the use of Doppler. A laboratory fee is required. Prerequisite: Admission into the Diagnostic Medical Sonography program, or permission of the Program Director. Corequisites: ULSO 201, 220, and 225.

ULSO 215 – Small Parts 2:2:0

Instructs students in the anatomy, physiology, and pathology of the breast, prostate, scrotum, thyroid, and superficial structures. Normal and abnormal sonographic appearance of those organs are presented. A course fee is required. Prerequisites: Admission into the Diagnostic Medical Sonography program; ULSO 201, 208, 220, and 225 with a grade of C or higher. Corequisites: ULSO 202, 206, 221, and 226.

ULSO 216 – Introduction to Vascular Sonography 2:1:3

Introduces students to vascular sonography. Topics include peripheral venous, peripheral arterial, and cerebrovascular disease testing. Normal vascular anatomy is reviewed and students are introduced to pathologic processes of the vascular system as they relate to ultrasound imaging. Doppler principles related to vascular imaging are reviewed. Discussion includes signs and symptoms of vascular disease. Laboratory instruction includes

demonstration of ultrasound imaging and related Doppler technique. A laboratory fee is required. Prerequisites: Admission into the Diagnostic Medical Sonography program; ULSO 202, 206, 215, 221, and 226 with a grade of C or higher. Corequisites: ULSO 207 and 223.

ULSO 220 – Clinical Experience I 3:0:24

The first clinical component of the Diagnostic Medical Sonography program (Ultrasound Technology). The clinical consists of three, eight-hour days per week for fifteen weeks at clinical sites. A course and insurance fee are required. Prerequisite: Admission into the Diagnostic Medical Sonography program, or permission of the Program Director. Corequisites: ULSO 201, 208, and 225.

ULSO 221 – Clinical Experience II 3:0:24

The second clinical component of the Diagnostic Medical Sonography program (Ultrasound Technology). The clinical consists of three, eight-hour days per week for twelve weeks at clinical sites. A course and insurance fee are required. Prerequisites: Admission into the Diagnostic Medical Sonography program; ULSO 201, 208, 220, and 225 with a grade of C or higher. Corequisites: ULSO 202, 206, 215, and 226.

ULSO 223 – Clinical Experience III 4:0:32

The third clinical component of the Diagnostic Medical Sonography program (Ultrasound Technology). The clinical consists of four, eight-hour days per week for fifteen weeks at clinical sites. A course and insurance fee are required. Prerequisites: Admission into the Diagnostic Medical Sonography program; ULSO 202, 206, 215, 221, and 226 with a grade of C or higher. Corequisites: ULSO 207 and 216.

ULSO 225 – Acoustical Principles and Instrumentation I 4:4:0

Provides a presentation of acoustical physical principles and sonographic instrumentation. Application and uses in the field of diagnostic medical sonography are considered. Topics include principles of ultrasound, propagation of ultrasound, transducers, pulse echo imaging and instrumentation, storage, display, Doppler, artifacts, quality assurance, bioeffects, and safety. A course fee is required. Prerequisite: Admission into the Diagnostic Medical Sonography program, or permission of the Program Director. Corequisites: ULSO 201, 208, and 220.

ULSO 226 – Acoustical Principles and Instrumentation II 2:2:0

A continuation of ULSO 225 with topics discussed in additional detail. Advanced

principles in medical ultrasound imaging, instrumentation, hemodynamics, and Doppler are described. Doppler instrumentation and application are included. A course fee is required. Prerequisites: ULSO 201, 208, 220, and 225 with a grade of C or higher. Corequisites: ULSO 202, 206, 215, and 221.

Web • BHET Division

WEB 102 – Internet and WEB Design 3:3:0

Uses of the Internet and the World Wide Web in business. The Internet is examined. Students learn to accomplish business tasks using the services of the Internet, with emphasis on the World Wide Web. An introduction to Web page design and development is included, using HTML and editors.

WEB 110 – Web Site Publishing 3:3:0

Covers creating web sites using web editing software for HTML, XHTML, and XML. Topics include page design, Cascading Style Sheets, multimedia, flash, content management systems, and publishing to servers using web authoring tools like Dreamweaver, Microsoft Expression Web, or Office SharePoint.

WEB 121 – Electronic Commerce 3:3:0

Covers electronic commerce methodologies and practices. Topics include electronic commerce software, security, online transactions, payment systems, business strategies, marketing, electronic data interchanges, ethics, and legal issues.

WEB 125 – HTML (HyperText Markup Language) 3:3:0

Covers creating web pages using markup and scripting languages for HTML, XHTML, XML, and JavaScript. Topics include language structure, Cascading Style Sheets (CSS), dynamic programming (DHTML), web design, site development, and security.

WEB 126 – XML (eXtensible Markup Language) 3:3:0

Covers the use of eXtensible Markup Language (XML) in web pages, databases, and other computer applications. Topics include XML concepts, standards, creating documents, validation, display methods, associated technologies, custom markup languages, software tools and applications, integration with databases, and security.

WEB 130 – Web Design and Multimedia 3:3:0

Introduces creating effective web site design and multimedia. Topics include graphic design, layouts, guidelines, site planning, usability, technical issues, multimedia formats, and use of software for graphics, animation, flash, sound, and video.

WEB 133 – Web Design Theory 3:3:0

Explores graphic design principles for creating web pages, layouts, and graphic elements. Topics include web typography, color theory, layout, two-dimensional Cartesian geometry, grids, site harmony, graphic identity, template design, CCS color and typography control, and accessibility.

WEB 135 – Web Design with Raster Images 3:3:0

Covers image editing using leading software to create raster graphics and page layouts for web use. Topics include digital painting and editing tools, layer management, filters, special effects, vector-raster conversions, animation, optimizing web file formats, and the use of leading software such as Photoshop.

WEB 138 – Web Design with Vector Images 3:3:0

Covers creating web vector graphics and page layouts using illustration software. Topics include digital drawing tools, manipulating points and curves, layer management, text-on-curve, filters, special effects, web file formats, vector-raster conversions, and exporting to animation programs.

WEB 143 – Web Application Development 3:3:0

Introduces web application development using server programs, HTML, XML, and databases. Topics include server programming, PHP and JSP concepts, database programming, web services, security, and creating applications using ASP.NET, Microsoft Visual Studio.NET, and languages like Visual Basic (VB.NET) or JavaScript.

WEB 230 – Web Design with Animation 3:3:0

Covers web animation techniques using two-dimensional and three-dimensional animation software. Topics include creating 2D and 3D vector objects, animating objects through space, integrating audio and video, flash animations, optimizing web animations, and applying fills, textures, light sources and special effects. *Prerequisite: WEB 130 with a grade of C or higher, or multimedia experience.*

WEB 233 – Web Multimedia Production 3:3:0

Covers editing and techniques used to create web multimedia of video, sound, and animations. Topics include manipulating multimedia over timelines, flash animations, and creating/editing digital audio, digital video, dynamic buttons, and two-dimensional vector animations. *Prerequisite: WEB 130 with a grade of C or higher, or multimedia experience.*

WEB 240 – JavaScript Programming 3:3:0

Programming with JavaScript to build client-side web pages with XML and HTML. Topics include programming constructs, logic, debugging, dynamic effects, user interaction,

form validation, rich media, security, Flash ActionScript, and remote scripting with Ajax. *Prerequisite: WEB 102 or WEB 125 or WEB 143 with a grade of C or higher.*

WEB 247 – C#.NET Programming 3:3:0

An introduction to computer programming using the C# programming language. Emphasis on basics of good C# programming techniques and style through extensive practice in writing, running, and debugging programs. *Prerequisite: WEB 143 with a grade of C or higher.*

WEB 253 – ASP.NET Active Server Pages 3:3:0

Covers web application development using Active Server Pages (ASP.NET) programming, XML, and databases. Topics include creating data-driven web pages, ASP.NET programming, HTML tags, client/server applications, XML web services, configuring web servers, security, and common databases such as Microsoft SQL Server. *Prerequisite: WEB 143 or CIS 238 with a grade of C or higher, or application development experience.*

WEB 255 – PHP / MySQL Programming 3:3:0

Covers web application development using PHP programming and MySQL databases. Topics include creating database-driven web pages, PHP programming, HTML tags, client/server applications, XML web services, security issues, database administration using MySQL, and the Apache web server. *Prerequisite: WEB 143 or CIS 238 with a grade of C or higher, or application development experience.*

WEB 256 – JSP Java Server Pages 3:3:0

Covers web application development using Java server Pages (JSP), XML, and databases. Topics include creating web pages, JSP programming, HTML tags, client-server applications, XML web services, configuring Apache Tomcat, Java 2 Platform Enterprise Edition (J2EE) technology, security, and databases like MySQL. *Prerequisite: WEB 143 or CIS 238 with a grade of C or higher, or application development experience.*

WEB 260 – Web Server Administration 3:3:0

Covers implementing and administering secure web sites on a web server. Topics include web site concepts, web server administration, various operating systems and software options, configuring web sites, troubleshooting, and implementing security. *Prerequisite: WEB 143 or CNT 120 with a grade of C or higher.*

WEB 268 – Capstone Web Project 3:3:0

Capstone experience in which students use skills learned in the WEB program to complete a web site through its life cycle. Projects

involve job application, interviewing, and working as a developer or designer, both individually and with a group. *Prerequisites: WEB 130 and WEB 143.*

WEB 270 – Cooperative Work Experience in Web 3:0:15

Faculty monitored employment of at least 15 hours per week for 15 weeks in an approved cooperative business work experience applying the knowledge and skills acquired in the Web curriculum. Written documentation of the cooperative work experience activities and other performance-evaluation measurements will be used to determine the final course grade. *Open only to students enrolled in either the Web Developer AA Degree or Web Developer Certificate program. Prerequisites: Must have completed 15 credits in Web courses and any other CIS courses required, with a grade of C or higher; and instructor approval of work plan.*

Welding • BHET Division

WELD 101 – Blueprint Reading 2:2:0

Basic skills introduced include interpreting typical welding drawings and symbols, orthographic projection, tolerancing, fitting and dimensioning systems.

WELD 102 – Oxy – Fuel Welding and Cutting 3:2:3

Provides technical information and hands-on experience in flat, horizontal, vertical and overhead position using the oxygen fuel welding and cutting. Carbon-arc cutting is also covered. Topics include rod sizes, common flaws, and types of welds and joints. Safety is stressed. *A laboratory fee is required.*

WELD 103 – Shielded Metal Arc Welding I 3:2:3

Provides technical information and hands-on experience in flat and horizontal position shielded metal arc welding. Topics include electrode sizes, common flaws, and types of welds and joints. Safety is stressed. *A laboratory fee is required. Prerequisite: WELD 102 with a grade of C or higher.*

WELD 105 – Shielded Metal Arc Welding II 3:2:3

Provides technical information and hands-on experience in vertical and overhead position shielded metal arc welding. Topics include identification of common flaws, analysis of operating principles, and principles of non-fusion welding. Safety is stressed. *A laboratory fee is required. Prerequisite: WELD 103 with a grade of C or higher.*

WELD 107 – Shielded Metal Arc Welding III 3:2:3

Development of skills in shielded metal arc welding (SMAW) including hands-on experience in welding test plates in all positions and welding performed with and without use of backup material on steel. Safety is stressed. *A*

Welding (continued)

laboratory fee is required. Prerequisite: WELD 105 with a grade of C or higher.

WELD 109 – Gas Metal, Gas Tungsten and Flux Core Arc Welding 3:2:3

Technical information and hands-on experience for all positions of steel, stainless steel, and aluminum gas tungsten arc welding (GTAW), and gas metal arc welding (GMAW). Topics include flux cored arc welding (FCAW) and other processes important in industrial applications as well as troubleshooting common equipment used as power sources. *A laboratory fee is required. Prerequisite: WELD 107 with a grade of C or higher.*

WELD 111 – Welding Applications 3:2:3

Technical information and hands-on experience in electric arc, oxygen-acetylene (MIG), and heliarc (TIG) welding. Other welding techniques also covered. *A laboratory fee is required.*

WELD 120 – Gas Metal Arc Welding I 3:1.5:4.5

Gas metal arc welding. This is the first in a series of courses which teach the student the operation and application of gas metal arc welding (GMAW). The student sets up, operates, and maintains a gas metal arc welder. The student makes satisfactory welds on steel in a variety of positions. *A laboratory fee is required. Prerequisites: WELD 101, 102, and 103; or permission of the instructor or program coordinator.*

WELD 130 – Gas Tungsten Arc Welding I 3:1.5:4.5

Gas tungsten arc welding. This is the first in a series of courses which teach the student the operation and application of gas tungsten arc welding (GTAW). The student selects proper current, prepares metal, and makes satisfactory welds on ferrous metals. The course includes fillet and groove welds in a variety of posi-

tions. *A laboratory fee is required. Prerequisites: WELD 101, 102, and 103; or permission of the instructor or program coordinator.*

WELD 205 – Testing and Inspection 3:2:3

The identification and causes of discontinuities in weldments. Students learn and practice destructive and nondestructive testing, including the techniques of visual inspection, magnetic particle inspection, liquid dye penetrant inspection, and ultrasonic inspection. In addition, students study x-ray inspection and other techniques found in the modern welding industry. *A laboratory fee is required. Prerequisites: WELD 101, 102, and 103; or permission of the instructor or program coordinator.*

WELD 210 – Flux Cored, SubArc, and Advanced Welding Processes 3:1.5:4.5

Advanced welding processes. Primarily focused on flux cored (FCAW) and subarc (SAW) welding processes and their applications. The course also presents information and skills in other advanced processes found in the modern welding industry. *A laboratory fee is required. Prerequisites: WELD 101, 102, and 103; or permission of the instructor or program coordinator.*

WELD 220 – Gas Metal Arc Welding II 3:1.5:4.5

Gas metal arc welding. This is the second in a series of courses which teach the student the operation and application of gas metal arc welding (GMAW). The student sets up, operates, and maintains a gas metal arc welder. The student makes satisfactory welds on aluminum and stainless steel in a variety of positions. The student also develops advanced skills in welding ferrous metals. *A laboratory fee is*

required. Prerequisite: WELD 120, or permission of the instructor or program coordinator.

WELD 230 – Gas Tungsten Arc Welding II 3:1.5:4.5

Gas tungsten arc welding. This is the second in a series of courses which teach the student the operation and application of gas tungsten arc welding (GTAW). The student selects proper current, prepares metal, and makes satisfactory welds. The course includes advanced welds on ferrous and non-ferrous metals as well as on pipe. *A laboratory fee is required. Prerequisite: WELD 130, or permission of the instructor or program coordinator.*

WELD 240 – Pipe Welding 3:1.5:4.5

Welding of piping or tubing. Students develop skills in the welding of pipe or tubing using oxy-fuel, shielded metal arc (SMAW), gas metal arc (GMAW), gas tungsten arc (GTAW), and other welding processes. Weldments are made on pressure piping rotated and non-rotated positions in accordance with industry standards. *A laboratory fee is required. Prerequisites: WELD 101, 102, and 103; or permission of the instructor or program coordinator.*

WELD 291 – Welding Cooperative Work Experience 3:0:15

On-the-job training (OJT). Faculty monitored OJT with a welding employer for a minimum of 15 hours per week (225 total hours). The student learns and practices technical skills on-the-job. *Prerequisite: Must have completed 24 hours of welding course work with an overall C average; and permission of the program coordinator.*



College President and Board of Trustees



Edna V. Baehre, Ph.D.
President



Donald E. Schell
2010 • Chairperson



Mark A. Whitmoyer
2008 • Vice Chairperson



Toni H. Sharp
2008
Secretary



Marsha M. Davis
2012
Asst. Secretary



Terry L. Burrows
2012
Treasurer



Jeffrey A. Shaffer
2013
Asst. Treasurer



Frank A. Conte
2012



**Daniel P. Delaney,
Esq.**
2008



John S. Jordan, CAE
2008



**Margarita M.
Kearns, DPS**
2010



Sally S. Klein
2012



**William Murray,
M.D.**
2012



Charles R. Peguese
2010



Robert J. Phillips
2013



Thomas B. Richey
2010



Nailah I. Rogers
2008



Timothy L. Sandoe
2013



**Senator
Patricia H. Vance**
2010

Board of Trustee Chairs

Ronald C. Brown, P.E., 2004–2007
 Velma A. Redmond, Esq., 1998–2004
 Thomas C. Herweg, 1994–1998
 Ezra Grubb, Jr., 1990–1994
 James W. Evans, Esq., 1982–1990
 Bruce E. Cooper, Esq., 1964–1982

Solicitor: David A. Keller, Esq.

Trustees Emeriti

Paul B. Beers
 Ronald C. Brown, P.E.
 Gwilym D. Davies, Ed.D.
 William E. Davis, Jr.
 James R. Doran
 James W. Evans, Esq.
 Nancy J. George
 H. Bruce Gerber
 Charles A. Gilmore

Lois L. Grass
 Ezra Grubb, Jr.
 A. William Heinz
 Thomas C. Herweg
 Frank S. Kugle
 S. Sava Macut, M.D.
 Rosemary Thompson McAvoy
 Sarah J. Pearce
 Sara N. Prioleau, D.M.D.

Velma A. Redmond, Esq.
 Harlon L. Robinson
 James H. Rowland, Jr., Esq.
 Robert L. Rubendall, Esq., D.P.S.
 James I. Scheiner, P.E.
 Helen Y. Swope
 Robert K. Watts

The Delegate Body and Honorary Doctor of Public Service

The Delegate Body

Each of the sponsoring school districts of the college selects a member of its School Board as a Delegate. The Delegate Body elects Trustees of the college and approves the annual budget.

Camp Hill School District,
Randall G. Gale

Carlisle Area School District,
Phillip Gillespie

Central Dauphin School District,
Ford Thompson

Cumberland Valley School District,
Kevin J. Moyer

Derry Township School District,
Dr. Hank Donahue

East Pennsboro Area School District,
Patti Gilbert

Greenwood School District,
William Tilghman

Halifax Area School District,
William H. Sayre

Harrisburg School District,
Calobe Jackson, Jr.

Lower Dauphin School District,
Gwen Adams

Mechanicsburg Area School District,
Richard Bradley

Middletown Area School District,
Barbara A. Layne

Millersburg Area School District,
Karen Fox Lunt

Newport School District,
Jill A. Deimler

South Middleton School District,
Michael H. Berk

Steelton-Highspire School District,
Robert Spizzirri

Susquehanna Township School District,
Linda Butler

Susquenita School District,
Bryon T. Eppley

Upper Dauphin School District

West Perry School District,
Rick Smiley

West Shore School District,
Todd Ambrose

Williams Valley School District,
John R. Sweikert

Honorary Doctor of Public Service

The honorary degree of Doctor of Public Service is awarded to outstanding individuals in recognition of distinguished leadership and service.

K. Leroy Irvis, 1988

William J. King, 1989

William W. Scranton, 1990

Genevieve Blatt, 1991

William H. Alexander, 1992

Margarita M. Kearns, 1993

Bruce E. Cooper, 1994

James W. Evans, 1994

John J. Shumaker, 1995

C. Ted Lick, 1996

Stephen R. Reed, 1997

Mary Sachs, 1998

Rev. William M. Gray, 2000

Gov. George M. Leader, 2001

Frank J. Dixon, 2002

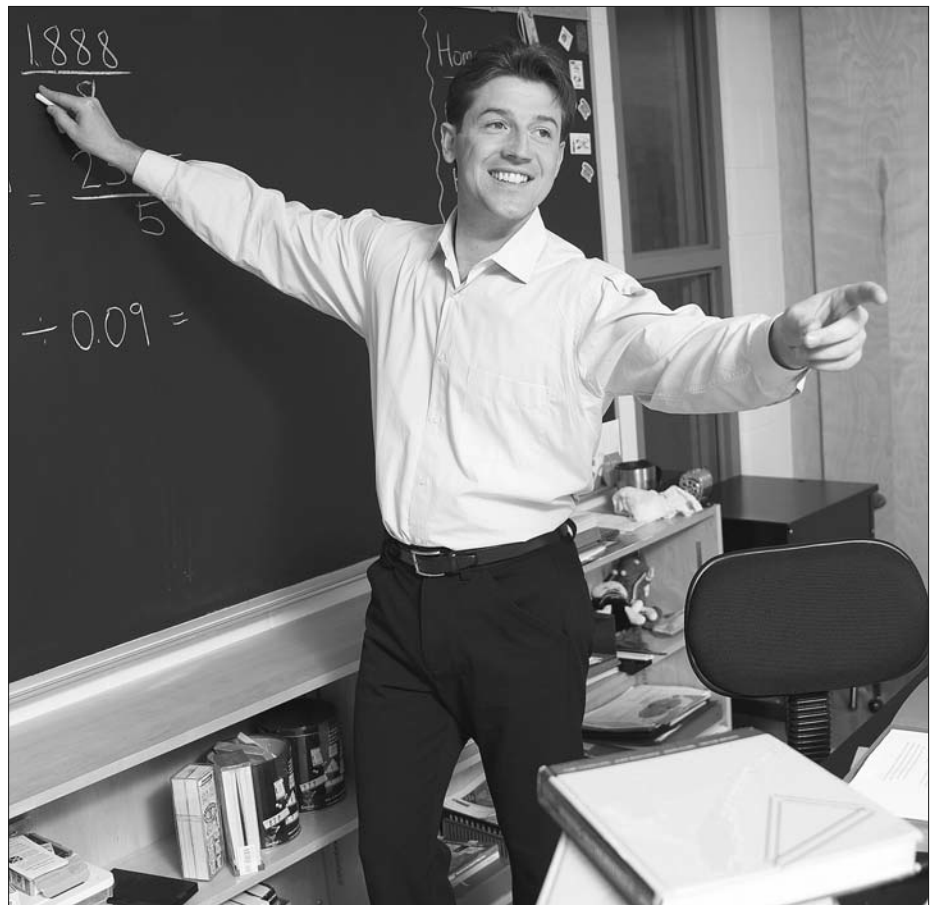
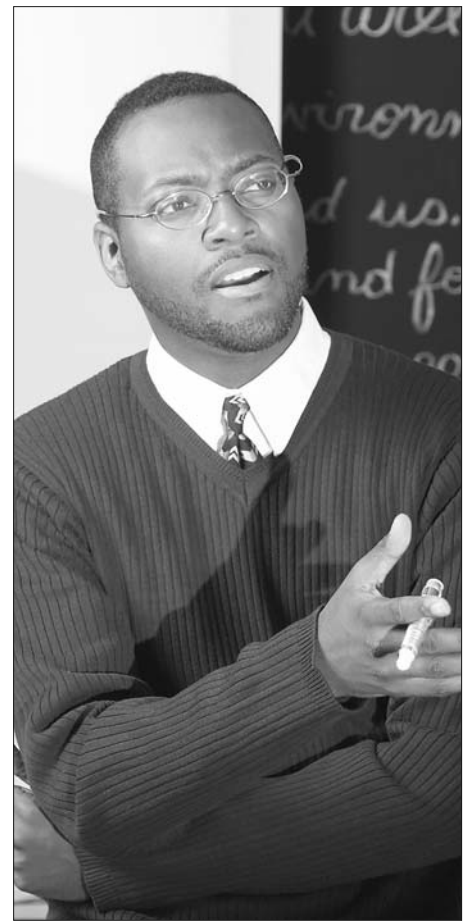
Ronald Hankey, 2003

Robert L. Rubendall, 2005

Grace Milliman Pollock, 2005

Robert A. Ortenzio, 2006

Velma A. Redmond, Esq., 2007



Office of the President

Edna V. Baehre, *President, 1997*
B.A., Pädagogische Hochschule, Heidelberg, Germany;
M.A., Ph.D., State University of New York at Buffalo

David J. Morrison,
Executive Assistant to the President, 2002
B.A., Lehigh University

Nancy L. Wennberg,
Administrative Assistant to the President, 1999
B.A., Gettysburg College

Office of Academic Affairs & Enrollment Mgmt.

Ronald R. Young, *Vice President,
Academic Affairs and Enrollment Management;
Senior Professor, Mathematics, 1971*
B.S., M.S., Shippensburg University;
M.Ed., The Pennsylvania State University

Cynthia A. Doherty, *Dean, Academic Affairs
Administration; Associate Professor, English, 1993*
B.A., King's College;
M.A., Ph.D., The Pennsylvania State University

Lori A. Fair, *Dean, Adult Basic Education and
Developmental Studies; Associate Professor, Human
Development, 2000*
B.A., M.A., Rider University;
Ed.D., Nova Southeastern University

Christopher W. Fowler, *Dean,
Mathematics, Science, and Allied Health, 2007*
B.S., United States Military Academy;
M.S., Rensselaer Polytech Institute;
M.S., Ph.D., Georgia Institute of Technology

Alice L. Lubrecht, *Dean,
Library and Information Resources, 2001*
A.B., Albright College;
M.L.S., Dominican University

Thaddeus Sampson, *Dean, Communications, Arts, and
Social Sciences; Senior Professor, Speech/Mass
Communication, 1972*
B.A., Howard University;
M.A., Michigan State University

William R. Thompson, *Dean, Business, Hospitality,
Engineering, and Technology; Professor, Industrial
Technology, 2001*
B.S., M. Ed., Millersville University;
Ed. D., West Virginia University

Linda A. Lefevre, *Associate Dean, Business, Hospitality,
Engineering, and Technology, 1989*
B.S., Kutztown University;
M.A., The Pennsylvania State University

Linda C. Myers, *Associate Dean, Mathematics, Science,
and Allied Health; Professor, Mathematics, 1984*
B.S., St. John's University;
M.S., Shippensburg University;
Ed.D., Temple University

Diane S. Thompson, *Assistant Dean, Communication, Arts,
and Social Sciences; Associate Professor, English, 1998*
B.A., M.A., Brigham Young University

Ross A. Berger, *Director, Tech Prep and
Secondary Articulation, 2000*
B.S.Ed., Millersville University;
M.Ed., Temple University

Theresa L. Guerrisi, *Director,
Performing Artist Series, 1989*
B.A., Susquehanna University;
M.A., The Pennsylvania State University

Glen D. Lum, *Director, Institutional
Research and Assessment, 1986*
B.S., Michigan State University;
A.M., Ph.D., University of Michigan

Ronald E. Rebeck, *Director, Nursing Program;
Professor, Nursing, 1992*
A.A., Harrisburg Area Community College;
B.S.N., York College; M.S., University of Maryland

Deborah A. Ennis, *Assistant Director, Nursing, 1980*
B.S.N., M.S.N., Widener University

Catherine Lencioni, *Curriculum Coordinator;
Professor, Medical Laboratory Technology, 1986*
B.S., James Madison University;
M.S., Shippensburg University

Office of College & Community Development

Nancy M. Rockey, *Vice President,
College and Community Development;
Senior Professor, Business Information Systems, 1981*
B.S., M.Ed., Shippensburg University

Donald G. Koones, *Associate Dean,
Community Education Center, 1975*
B.S., Bloomsburg University;
M.A., The Pennsylvania State University;
Ed.D., Temple University

Mark C. Berger, *Executive Director,
Workforce Development, 1998*
B.A., M.Ed., The Pennsylvania State University

Lynne E. Dillard, *Director,
Alumni Affairs and Foundation Special Projects, 1989*
B.S., Kutztown University

Patricia Dombrowsky, *Director,
Law Enforcement Training, 1998*
B.S., University of North Carolina

Willetta D. Huth, *Director,
Noncredit Enrollment Management, 2000*
B.S., The Pennsylvania State University

Sally J. John, *Director,
Noncredit Computer Training, 1985*
B.A., Miami University;
M.A., The Pennsylvania State University

Jerome E. Ozog, *Director, Fire, EMS, Healthcare, 2002*
B.S., Houghton College;
M.P.A., Gannon University

Cynthia A. Reiner, *Director,
Healthcare Education, 2005*
A.A., Harrisburg Area Community College;
B.S., Messiah College

Frances M. Verotsky, *Director, Institute for Entrepreneurial
Studies; Professor, Business Information Systems, 1988*
B.S., M.Ed., Indiana University of Pennsylvania

Diane H. Watkins, *Director, WEDNet, 1993*
B.A., Louisiana Technical University;
M.S., University of Nebraska

Office of Student Affairs

Winfred A. Black, *Vice President, Student Affairs/
Enrollment Management, 2006*
B.A., University of Maryland;
M.S., Hood College;
M. Ed., Ed. D., Northern Arizona University

Dory S. Leahey, *Dean,
Student Retention Services, 2000*
B.A., M.Ed., Westminster College

Lynette A. DiBrito, *Associate Dean, Student Life, 2002*
B.A., Minnesota State University Moorhead;
M.Ed., Arizona State University

Matthew D. Braswell, *Director, Counseling Services, 2005*
B.S., University of Maryland; M.A., Towson University

Jennifer L. Bucher, *Director, Admissions;
Associate Professor, Counseling, 1993*
B. A., Susquehanna University;
M.S., Shippensburg University;
National Board for Counselor Certification

Lisa A. Cleveland, *Director, Athletics, 1988*
B.S., M.S., Eastern Kentucky University

Sheila E. Ciotti, *Director, Career Services, 1999*
B.S., M.Mgt., The Pennsylvania State University

Carole L. Kerper, *Director, Disability Services, 2003*
B.A., Muskingum College;
M.S., Ohio University

Marguerite M. MacDonald, *Director,
Office for Academic Success, 1990*
M.A., Lincoln University

Roz E. Ogden, *Director, Student Records, 1978*
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University;
M.S., Shippensburg University

Winnie S. Richards, *Director, Child Play Services, 2002*
A.A., Harrisburg Area Community College;
B.S., University of South Florida

Tisa R. Riley, *Director, Registration, 1993*
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University

James J. Carideo, *Assistant Director, Financial Aid, 2002*
B.S., The Pennsylvania State University;
M.A., Edinboro University

Office of Finance & College Resources

George A. Franklin, Jr., *Vice President, Finance and
College Resources, 1990*
B.A., Franklin and Marshall College;
C.P.A., Pennsylvania

Barbara L. Hutchinson, *Controller, 1995*
A.A., Burlington County College;
B.S., Trenton State College

John M. Eberly, *Assistant Controller, Accounting Services,
General and Special Accounting, 1996*
B.S., M.B.A., Shippensburg University

Thomas J. Fogarty, *Executive Director,
Business and Auxiliary Services, 1999*
B.S., Central Connecticut State University

Andrew B. Morrow, *Executive Director,
Information Technology Services, 2001*

Personnel

Office of Finance & College Resources (cont.)

Joseph R. Wojtysiak, Executive Director, Facilities Management, 2002
B.S., University of Baltimore;
M.S., George Washington University

Charles G. Crider, Director, Purchasing, 2005
A.A., Harrisburg Area Community College

Kyle J. DiBrito, Director, College Bookstores, 2005
B.A., Minnesota State University Moorhead

Jay E. Ellison, Director, Facilities Maintenance and Operations, 2006
B.S., Elizabethtown College

Christopher T. Fuller, Director, Technical Services, 1997

Leiykun Kassahun, Director, Safety and Security, 2002
B.S., Ethiopian National Police Academy

Louis Readinger, Director, Enterprise Technology Services, 1992
A.S., The Pennsylvania State University;
B.A., Rutgers University;
M.S., University of Southern California

Brandy J. Henry, Assistant Director, College Bookstores, 1999
A.A., The Pennsylvania State University

Office of Human Resources

Meredith E. Tulli, Executive Director, Human Resources, 1999
B.S., Wilson College;
M.P.A., The Pennsylvania State University; SPHR

William J. Holloway, Assistant Director, Human Resources/Compensation and Benefits, 2002
A.A. Harrisburg Area Community College;
B.A., M.S., Shippensburg University

Deidre D. Lenker, Assistant Director, Human Resources/Employee Relations, 2006
B.S., Indiana University of Pennsylvania

Glenna G. Stump, Assistant Director, Human Resources/Operations and Administration, 1973
A.A., Harrisburg Area Community College

Patricia J. Thompson, Assistant Director, Human Resources/Employment and Training, 1990
A.A., Harrisburg Area Community College

Office of Public Relations

Patrick M. Early, Executive Director, Public Relations, 2002
B.A., Georgetown University;
M.A., University of Missouri;
PRSA Accredited

Nancy Fureman, Director, Publications and Graphic Identity, 2007
B.A., Millersville University

Margurite P. Saylor, Director, Media Relations, 2007
B.S., University of Tennessee

Cheryl E. Kugler, Coordinator, Advertising and Marketing, 2003
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University

Tracy J. Mendoza, Coordinator, Media Relations, 1990
B.A., Shippensburg University

Virtual Campus & Instructional Technology

Larry Adams, Dean, Virtual Campus and Instructional Technology, 1992
B.S., M.A.C.T., Murray State University;
Ph.D., Southern Illinois University

Ellworth O. Beckmann, Associate Dean, Instructional Technology and Academic Computing Services, 2002
B.S., M.S., University of Wisconsin

Juliette Winterer, Associate Dean, Virtual Campus, 2006
B.A., Pomona College;
Ph.D., University of Washington

Elaine M. Moran, Assistant Dean, Student Support Services, 1990
A.A., Harrisburg Area Community College;
B.S., Regents College;
M.A., George Washington University

Hongxiang Wang, Director, Academic Computing and Training, 2006
B.A., Shenyang Teachers College;
M.L.S., Louisiana State University;
Ph.D., Mississippi State University

Qiquan Wang, Director, Instructional Technology Training, 1996
M.A., Bowling Green State University

David J. Wartell, Director, Technical Support Services, 1982
B.A., University of Delaware;
M.S., University of Connecticut

Lancaster Campus

Stuart J. Savin, Campus Vice President/Dean, 2006
B.A., The University of Connecticut;
M.S., State University of New York;
Ed.D., Oregon State University

Brad A. Wolf, Campus Dean, 2001
B.A., Franklin and Marshall College;
M.F.A., Bennington College;
J.D., Dickinson College

Jacqueline A. Bareuther, Associate Dean, Counseling and Retention Services; Associate Professor, Counseling, 1996
B.A., M.Ed., Millersville University;
National Board for Counselor Certification

Maureen B. Campbell, Associate Dean, Enrollment Management Services; Professor, Counseling, 1990
B.S., Duquesne University;
M.Ed., The Pennsylvania State University;
National Board for Counselor Certification, LPC

Michael C. Corradino, Assistant Dean, Academic Affairs, 2004
B.A., St. Josephs University;
M.A., University of Chicago

Eleanor D. Bosserman, Director, Business and Administrative Services, 2004
B.S., York College of Pennsylvania

Jeanne Hermann, Director, Campus Library; Professor, Information Science, 1990
B. A., Ursinus College;
M.L.S., Drexel University

Ernest T. Peters, Director, Campus Facilities, 2001

Kristie A. Berkstreser, Assistant Director, Nursing, 2006
B.S.N., Millersville University

Lebanon Campus

Kathleen R. Kramer, Campus Vice President/Dean, 2007
B.A., Indiana University of Pennsylvania;
M.A., University of Florida;
Ed.D., Temple University

Cheryl Batdorf, Associate Dean, Academic Affairs, 2004
B.S., Shippensburg University;
M.B.A., Lebanon Valley College of Pennsylvania

Deborah G. Lovett, Director, Campus Library, 2006
B.A., LaSalle University; M.S., Drexel University

Gettysburg Campus

Jennifer Weaver, Campus Vice President/Dean, 1990
B.S., M.Ed., The Pennsylvania State University

Shannon N. Harvey, Associate Dean, Academic Affairs, 1998
B. A., Bloomsburg University;
M.P.A., Shippensburg University

Katherine Kough, Assistant Dean, Student Services, 2005
B.A., Mt. Union College;
M. Ed., The Pennsylvania State University

Ronald J. Cline, Director, Campus Facilities, 2006
A.A., Electronics Training Center

Carol R. Gerkin, Director, Workforce Development/Continuing Education, Gettysburg Campus, 1993
B. Ed., Plymouth State College of the University of New Hampshire;
M.S., Robert Morris College

Marilyn M. Teeter, Director, Nursing; Associate Professor, Nursing, 2003
B.S.N., Duquesne University;
M.S.N., University of Maryland

York Campus

Jean M. Treuthart, Campus Vice President/Dean, 2003
A.S., Peirce College;
B.S., University of Maryland;
M.A., College of Notre Dame

Ann L. Kemper, Director, Campus Library, 2005
B.A., Taylor University;
M.Div., Duke Divinity School;
M.L.S., Kent State University

Marjorie A. Mattis, Director, Educational Services, 2005
A.A.S., Mount Aloysius College;
B.A., M.Ed., St. Francis University

Peter B. Ocsodai, Director, Student Affairs, 2006
A.S., State University of New York-College of Technology;
B.S., State University of New York-Center at Binghamton;
M.S., Ph. D., Syracuse University

Faculty (as of February 2008)

Richard S. Albright, Assistant Professor,
English/Harrisburg Campus, 2005
B.A., Ph.D., Lehigh University;
M.A., Millersville University

Jennifer L. Alleman, Assistant Professor,
Counseling/Lancaster Campus, 2003
B.A., M.S., Millersville University

Todd D. Allen, Assistant Professor,
Biology/Lancaster Campus, 2006
B.S., University of Pittsburgh;
Ph.D., University of Maryland

Cathryn M. Amdahl, Professor,
English/Harrisburg Campus, 1992
B.A., University of Montana;
M.A., Washington State University

Bernadette M. Antkowiak, Senior Professor,
Mathematics/Harrisburg Campus, 1971
B.S., Clarion University;
M.S., Bucknell University

R. Curtis Aumiller, Assistant Professor,
Respiratory Care/Harrisburg Campus, 2003
A.S., Harrisburg Area Community College;
B.S., M.S., University of St. Francis

Christine R. Bachman, Instructor,
Nursing/Lancaster Campus, 2007
B.S.N., Millersville University;
B.S.N., Lycoming College;
M.S.N., Villanova University

Joel L. Bacon, Instructor,
Medical Assisting/Harrisburg Campus, 2004
B.S., Elizabethtown College

David R. Bailey, Assistant Professor,
Psychology/Gettysburg Campus, 2005
B.A., The Pennsylvania State University;
M.S., Shippensburg University

Malcolm B. Baird, Associate Professor,
Biology/Lancaster Campus, 2005
A.B., Wilkes College;
M.A., Ph.D., University of Delaware

Tina M. Bakowski, Associate Professor,
Music/Harrisburg Campus, 1998
B.A., Lebanon Valley College;
M.M., University of Kansas;
M.M., Indiana University

Susan E. Bangs, Professor,
English/Harrisburg Campus, 1990
B.A., The Pennsylvania State University;
M.A., West Chester University;
Ed.D., Boston University

Adam C. Barton, Assistant Professor, Criminal
Justice/Harrisburg Campus, 2008
B.S., Jacksonville State University;
M.S., Shippensburg University

Trudy L. Bauer, Assistant Professor,
Nursing/Lancaster Campus, 2007
B.S.N., Indiana University of Pennsylvania;
M.S.N., Widener University

James E. Baxter, Associate Professor,
Physical Science/Geology/Harrisburg Campus, 2000
B.S., Lehigh University;
M.S., The Pennsylvania State University

Rosalina Beard, Associate Professor,
Spanish/Harrisburg Campus, 1993
B.S., New Mexico State University;
M.A., University of New Mexico

Patrice L. Beittel, Associate Professor,
Counseling/Lancaster Campus, 2003
B.A., Towson University;
M.S., Shippensburg University

Diane L. Benner, Professor,
Mathematics/Computer Science/Harrisburg Campus, 1990
B.S., State University of New York at Oswego;
M.S., Syracuse University

Roberta I. Bilous, Senior Professor,
Education/Harrisburg Campus, 1983
B.S., Indiana University of Pennsylvania;
M.S., Ohio State University

Christine M. Bittinger, Associate Professor,
Biology/Environmental Science/Harrisburg Campus, 2001
B.A., Susquehanna University;
M.S., Drexel University

Diane Bittle, Associate Professor,
Computer Information Services/Gettysburg Campus, 1998
B.S., M.B.A., Mt. St. Mary's College

Shelly A. Blanchette, Instructor,
Counseling/York Campus, 2004
B.S., University of Connecticut;
M.S., Shippensburg University

Emily J. Boardman, Instructor,
Counseling/Harrisburg Campus, 2006
B.A., Gettysburg College;
M.S., Shippensburg University

Lou Ann Boose, Professor,
Nursing/Harrisburg Campus, 1990
B.S.N., M.S.N., The Pennsylvania State University

James A. Boswell, Senior Professor,
English/Harrisburg Campus, 1981
B.A., M.A., Slippery Rock University

Michael L. Bowden, Associate Professor,
Information Science/Harrisburg Campus, 1997
B.A., DePauw University;
M.L.S., Indiana University, Bloomington, IN

Gina M. Bowers-Miller, Associate Professor,
Counseling/Computer Information Systems/
Harrisburg Campus, 1993
B.S., Mansfield University;
M.Ed., University of North Carolina;
M.A., George Washington University;
National Board for Counselor Certification

Margaret A. Brennan, Professor,
Theatre/Harrisburg Campus, 1989
B.A., University of Leicester;
M.A., Vermont College of Norwich University;
Licentiate, London Academy of Music and Dramatic Art

C. Renae Brown, Associate Professor,
Computer Networking/Harrisburg Campus, 2001
B.S., Gannon College;
M.A., Duquesne University

Douglas L. Brown, Assistant Professor,
Computer Networking Technology/
Harrisburg Campus, 2002
B.S., M.Ed., Millersville University

Mary Brown, Assistant Professor,
Mathematics/Harrisburg Campus, 2000
B.S., Indiana University of Pennsylvania;
M.S., Shippensburg University

Linda A. Buckwalter, Professor,
Mathematics/Harrisburg Campus, 1990
B.S., The Pennsylvania State University;
M.S., Shippensburg University

Valerie J. Bugosh, Instructor,
Nursing/Harrisburg Campus, 2007
B.S.N., Millersville University

Edward A. Burns, Instructor,
HVAC/Harrisburg Campus, 2003

Heather Burns, Assistant Professor,
Counseling/York Campus, 2001
B.A., American University;
M.Ed., The Pennsylvania State University

Ann M. Burris, Professor,
Counseling/Lebanon Campus, 1990
B.A., M.S., Shippensburg University;
National Board for Counselor Certification

Angela M. Campbell, Assistant Professor,
Counseling/Harrisburg Campus, 2004
B.A., M.A., Ph.D., Western Michigan University

Paul J. Carrick, Senior Professor,
Philosophy/Humanities/Harrisburg Campus, 1971
B.A., Michigan State University;
M.A., University of Pennsylvania;
Ph.D., Temple University

Bertha R. Casey, Professor,
Mathematics/Lancaster Campus, 1992
B.S., West Chester University;
M.Ed., University of Delaware

Kathleen R. Chescattie, Instructor,
English/Harrisburg Campus, 2006
A.A., Harrisburg Area Community College;
B.A., Dickinson College;
M.A., Salisbury State College

Felipe H. Chia, Professor,
Business Management/Harrisburg Campus, 1988
A.B., A.B.F., B.B.M., B.I.B., Northwood Institute;
M.S., Radford University;
M.B.A., Southeast Missouri State University;
E.D.S., Arkansas State University;
C.A.G.S., The College of William and Mary

O. Pauline Chow, Professor,
Mathematics/Harrisburg Campus, 1984
B.S., M.S., State University of New York at Stony Brook

Daniel R. Clark, Assistant Professor,
Chemistry/Harrisburg Campus, 2005
B.A., Southern Connecticut State University;
Ph.D., University of Connecticut

Paul D. Cockeram, Instructor,
English/Harrisburg Campus, 2006
B.A., Hiram College;
M.A., M.F.A., Iowa State University

Patricia T. Collamer, Instructor,
Sociology/York Campus, 2007
B.S., Cornell University;
M.A., University of New Hampshire

Personnel

Faculty (continued)

Lois B. Colpo, Instructor, Mathematics/Human Development/Harrisburg Campus, 2005
B.S., Wagner College;
M.A., The Pennsylvania State University

Kathleen S. Conley, Instructor, Information Science/Harrisburg Campus, 2005
B.A., Eastern Illinois University;
M.L.S., University of Illinois

John A. Cooper, Assistant Professor, Mathematics/Virtual Campus, 2007
B.S., The Pennsylvania State University;
B.B.A., Temple University;
M.S., Shippensburg University

Elmer N. Criswell, Jr., Senior Professor, Criminal Justice/Harrisburg Campus, 1975
B.A., West Liberty State College;
M.S., Eastern Kentucky University

Donneva Crowell, Assistant Professor, English/Gettysburg Campus, 2006
B.S., M.A., Texas Tech University

Craig A. Davis, Professor, Emergency Medical Services/Harrisburg Campus, 1990
B.S., Elizabethtown College;
M.Ed., The Pennsylvania State University

Lynette L. Davis, Associate Professor, Nursing/Lancaster Campus, 2002
B.S.N., York College of Pennsylvania;
M.S.N., Widener University

Robert E. Deitzel, Jr., Senior Professor, Sociology/Harrisburg Campus, 1970
B.A., Findlay College;
J.D., Ohio Northern University

Susan O. Deringer, Assistant Professor, Nursing/Harrisburg Campus, 2003
B.A., James Madison University;
B.S.N., M.S.N., York College

Heidi F. Devlin, Instructor, Biology/Lebanon Campus, 2007
A.A., Reading Area Community College;
B.S., Albright College;
Ph.D., The Pennsylvania State University

Jonathan DeYoung, Associate Professor, English/Harrisburg Campus, 2003
B.A., Wheaton College;
M.A., Columbia College

Kazim H. Dharsi, Senior Professor, Architecture/Architectural Technology/Harrisburg Campus, 1989
B.Arch., University of Bombay;
M.Arch., State University of New York;
AIA, Registered Architect

Judy A. Dibert, Senior Professor, English/Harrisburg Campus, 1981
B.S., Lock Haven University;
M.Ed., Temple University

Clifford R. Dillmann, Senior Professor, Psychology/Harrisburg Campus, 1970
B.A., Florida State University;
M.A., University of Pittsburgh

Michael A. Dockery, Senior Professor, English/Harrisburg Campus, 1971
B.A., Cardinal Glennon College;
M.A., Ph.D., Southern Illinois University

Kathleen T. Doherty, Professor, Psychology/Harrisburg Campus, 2000
B.A., Gettysburg College;
M.A., Ph.D., University of Maryland

Tim L. Dolin, Associate Professor, Speech/Harrisburg Campus, 1993
B.A., M.A., Marshall University

Gregory L. Dolise, Associate Professor, Physics/Harrisburg Campus, 1998
B.A., State University of New York at Stony Brook;
M.S., Queens College

Margaret E. Dombrowski, Associate Professor, Psychology/Harrisburg Campus, 1999
A.A., Cuyahoga Community College;
B.G.S., M.A., M.A., Ph.D., Kent State University

Carole A. Dorsch, Associate Professor, Biology/York Campus, 2005
A.B., Goucher College;
M.D., Johns Hopkins University

Ronald A. Dowe, Assistant Professor, Physics/Physical Science/Harrisburg Campus, 2004
B.S.Ed., Indiana University of Pennsylvania;
M.Ed., Lebanon Valley College

Joan G. Ellison, Assistant Professor, Dental Hygiene/Harrisburg Campus, 1999
A.A., Erie Community College;
B.S., SUNY Brockport;
M.S., Old Dominion University

Brenda C. Eppley, Professor, Theatre/Harrisburg Campus, 1991
B.F.A., West Virginia University;
M.F.A., University of North Carolina

Nicole L. Ernst, Instructor, Geospatial/Harrisburg Campus, 2005
B.A., Montana State University;
B.A., Slippery Rock University;
M.A., East Carolina University

Charles R. Fahnestock, Senior Professor, Counseling/Mathematics/Harrisburg Campus, 1969
A.A., Hershey Junior College;
B.S., Elizabethtown College;
M.Ed., Shippensburg University;
National Board for Counselor Certification,
National Certified Counselor, N.C.C.

Daniel P. Fahringer, Assistant Professor, Computer Science/Mathematics/Harrisburg Campus, 1999
B.S., B.Ed., Shippensburg University;
M.Ed., Millersville University

Gerry M. Farmer, Instructor, Electrical Technology/Harrisburg Campus, 2004

Larry W. Fanus, Assistant Professor, Nursing/Lancaster Campus, 2004
B.S.N., M.S.N., University of Pennsylvania

Charles J. Fernandes, Associate Professor, Speech/Lancaster Campus, 1993
A.A., Modesto Junior College;
B.A., M.A., San Francisco State University

Monica J. Filburn, Associate Professor, Nursing/Harrisburg Campus, 2001
B.S.N., The Pennsylvania State University;
M.S.N., University of Pittsburgh

Michael A. Finch, Instructor, Culinary Arts/Harrisburg Campus, 2006

Geremea P. Fiorvanti, Instructor, Biology/Lancaster Campus, 2007
A.S., Delaware County Community College;
B.S., Texas A&M University;
M.S., University of South Alabama

Rhonda S. Foertsch, Instructor, Nursing/Lancaster Campus, 2005
B.S.N., The Pennsylvania State University

Bernadette M. Foreman, Instructor, Nursing/Harrisburg Campus, 2006
B.S.N., Bloomsburg University

William C. Forney, Instructor, Electronics/Harrisburg Campus, 1985

Mary L. Furlas, Associate Professor, Counseling/Harrisburg Campus, 1998
B.A., Findlay College;
M.S., Shippensburg University

Rebecca J. Fratantuono, Assistant Professor, Nursing/Harrisburg Campus, 2004
B.S.N., Salve Regina College;
M.S.N., University of Phoenix

Sharon E. Fronko, Instructor, Nursing/Harrisburg Campus, 2005
B.A., The Pennsylvania State University;
B.S.N., York College of Pennsylvania;
M.S.N., University of Phoenix

Jonathan D. Gainor, Instructor, Philosophy/Harrisburg Campus, 2006
B.A., Millersville University;
M.A., Miami University

Ming Y. Gao, Professor, Psychology/Lancaster Campus, 1993
B.A., Beijing Institute;
M.A., Canberra College;
M.S., Ph.D., Lehigh University

Sue Z. Gao, Associate Professor, Counseling/ESL/Lancaster Campus, 1997
B.A., Beijing Institute;
M.A., Syracuse University;
M.Ed., Lehigh University

Kristen R. Gettys, Instructor, Nursing/Harrisburg Campus, 2004
A.S., Harrisburg Area Community College;
B.S.N., M.S.N., York College of Pennsylvania

Margaret M. Gingrich, Professor, Nursing/Harrisburg Campus, 1989
B.S.N., The Pennsylvania State University;
M.S.N., Thomas Jefferson University

Sherrill B. Goodlive, Assistant Professor, Counseling/Harrisburg Campus, 1997
B.S., Ohio State University;
B.A., University of Akron;
M.S., Shippensburg University

Barbara B. Grandia, Professor,
Counseling/Lebanon Campus, 1992
B.A., Bucknell University;
M.Ed., The Pennsylvania State University;
M.Ed., Millersville University;
National Board for Counselor Certification

Valerie A. Gray, Associate Professor,
Technical/Business Writing/Harrisburg Campus, 1998
B.A., Wright State University;
M.S., Drexel University

Robert C. Green, Senior Professor, English, Computer
Information Systems/Harrisburg Campus, 1972
B.A., M.A., Loyola University, Chicago;
M.S., American University;
Ph.D., University of Rochester;
MCP (NT4.0), CNA (NetWare3.12)

Debra L. Grieneisen, Associate Professor,
Medical Laboratory Technology/Biology/Harrisburg
Campus, 1993
B.S., Indiana University of Pennsylvania;
M.S., Shippensburg University

Susan G. Gugoff, Instructor,
Sonography/Harrisburg Campus, 2004

Brian Gurian, Associate Professor,
History/Harrisburg Campus, 2002
B.A., Hunter College;
M.A., State University of New York;
D.A., St. John's University

Geraldine Gutwein, Professor,
English/Reading/Harrisburg Campus, 1991
B.S.Ed., Black Hills State College;
M.A., Middlebury College, Bread Loaf School of English;
Ph.D., Indiana University of Pennsylvania

Robert C. Hairston, Senior Professor,
Biology/Harrisburg Campus, 1982
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University;
M.S., Shippensburg University;
M.Ed., The Pennsylvania State University

William F. Hairston, Professor,
Biology/Harrisburg Campus, 1991
B.S., The Pennsylvania State University;
M.S., Shippensburg University

Marcia A. Hajduk, Senior Professor, Hotel, Restaurant,
and Institutional Management/Harrisburg Campus, 1982
B.S., University of Massachusetts;
M.B.A., Fairleigh Dickinson University;
Ed.D., Temple University

Corwin C. Hale, Senior Professor,
History/Anthropology/Harrisburg Campus, 1967
B.A., Alma College;
M.A., Western Michigan University

Kimberly S. Hall, Instructor,
English/Lancaster Campus, 2004
B.A., Millersville University;
M.A., University of Maryland

Patricia A. Hanahoe-Dosch, Assistant Professor,
English/Lancaster Campus, 2006
B.A., Richard Stockton College of New Jersey;
M.F.A., University of Arizona

Joseph R. Hardy, Senior Professor,
Psychology/Virtual Campus, 1970
B.S., M.A., Central Michigan University

Mary L. Harris, Assistant Professor,
Mathematics/Lancaster Campus, 2003
B.S., M.A.T., Duke University

James L. Hartman, Senior Professor,
Accounting/Harrisburg Campus, 1974
A.A., Harrisburg Area Community College;
B.S., M.B.A., Shippensburg University;
C.M.A.

John R. Heapes, Senior Professor,
Sociology/Harrisburg Campus, 1970
B.A., Iona College;
M.A., State University of New York at Buffalo;
M.S.W., Temple University

George D. Heiser, Assistant Professor,
Radiologic Technology/Lancaster Campus 2003
B.P.S., Elizabethtown College

Susan B. Hench, Instructor,
Nursing/Harrisburg Campus, 2005
B.S., Juniata College;
B.S.N., Messiah College

Gregory G. Hess, Senior Professor, Counseling;
Associate Professor, Philosophy/Harrisburg Campus, 1969
B.A., Mt. St. Mary's College;
M.S., Shippensburg University;
Certified Professional Counselor;
National Board for Counselor Certification;
National Certified Career Counselor

Terri Hildebrand, Instructor, Radiological
Technology/Harrisburg Campus, 2005
A.A., Harrisburg Area Community College

Lisa K. Hill, Instructor, Speech/Gettysburg Campus, 2004
B.A., Mansfield University;
M.S., Shippensburg University

Philip J. Hoeflich, Associate Professor,
Speech Communication/Harrisburg Campus, 2002
B.A., M.A., Bloomsburg University

Mary H. Hoffman, Associate Professor,
English/Harrisburg Campus, 1992
B.S., Spring Hill College;
M.A., Sonoma State College

Elfriede S. Hoskins, Associate Professor, Human
Development/Counseling/Harrisburg Campus, 1998
B.A., M.S., Shippensburg University

Sheela S. Huddle, Instructor,
Biology/Lancaster Campus, 2006
B.S., B.S., M.S., University of North Bengal

James S. Hume, Professor,
Mathematics/Lancaster Campus, 1992
B.S., U.S. Military Academy;
M.S., Virginia State University

Jeffrey Ihlenfeldt, Assistant Professor,
English/Lancaster Campus, 2000
A.A., Buck County Community College;
B.A., Vermont College;
M.F.A., Goddard College

Anthony C. Ijomah, Professor,
Geography/Harrisburg Campus, 1993
B.S., Roosevelt University;
M.C.R.P., Illinois Institute of Technology;
Ph.D., University of Wisconsin

Julia R. Imboden, Assistant Professor,
Sonography/Harrisburg Campus, 2002
B.S., Cambriini College;
M.S., University of Saint Francis

Charles L. Jeffrey, Senior Professor,
Biology/Harrisburg Campus, 1965
B.S., Fredonia College;
M.A.T., Harvard University

Sidney Johnson, Jr., Professor,
Mathematics/Harrisburg Campus, 1990
B.S., Metro State College;
M.A., University of Northern Colorado

Robert D. Karas, Assistant Professor,
Counseling/Virtual Campus, 2006
B.A., M.A., Indiana University

Getachew Kassahun, Professor,
Hotel/Restaurant Management and
Travel and Tourism/Harrisburg Campus, 1990
A.S.B., Central Pennsylvania Business School;
B.So.Sc., The Pennsylvania State University;
M.A., Shippensburg University

Diane M. Kemper, Instructor,
Nursing/Gettysburg Campus, 2004
A.A.S., Northampton County Community College;
B.S.N., York College of Pennsylvania

Amy L. Kennedy, Professor,
Surgical Technology/Harrisburg Campus, 2002
B.S.N., The Pennsylvania State University;
M.S.N., Duquesne University

Ellen M. Kessler, Associate Professor, Computer
Information Systems/Lancaster Campus, 1997
B.S., Immaculata College;
M.S., Villanova University

Kimberly A. Ketelsleger, Associate Professor,
Mechanical Engineering Technology/
Harrisburg Campus, 2002
B.S., M.S., University of Rhode Island

Michele C. Kieff, Assistant Professor,
Counseling/Harrisburg Campus, 2004
B.A., Boston College;
M.S., Shippensburg University

Tommy Kochel, Associate Professor,
English as a Second Language/Harrisburg Campus, 2002
B.A., Juniata College;
M.A., Ohio University

Qingshou Kong, Professor,
Mathematics/Lancaster Campus, 2002
B.S., Suzhou University, China;
M.S., Henan Normal University, China;
Ph.D., Wesleyan University

Jacques T. Kuitche, Instructor,
Mathematics/Lancaster Campus, 2005
B.A., Gulf Coast University;
M.S., Florida Atlantic University

James C. Lard, Associate Professor,
Art/Harrisburg Campus, 1993
B.F.A., M.F.A., Louisiana Technology University

Mong-Ting Lee, Professor,
Biology/Harrisburg Campus, 1992
B.S., National Taiwan Normal University;
M.S., Ph.D., Kent State University

Personnel

Faculty (continued)

George C. Lehman, *Instructor, Mathematics/Computer Science/Lancaster Campus, 2004*
B.S., Kutztown University;
M.S., Villanova University

Kimberly D. Leib, *Instructor, Medial Laboratory Technology/Harrisburg Campus, 2004*
A.S.B., Central Penn College;
B.S., The Pennsylvania State University

Susan F. Leib, *Professor, Nursing/Harrisburg Campus, 1990*
B.S.N., Millersville University;
M.S.N., The Pennsylvania State University

Bradley A. Leidich, *Senior Professor, Respiratory Care/Harrisburg Campus, 1989*
A.A.S., Harrisburg Area Community College;
B.B., The Pennsylvania State University;
M.Ed., Temple University

Katherine E. Leonard, *Associate Professor, Nursing/Harrisburg Campus, 2001*
B.S.N., Russell Sage College;
M.S., The Pennsylvania State University

Phillip K. Letting, *Associate Professor, Economics/Harrisburg Campus, 2002*
A.A., Pinebrook Junior College;
B.S., M.A., Central Missouri State University;
Ph.D., Southern Illinois University

Lisa A. Linton, *Professor, Speech/Harrisburg Campus, 1991*
B.S., Clarion University;
M.A., Indiana University

David R. Liu, *Assistant Professor, Sociology/Harrisburg Campus, 2003*
B.A., Dickinson College;
M.A., York University, Canada

Jill A. Lott, *Instructor, Nursing/Gettysburg Campus, 2003*
B.S.N., Messiah College

Kathleen A. Mack, *Associate Professor, Legal Studies/Harrisburg Campus, 2003*
B.A., University of Notre Dame;
J.D., Indiana University, Purdue

William E. Mack, *Professor, Electronics/Harrisburg Campus, 1983*
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University;
M.E.S., Loyola College

Annamarie Malchenson, *Instructor, Early Childhood Education/Harrisburg Campus, 2006*
B.A., Southern Connecticut State University;
M.S., Bloomsburg University

Katherine S. Margolis, *Assistant Professor, Information Science/Harrisburg Campus, 2006*
B.A., The Pennsylvania State University;
M.A., University of Minnesota

Paul C. Martin, *Associate Professor, Computer Information Systems/Harrisburg Campus, 2002*
B.S., M.B.A., Indiana University of Pennsylvania

Seth D. Martin, *Instructor, English/Lancaster Campus, 2004*
B.S., Drexel University;
M.A., University of Vermont

Jodi L. Mason, *Instructor, Biology/Lancaster Campus, 2004*
B.S., University of Montana;
M.S., Ohio State University

Kelly E. Matthews, *Professor, Chemistry/Lancaster Campus, 2002*
B.S., Lehigh University;
Ph.D., Virginia Polytechnic Institute and State University

Md. Mojibul Maula, *Professor, Biology/Lancaster Campus, 1997*
B.S., University of Calcutta;
M.S., University of Kalyani;
M.S., Baylor University;
Ph.D., University of Maryland

Diane M. Mauro, *Assistant Professor, Marketing/Management/Lancaster Campus, 2005*
B.S., The Pennsylvania State University;
M.B.A., Temple University

Edward J. McCarthy, *Senior Professor, English/Harrisburg Campus, 1970*
B.A., State University of New York at Oswego;
M.A., The Pennsylvania State University

Jimmy D. McCarty, *Associate Professor, Business Management/Harrisburg Campus, 2008*
B.S., Indiana University;
M.B.A., Eastern University;
M.S., The Pennsylvania State University;
Ph.D., Capella University

Takiya S. McClain, *Instructor, Nursing/Lancaster Campus, 2008*
B.A., New York University;
B.S.N., Syracuse University

Sally Ann McCrear, *Professor, Counseling/Harrisburg Campus, 1990*
B.S., Lock Haven University;
M.S., Shippensburg University;
National Board for Counselor Certification

Ruth A. McGinley, *Associate Professor, Hotel, Restaurant, Institutional Mgmt./Harrisburg Campus, 1993*
B.S., The Pennsylvania State University;
M.S., College of St. Francis

Barbara McGraw, *Assistant Professor, English/Lancaster Campus, 2003*
B.A., University of Illinois;
M.Ed., Millersville University

Robert T. McLean, *Senior Professor, Economics/Harrisburg Campus, 1975*
A.B., Boston College;
M.A., Princeton University

David W. McNeilly, *Senior Professor, Engineering/Counseling/Harrisburg Campus, 1971*
B.S., San Diego State University;
M.S., California State University at Los Angeles;
P.E., Pennsylvania and California;
National Board for Counselor Certification

Kari A. Meck, *Assistant Professor, Computer Information Systems/Lancaster Campus, 2003*
B.S., York College of Pennsylvania;
M.S., Nova Southeastern University

James R. Megenity, *Senior Professor, Sociology/Harrisburg Campus, 1971*
B.S., M.A., Ball State Teachers College

Caroline L. Mellinger, *Instructor, History/Virtual Campus, 2006*
A.A., Butte College;
B.A., B.A., California State University;
M.A., University of Wisconsin

Sara F. Meng, *Associate Professor, Art History/Harrisburg Campus, 2000*
B.A., University of Kentucky;
M.A., University of Louisville;
Ph.D., Case Western Reserve University

Reid P. Meredith, *Instructor, Reading/Harrisburg Campus, 2007*
B.A., Norwich University;
M.A., Vermont College

Robert B. Meyers, *Instructor, Industrial Technology/Harrisburg Campus, 2007*
Diploma, Harrisburg Area Community College

Virginia L. Mickens, *Professor, Nursing/Harrisburg Campus, 1985*
A.A.S., B.S.N., Medgar Evers College;
M.S.N., Ohio State University

Thomas J. Miller, *Associate Professor, Education/Harrisburg Campus, 2002*
B.S., Indiana University of Pennsylvania;
M.Ed., Bloomsburg University;
Ed.D., The Pennsylvania State University

Yvonne J. Milspaw, *Professor, English/Humanities/Harrisburg Campus, 1989*
B.A., Mary Washington College;
M.A., Ph.D., Indiana University

Linda H. Mininger, *Assistant Professor, Reading/Harrisburg Campus, 2003*
B.S., Eastern Mennonite University;
M.Ed., Frostburg State University

Janette B. Moraski, *Instructor, Physics/Harrisburg Campus, 2004*
B.S., Indiana University of Pennsylvania;
M.S., University of Alabama

Debra R. Morris, *Assistant Professor, Physical Education/Harrisburg Campus, 1999*
B.S., East Stroudsburg University;
M.Ed., The Pennsylvania State University

Todd A. Morris, *Assistant Professor, Nursing/Lancaster Campus, 2007*
B.S.N., York College;
M.S.N., Widener University

Loyall L. Mumby, *Professor, Business Management/Lancaster Campus, 2000*
B.A., M.B.A., Eastern Illinois University;
Ph.D., LaSalle University

Diane L. Mumma, *Instructor, Nursing/Lancaster Campus, 2007*
B.S., The Pennsylvania State University;
M.S.N., University of Delaware

Kathleen B. Murren, *Professor, Legal Studies/Harrisburg Campus, 1997*
B.S., University of Notre Dame;
J.D., Dickinson School of Law

Wayne E. Musser, *Professor, Automotive Technology/Harrisburg Campus, 1989*
A.S., Williamsport Area Community College;
B.S., University of Southern Colorado;
M.Ed., The Pennsylvania State University

Earl C. Myers, Instructor, Mechanical Engineering Technology/Harrisburg Campus, 2004
A.S., Harrisburg Area Community College;
B.S., The Pennsylvania State University

Ryan A. Neff, Instructor,
Marketing/Harrisburg Campus, 2008
B.S., University of Delaware;
M.B.A., Millersville University

Ruth A. Negley, Assistant Professor,
Biology/Gettysburg Campus, 2000
B.S., M.Ed., Shippensburg University

Bonnie O. Neher, Professor, Counseling/
Criminal Justice/Harrisburg Campus, 1980
A.A., Harrisburg Area Community College;
B.S., Central Missouri State University;
M.S., Shippensburg University

Timothy J. Neher, Senior Professor,
Psychology/Counseling/Harrisburg Campus, 1971
B.A., Hanover College;
M.Ed., Ed.D., University of Illinois

Lyra L. Neville, Assistant Professor,
Mathematics/Lancaster Campus, 2005
B.A., B.S., Eastern New Mexico University;
M.A., University of New Mexico

Jeffrey C. Newhard, Assistant Professor,
Counseling/York Campus, 2007
A.A., Lehigh Carbon Community College;
B.S., Kutztown University;
M.S., Shippensburg University

Lisette Newhard, Instructor,
Counseling/Gettysburg Campus, 2003
B.A., West Chester University;
M.Ed., Kutztown University

Minh Quang Nguyen, Professor, Computer Information
Systems/Accounting/Harrisburg Campus, 1984
B.B.A., The Pennsylvania State University;
M.B.A., M.S.I.S., Shippensburg University

Debra A. Nickey, Instructor,
Dental Assisting/Harrisburg Campus, 1987
B.S., The Pennsylvania State University;
M.A., University of Phoenix

Cynthia L. Nicotera, Associate Professor,
Information Science/Harrisburg Campus, 2000
A.A., Harrisburg Area Community College;
B.Ed., M.Ed., The Pennsylvania State University;
M.S., Drexel University

Jason T. Nielsen, Associate Professor,
Accounting/Management/Lancaster Campus, 1998
B.S., M.Ac., Brigham Young University

Linda P. O'Connor, Associate Professor,
Mathematics Gettysburg Campus, 2000
B.S., West Chester University;
M.Ed., Western Maryland College

Suzanne E. O'Hop, Associate Professor,
English/Virtual Campus, 2006
B.A., Dickinson College;
M.A., Millersville University;
Ph.D., University of Rhode Island

Edward O. Omolo, Associate Professor,
Biology/Harrisburg Campus, 2004
B.S., State University of New York;
B.Ed., Ohio Dominican University;
M.S., Seton Hall University;
Ph.D., University Nairobi

Loretta A. O'Neill, Associate Professor,
Nursing/Lancaster Campus, 2003
B.S.N., The Pennsylvania State University;
M.N., University of Washington

Richard S. Orange, Instructor,
Fire Science/Harrisburg Campus, 2003
B.S., Excelsior College

Maureen B. Osborne, Assistant Professor,
Counseling/Harrisburg Campus, 2004
B.S., Kings College;
M.S., Shippensburg University

Janka Ovcharovichova, Professor,
Civil Technology/Harrisburg Campus, 2000
B.S., M.S., Ph.D., Slovak Polytechnic University

Pamela L. Pacana, Instructor,
Cardiovascular Technology/Lancaster Campus, 2002
A.S., Immaculata College

Yolanda Perez-Rivera, Professor,
Counseling/Harrisburg Campus, 1986
B.A., M.Ed., University of Puerto Rico

Carl R. Petersheim, Assistant Professor,
Computer Information Systems/Lancaster Campus, 2003
B.S.Ed., Millersville University

David G. Petkosh, Professor, Reading/
Lancaster Campus, 2001
B.S., Millersville University;
M.Ed., Ph.D., The Pennsylvania State University

M. Karen Petyak, Associate Professor,
Counseling/Harrisburg Campus, 2000
B.A., Lenoir Rhyne College;
M.S., Shippensburg University

Allison D. Pfaff, Instructor,
Mathematics/York Campus, 2006
A.A., Lorain County Community College;
B.S.Ed., M.S., Youngstown State University

Joseph F. Plehani, Assistant Professor,
Accounting/Harrisburg Campus, 2007
B.S., Elizabethtown College;
M.B.A., Lebanon Valley College

Karen E. Polite, Assistant Professor,
Human Services/Lancaster Campus, 2001
B.A., Millersville University;
M.S.W., University of Pennsylvania

Karen J. Ponti, Assistant Professor,
Dental Hygiene/Harrisburg Campus, 2001
B.S., New York University;
M.Ed., The Pennsylvania State University

Ruby H. Porr, Instructor,
Human Services/Harrisburg Campus, 2007
B.S., Elizabethtown College;
M.S.W., Temple University

Jeanne M. Purtell, Instructor, English/York Campus, 2007
B.A., Cabrini College;
M.Ed., The Pennsylvania State University

Judy E. Rahauer, Instructor, Nursing/York Campus, 2007
B.S.N., York College

Eneida S. Ramirez, Instructor,
Biology/Harrisburg Campus, 2007
B.S., M.S., University of Puerto Rico

Karen W. Ramsay, Associate Professor,
Nursing/Lancaster Campus, 2002
B.S.N., Millersville University;
M.S.N., University of Pennsylvania

Susan B. Ray, Instructor,
Nursing/Gettysburg Campus, 2006
A.A., Harrisburg Area Community College;
B.S.N., Millersville University

Marie Reardon, Professor,
Nursing/Harrisburg Campus, 1991
B.S.N., Villanova University;
M.S.N., The Pennsylvania State University

Joycelyn C. Redcross, Instructor,
English/Harrisburg Campus, 2005
B.A., M.A., University of Alabama

Joseph F. Register, Assistant Professor,
English/Lancaster Campus, 2003
B.A., Temple University;
M.A., University of Memphis

Cristal L. Renzo, Instructor,
English/Gettysburg Campus, 2005
B.A., Lebanon Valley College;
M.A., West Chester University

Sharon R. Roberts, Assistant Professor,
Nursing/Gettysburg Campus, 2004
B.S.N., Medical College of Georgia;
M.S.N., University of Evansville

Rachel S. Rohlf, Instructor, Information
Science/Harrisburg Campus, 2004
B.A., M.S., University of Illinois;
M.A., The Pennsylvania State University

Cindy W. Rose, Instructor,
Humanities/Lancaster Campus, 2004
B.S.Ed., Mansfield University;
M.A., The Pennsylvania State University

Diane M. Roselli, Associate Professor,
Computer Information Systems/Harrisburg Campus, 2000
B.F.A., Philadelphia College of Art;
M.A., Antioch University

Suzanne E. Rosenberger, Instructor, Mathematics/Human
Development/Harrisburg Campus, 2006
B.S., Shippensburg University;
M.Ed., The Pennsylvania State University

Jason W. Rosenberry, Assistant Professor,
Mathematics/Gettysburg Campus, 2005
B.S.Ed., M.Ed., Shippensburg University

Rodney J. Ross, Senior Professor,
History/Geography/Harrisburg Campus, 1970
B.S., Shippensburg University;
M.Ed., Ed.D., The Pennsylvania State University

Debra L. Rothermel, Instructor,
Mathematics/Lancaster Campus, 2005
B.S.Ed., M.Ed., Millersville University

Robert M. Rowlands, Professor,
Business Law/Harrisburg Campus, 2000
B.A., J.D., University of Pennsylvania

Michael S. Salisbury, Professor,
Automotive Technology/Harrisburg Campus, 1984
B.S., M.Ed., The Pennsylvania State University

Frederick E. Sanders, Senior Professor,
English/Speech/Harrisburg Campus, 1964
B.S., M.Ed., Shippensburg University;
Ed.D., University of Maryland

Joseph H. Santanna, Senior Professor,
Accounting/Harrisburg Campus, 1974
B.A., St. Vincent College;
C.P.A., Pennsylvania

Personnel

Faculty (continued)

Lois A. Schaffer, Assistant Professor,
Cardiovascular Technology/Lancaster Campus, 2002
B.H.S., Gwynedd-Mercy College

Kathleen M. Schlotthauer, Associate Professor,
Dental Hygiene/Harrisburg Campus, 1990
B.H.S., University of Kentucky;
M.Ed., The Pennsylvania State University

Michelle M. Schlusser, Instructor,
Nursing/Harrisburg Campus, 2006
B.S.N., The Pennsylvania State University

Judy H. Schmidt, Assistant Professor,
English/Harrisburg Campus, 2002
A.B., Susquehanna University;
M.Ed., Indiana University of Pennsylvania

Debra M. Schneider, Assistant Professor,
Counseling/Lebanon Campus, 2002
B.A., Barat College;
M.Ed., Ramapo College

Kristy J. Schultz, Instructor,
Cardiovascular Technology/Lancaster Campus, 2004
B.S., Bloomsburg University

Beverly Segina, Senior Professor,
Information Science; Associate Professor,
History/Harrisburg Campus, 1973
B.A., Shippensburg University;
M.A., University of Maryland

James W. Selgas, Senior Professor, *Psychology, 1966*
B.A., M.A., Ed.D., Lehigh University; Licensed Psychologist,
Pennsylvania; Certificate, Behavior Therapy, Temple
University School of Medicine; Diplomas, Spanish
Language and Culture, La Universidad Complutense de
Madrid, La Universidad de Oviedo

Julia A. Sensenig, Instructor,
Nursing/Lancaster Campus, 2004
B.S.N. Kutztown University;
M.S.N., West Chester University

Rosa G. Seyfried, Professor,
Mathematics/Harrisburg Campus, 1991
A.S., Humacao University College;
B.S., University of Puerto Rico;
M.S., University of Illinois;
M.A., The Pennsylvania State University

Alyse J. Shaffer, Instructor, *Administrative Office*
Specialist/Harrisburg Campus, 2007
B.S.Ed., Indiana University of Pennsylvania

Ellen L. Shatto, Professor,
Mathematics/Virtual Campus, 1992
B.A., Lebanon Valley College;
M.Ed., The Pennsylvania State University

Raymond S. Sherer, Senior Professor,
English/Harrisburg Campus, 1970
B.A., Canisius College;
M.A., University of Wisconsin at Madison;
Ph.D., State University of New York at Buffalo

Judith A. Sherwood, Professor,
Early Childhood Education/Lancaster Campus, 2001
A.B., Muhlenberg College;
M.Ed., Kutztown University;
Ed.D., Nova University

Janet E. Shimek, Assistant Professor,
Nursing/Gettysburg Campus, 2008
A.A., Essex Community College;
B.S.N., Towson University;
M.S., McDaniel College;
M.S.N., University of Phoenix

Eleana G. Shipman, Associate Professor,
Nursing/Lancaster Campus, 2001
B.S.N., University of Maryland;
M.S.N., Villanova University

Dennis D. Shoemaker, Associate Professor,
Psychology/Harrisburg Campus, 2007
B.S., The Pennsylvania State University;
M.S., Millersville University;
Psy.D., Philadelphia College of Osteopathic Medicine

Rebecca L. Shoener, Assistant Professor,
Radiologic Technology/Lancaster Campus, 2004
A.S., Coastal Georgia Community College;
B.G.S., M.Ed., Armstrong Atlantic State University

Jean M. Shutters, Senior Professor,
Mathematics/Harrisburg Campus, 1982
B.A., North Park College;
M.S., Illinois Institute of Technology

Trumbull L. Simmons, Jr., Senior Professor,
English/Harrisburg Campus, 1971
A.B., Taylor University;
M.A., Vanderbilt University

Matthew D. Sliifko, Instructor,
Mathematics/Harrisburg Campus, 2007
B.S., University of Pittsburgh;
M.S., Indiana University of Pennsylvania

Monica Smith-Talbot, Professor,
Art/Harrisburg Campus, 1984
B.A., M.F.A., Rochester Institute of Technology

Martha B. Spear, Professor,
Nursing/Harrisburg Campus, 1984
B.S.N., Roberts Wesleyan College;
M.S.N., University of Delaware

Jennifer St. Pierre, Instructor,
Sociology/Lancaster Campus, 2004
B.S., M.A., Western Michigan University

Richard P. Stringer, Associate Professor,
Biology/Lancaster Campus, 2002
B.A., Syracuse University;
M.S., North Carolina State University;
S.C.D., Johns Hopkins University

Nancy Summers, Professor,
Sociology/Harrisburg Campus, 1995
B.A., Wilmington College;
M.A., The Pennsylvania State University;
M.Am., St. Loyola College

R. Bruce Sundrud, Senior Professor,
Biology/Harrisburg Campus, 1971
B.S., M.S., Brigham Young University

Renee L. Sundrud, Associate Professor,
Mathematics/Harrisburg Campus, 1986
B.S., Brigham Young University;
B.S., The Pennsylvania State University;
M.S., Shippensburg University;
Ed.D., Temple University

Robert J. Swatski, Assistant Professor,
Biology/York Campus, 2007
B.S., Millersville University;
M.S., Florida Institute of Technology

James E. Switzenberg, Instructor,
Culinary Arts/Harrisburg Campus, 2006
A.A., Culinary Institute of America

John T. Sword, Associate Professor,
Biology/Harrisburg Campus, 2002
B.S., M.S., Ph.D., University of Wisconsin

Ronald R. Talbott, Senior Professor,
Art/Harrisburg Campus, 1983
B.S., University of Virginia;
M.F.A., Rochester Institute of Technology

Marjaneh Talebi, Associate Professor,
Art/Harrisburg Campus, 1995
B.F.A., Indiana University of Pennsylvania;
M.F.A., Kansas State University

James A. Terry, Senior Professor,
Government and Politics/Harrisburg Campus, 1967
B.S., Mansfield University;
M.A., The American University

Joy G. Tien, Professor,
Counseling/Lancaster Campus, 2002
B.S., Philippines College;
M.S.Ed., Millersville University

Gladdi A. Tomlinson, Professor,
Nursing/Harrisburg Campus, 1989
B.S.N., York College of Pennsylvania;
M.S.N., Villanova University

Leslie A. Torresson, Instructor,
Management/Virtual Campus, 2006
B.A., Long Island University;
M.B.A., Mount Saint Mary's College

Donna M. Traaen, Assistant Professor,
Dental Hygiene/Harrisburg Campus, 2007
A.P.S., Camden County College;
B.S., University of Maryland;
M.S., University of Missouri

Robert T. Troxell, Professor, *Art/Harrisburg Campus, 1991*
B.A., Millersville University;
M.F.A., University of Delaware;
Ph.D., The Pennsylvania State University

Natalia N. Turaki, Professor,
Chemistry/Harrisburg Campus, 1993
B.S., University of Jos;
Ph.D., University of South Carolina

Marie C. Ulmen, Instructor,
Reading/Harrisburg Campus, 2005
A.S., B.S., State University of New York;
M.Ed., Shippensburg University

Robert J. Ulrey, Senior Professor,
Mathematics/Harrisburg Campus, 1971
B.A., Manchester College;
M.A., Bowdoin College

Edward J. VanBlargan, Professor,
Computer Information Systems/Harrisburg Campus, 2000
B.S., M.S., The Pennsylvania State University;
Ph.D., University of Maryland

Jennifer A. VanBlargan, Assistant Professor,
Nursing/Lancaster Campus, 2007
B.S.N., Desales University;
M.S.N., Millersville University

Irma Alicia Villarreal, Associate Professor,
Counseling/Lancaster Campus, 2002
B.S., University of Dubuque;
M.S.W., University of Iowa

Sharon A. Wagenheim, Senior Professor,
Nursing/Harrisburg Campus, 1974
B.S., Duquesne University;
M.S.N., University of Pennsylvania

Dee M. Walter, Assistant Professor,
Biology/Harrisburg Campus, 2000
A.A., Harrisburg Area Community College;
B.S., Dickinson College;
M.S., Shippensburg University

Janice H. Waltz, Instructor, Human
Development/Harrisburg Campus, 2004
B.S. Jacksonville University;
M.A. Southwestern Baptist Theological Seminary

David J. Wassmer, Assistant Professor, Physical
Education/Harrisburg Campus, 2006
B.S., Lock Haven University;
M.S., Bloomsburg University

Pamela C. Watkins, Associate Professor,
Mathematics/Lancaster Campus, 2003
B.S.Ed., B.S., M.S., South Georgia College

Jacqueline A. Weaver, Assistant Professor,
Nursing/Lancaster Campus, 2005
B.S.N., Millersville University;
M.S.N., Widener University

M. Lynne E. Weber, Instructor,
Psychology/Harrisburg Campus, 2004
B.S., Allegheny College;
M.S. University of California

Elisa J. Weigard, Instructor,
Information Science/Lancaster Campus, 2004
B.A., John Carroll University;
M.L.S., Case Western Reserve University

Jay L. Wenger, Associate Professor,
Psychology/Lancaster Campus, 2004
B.S., B.A., Millersville University;
M.S., Ph.D., The Pennsylvania State University

Mary A. White, Assistant Professor,
Nursing/Harrisburg Campus, 2006
A.A., Northern Virginia Community College;
B.S.N., M.S.N., George Mason University

Michael B. Williams, Assistant Professor,
Counseling/Harrisburg Campus, 2005
B.A., M.A., Shippensburg University

Janet B. Willis, Senior Professor,
Nursing/Harrisburg Campus, 1975
B.S., Lebanon Valley College;
B.S.N., Millersville University;
M.S., Shippensburg University

Cheryl J. Wilson, Assistant Professor,
Speech/Harrisburg Campus, 2000
B.A., M.A., Marshall University

Martin J. Wise, Senior Professor,
Marketing/Harrisburg Campus, 1976
B.S., Indiana University of Pennsylvania;
M.B.A., Shippensburg University

Amy S. Withrow, Instructor, English/Virtual Campus, 2006
B.A., University of Findlay;
M.F.A., Bowling Green State University

Marlin E. Woodring, Professor,
Accounting/Harrisburg Campus, 1977
B.S., Slippery Rock University;
B.S., Shippensburg University;
C.P.A., Pennsylvania

Christopher Yarrish, Assistant Professor,
Mathematics/Harrisburg Campus, 2002
B.S., Millersville University;
M.S., Lehigh University

Marian E. Yoder, Assistant Professor,
Reading/Lancaster Campus, 2006
B.S.Ed., M.S.Ed., Millersville University;
M.Ed., Shippensburg University

Suzanne M. Youngblood, Associate Professor,
Criminal Justice/Lancaster Campus, 1993
B.S., M.S., Kent State University

Eric C. Yoxheimer, Associate Professor,
Computer Information Systems/Harrisburg Campus, 2003
B.A., Devry Institute of Technology;
M.S., Shippensburg University

Sandra Z. Zagar, Associate Professor,
Dental Hygiene/Harrisburg Campus, 1996
B.S.Ed., Temple University;
M.S., Central Michigan University

John D. Zales, Professor,
Business Information Systems/Harrisburg Campus, 1984
B.S., M.Ed., Shippensburg University

Rebecca M. Zawisky-Coleman, Instructor,
Counseling/Harrisburg Campus, 2004
B.A., Mansfield University;
M.S., Shippensburg University

Xiao-Qing Zhu, Associate Professor,
Humanities/Harrisburg Campus, 1992
B.A., Beijing Foreign Language Institute;
M.A., The Pennsylvania State University;
M.B.A., Lehigh University

Adjunct Faculty (as of 2008)

The college draws on the considerable pool of qualified persons in the community to supplement the teaching of its full-time faculty. The adjunct faculty listed below have been associated with the college for five or more years.

Steven Ahlf, Lecturer, Mechanical Engineering Technology
B.S.M.E., Rose Polytechnic Institute

Matthew F. Alfonso, Lecturer, Allied Health
B.S., Incarnate Word College;
J.D., St. Mary's University School of Law

Antoinette Aliitto-Heigl, Lecturer, French/ESL
B.A., Kent State University;
M.A., University of Illinois

Gloria C. Alvarez, Lecturer, Spanish
B.A., University of Maryland;
M.A., University of Texas at El Paso

Bruce I. Althouse, Lecturer, Mathematics
B.S., M.Ed., Millersville University

Penelope Amici, Lecturer, Computer Information Systems
A.A., Harrisburg Area Community College;
B.S. West Chester University

Amy E. Antonucci, Lecturer,
Computer Information Systems
B.S., M.S., The Pennsylvania State University;
M.S., University of Delaware

Linda Arnold, Lecturer, Computer Information Systems
B.A., Wilmington College;
M.E.E., Wilmington College

Mary Ellen Arrington, Lecturer, Psychology
B.S.N., University of Florida;
M.S., Barry University

Andrew Bacha, Lecturer, History
B.A., University of Idaho;
M.A.B.S., Mulintnomah Seminary;
M.A., Portland State University

Ronald E. Bailey, Lecturer, Mathematics
B.A., Gettysburg College;
M.S., College of William & Mary

Kendra Ballinger, Lecturer, Allied Health
B.S., R.R.T., Millersville University

Cheryl A. Bargo, Lecturer, Sonography

Raymond Barry, Lecturer, Criminal Justice
A.A., B.S., The Pennsylvania State University;
M.S., Shippensburg University

Deborah L. Bauer, Lecturer, Human Services
B.A., Duquesne University;
M.S., Temple University

Rhonda L. Bauriedl, Lecturer, Mathematics
B.S. Ed., Shippensburg University;
M.S. Ed., Wilkes University

Thomas Baxter, Lecturer, Computer Information Systems
B.A., Franklin and Marshall College;
M.B.A., The Pennsylvania State University

Ann S. Beaver, Lecturer, Early Childhood Education
B.A., Elizabethtown College;
M.A., Wayne State University

Dennis L. Benchoff, Lecturer, Mathematics
B.S., U.S. Military Academy;
M.S., Michigan State University

David W. Benfer, Lecturer, Electronics, Mathematics
B.S., E.E.T., The Pennsylvania State University

Juan Cruz Benito-Ruano, Lecturer, Spanish
Spanish Military Academy;
B.S.Ed., B.A., Shippensburg University;
M.E., University of Salamanca, Millersville University

Robert L. Best, Lecturer, Mathematics
B.A., Monmouth College;
M.S., Mankato State University

Earl Beyer, Lecturer, Biology
A.A., Bucks County Community College;
B.S., Temple University;
D.P.M., Ohio College of Podiatric Medicine;
J.D., Widener University School of Law

Edward Bianco, Lecturer, Accounting
B.S., University of Dayton;
C.P.A., Pennsylvania

Barry Bicksler, Lecturer, Mathematics
B.S., Shippensburg University;
M.A., University of Montana

Judy Birkett, Lecturer, Anthropology/Sociology
B.A., College of William & Mary;
M.A.T., University of Massachusetts

Barry Black, Lecturer, Mathematics
B.S., Millersville University;
M.Ed., Shippensburg University

David Bleil, Lecturer, Mathematics
B.A., Gannon College;
M.Ed., Millersville University

Personnel

Adjunct Faculty (continued)

John A. Boecker, Lecturer, Architecture
B.S., The Pennsylvania State University;
M.Arch., Yale University

David Bogdanovic, Lecturer, Criminal Justice
B.S., The Pennsylvania State University;
M.S., Shippensburg University

Nancy Boito, Lecturer, Computer Information Systems
B.S., University of Cincinnati;
M.Ed., The Pennsylvania State University

Theresa A. Boruta, Lecturer, Speech/Communication
B.S., Duquesne University;
M.A., University of Michigan

Paul F. Bonetti, Lecturer, Allied Health
B.S., M.S., University of Scranton

Susan M. Bonfanti, Lecturer, English
B.A., Lebanon Valley College;
M.A., Temple University

Michael W. Bottomley, Lecturer,
Computer Information Systems
B.S., Lebanon Valley College;
M.S., National University

Clifton Boyack, Lecturer, Accounting
B.S.E.E., Brigham Young University;
M.B.A., University of California at Berkeley

Daniel Boyer, Lecturer, Mathematics
B.S., M.Ed., Shippensburg University

Kenneth C. Boyer, Lecturer, Mathematics
B.S., Bloomsburg University;
M.A., Bucknell University

Kendra A. Bradecich, Lecturer, ESL
B.A., M.A., West Chester University

Margaret Brandt, Lecturer, Illustration
B.F.A., Kutztown University;
M.F.A., Syracuse University

Ellen C. Branscomb, Lecturer, Art
B.F.A., University of Wisconsin-Oshkosh;
M.F.A., Washington University

Dale J. Brickley, Lecturer, Psychology
B.A., Mansfield University;
M.S., Shippensburg University;
Ph.D., Pennsylvania State University

Matthew Brigaman, Lecturer,
Computer Information Systems
B.S., Indiana University of PA;
M.Ed., Shippensburg University

Jennifer M. Britten, Lecturer, Human Services
B.S., D'Youville College;
M.S., Temple University

Wesley Britton, Lecturer, English
B.A., University of Pennsylvania at California;
M.A., Ph.D., University of North Texas

Joel T. Brosius, Lecturer, Biology
B.S., Messiah College;
M.S., Shippensburg University

Lorena Brown, Lecturer, Spanish
B.S., The Pennsylvania State University;
M.S., Wilkes University

LaDonna Buffington, Lecturer, Early Childhood Education
B.S., Shippensburg University;
M.S., Bloomsburg University

Jacqueline A. Burch, Lecturer, Sociology
B.A., Millersville University;
M.S.W., Temple University

C. Allen Burgess, Lecturer, Sociology
B.A., M.A., M.S., Memphis State University;
M.S.S.W., University of Tennessee

Nancy G. Burke, Lecturer, Allied Health/Science
A.B., Immaculata College;
M.S., Shippensburg University;
Ed.D., Immaculata University

Richard Burkholder, Lecturer, Physical Education
B.S., East Stroudsburg University

Eli D. Buskirk, Lecturer, Biology
B.A., St Andrews Presbyterian College;
M.S., Ph.D., University of Michigan

Stephen J. Busterna, Lecturer, Art
B.A., Dickinson College;
M.A., The Pennsylvania State University;
J.D., Dickinson School of Law

Deborah Bybee, Lecturer, Psychology
B.A., M.A., Slippery Rock University

Victor P. Capece, Lecturer, Theatre
B.F.A., Ithaca College;
M.F.A., Yale University

Charlene A. Caple, Lecturer, Auctioneering

Robert B. Carey, Lecturer, Psychology
B.A., Millersville University;
M.S., Millersville University;
Ph.D., Philadelphia College of Osteopathic Medicine

Seamus Carmichael, Lecturer, Art
B.A., Ulster College of Art and Design;
Dipl. Ed., Northern Ireland Polytechnic;
Rome Scholar, British Arts Council

Donald B. Carr, Lecturer, Chemistry
B.S., M.S., Shippensburg University

Kurt W. Carr, Lecturer, Anthropology
B.A., Franklin and Marshall College;
M.A., Ph.D., Catholic University of America

Richard Carty, Lecturer, History
B.S., M.Ed., Shippensburg University

Patricia A. Cavanaugh, Lecturer, English
B.S., Millersville University;
M.A., Millersville University

William Cave, Lecturer, Sociology/Gerontology
B.A., Elizabethtown College;
M.Div., Bethany Theological Seminary

Sandra Chapman, Lecturer, Nursing
B.S.N., Indiana University of Pennsylvania

Ryan S. Chilcote, Lecturer, Music

Benjamin Y. Christ, Lecturer, Government and Politics
B.A., American University;
M.A., The Pennsylvania State University

Allison J. Christine, Lecturer, Psychology
B.S., York College of Pennsylvania;
M.S., Loyola College;
M.Ed., Pennsylvania State University

April Coder, Lecturer, Nursing
B.S.N., The Pennsylvania State University

Holly Cookerly, Lecturer, Health
B.S., M.Ed., The Pennsylvania State University

Susan Cooper, Lecturer, Mathematics
B.S., Boston University;
M.A., Villanova University

Richard J. Cordaro, Lecturer,
Management, Marketing and Business
B.S., Bloomsburg University;
M.B.A., University of Maryland

Vincent Corrado, Lecturer, Mathematics
B.S.Ed., Norwich University

Deborah L. Crawford, Lecturer, Mathematics
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University;
M. Ed., Millersville University

Barbara Crellin, Lecturer, English
M.A., West Chester University

Kelli Cross, Lecturer, Computer Information Systems
B.S., M. Ed., Shippensburg University

Annette Damato-Beamesderfer, Lecturer,
English/Literature
B.A., The Pennsylvania State University;
M.A., Kutztown University

Steven L. Daniels, Lecturer,
Building Construction Technology

Edward P. Darragh, Lecturer, Accounting
B.S., M.S., Bentley College

Anniken Davenport, Esq., Lecturer,
Paralegal Studies and Business Law
B.S., The Pennsylvania State University;
J.D., Dickinson School of Law

Cynthia J. Davis, Lecturer, Mathematics
B.S., Syracuse University;
M.A.T., University of Chicago;
Ed.D., University of Houston

Linda Rooney Davis, Lecturer, Nursing
B.A., The Pennsylvania State University

Barbara A. DeCesare, Lecturer, English
B.A., University of Baltimore;
M.A., Goddard College

Eric J. Deitch, Lecturer, Philosophy
B.A., Dickinson College;
M.A., Villanova University;
Ph.D., The Pennsylvania State University

Robert DeLong, Lecturer, Mathematics
B.S., M.Ed., Millersville University

Lawrence Deren, Lecturer, Mathematics
B.S., Lehigh University;
M.A., University of Oklahoma

James Dibert, Lecturer, History
B.S., Millersville University;
M.A., Lehigh University

James A. Diehm, Lecturer, Education
B.A., Albright College;
M.A., Lehigh University;
Administrative Certification, Temple University

Carol Dittoe, Lecturer, English
M.S., Millersville University

Robert Dixon, *Lecturer, Meteorology*
A.S., Belknap College;
B.S., Lyndon State College;
M.S., South Dakota School of Mines

John Doebling, *Lecturer, Computer Information Systems*
A.A., Harrisburg Area Community College;
B.A., Wilson College

Joseph Donato, *Lecturer, Speech Communications*
B.S., M.S., University of Kentucky

Mary E. Donecker, *Lecturer, English*
B.S., Millersville University;
M.C.P., The Pennsylvania State University

Christopher M. Doran, *Lecturer, Physical Education*
B.S., The Pennsylvania State University

Stephen Dorko, *Lecturer, Physical Education*
B.S., Indiana University of Pennsylvania;
M.S., Shippensburg University

Bonnie J. Dorsey, *Lecturer, English*
B.S., Millersville University;
M.A., Millersville University

John Doudrick, *Lecturer, Physical Education*

James Eash, *Lecturer, Social Science*
B.A., The Pennsylvania State University;
M.S.W., Temple University

Melinda Eash, *Lecturer, Psychology*
B.A., Susquehanna University;
M.S., Millersville University

Lonnie L. Ebersole, *Lecturer, Microbiology*
B.S., Indiana University of Pennsylvania;
M.S., Thomas Jefferson University

Timothy Ebersole, *Lecturer, Criminal Justice*
M.S., West Chester University;
M.B.A., Lebanon Valley College

Diane M. Edmond, *Lecturer, Psychology*
B.A., M.S., Millersville University

Fran Einstein, *Lecturer, Physical Education*
A.E.A. Certification, Red Cross W.S.I Certification

Daniel Eisenhart, *Lecturer, Photography*
A.A., Harrisburg Area Community College;
B.S., Rochester Institute of Technology

Dana L. Eisenstein, *Lecturer, Music*
B.A., Oberlin College Conservatory;
M.A., The San Francisco Conservatory of Music

Dale R. Elkiss, *Lecturer, Mathematics*
B.S., University of Miami;
M.S., The Johns Hopkins University

Thomas R. Embich, *Lecturer, Biology*
B.S., Lebanon Valley College;
M.S., University of Maine

Philip Esbenschade, *Lecturer, Biology*
B.S., The Pennsylvania State University;
M.S., Ph.D., North Carolina University

Christopher C. Esgar, *Lecturer, Management*
B.A., Gettysburg College;
M.B.A., Mount Saint Mary's University;
Ph.D., Kennedy Western University

Michael C. Essig, *Lecturer, English*
B.A., The Pennsylvania State University;
M.A., Kent State University

Thomas Faley, *Lecturer, Psychology*
B.S., U.S. Military Academy;
M.S., University of Miami

Candice Falger, *Lecturer, Biology*
B.A., Millersville University;
M.B.A., Lebanon Valley College

David L. Farmer, *Lecturer, English*
B.S., Elizabethtown College;
M.Ed., The Pennsylvania State University

Charles C. Fennell, Jr., *Lecturer, History and Geography*
B.A., Frostburg State College;
M.A., Clarion State College;
Ph.D., West Virginia University

Cindy Fenton, *Lecturer, Auctioneering*

Wendy M. Fenwick, *Lecturer, Mathematics*
B.S., Millersville University;
M.S., University of Vermont

James C. Ferrari, *Lecturer, Management and Marketing*
B.S., M.B.A., The Pennsylvania State University

Sean Fields, *Lecturer, Business Law*
B.A., Northern Kentucky University;
J.D., Dickinson School of Law,
The Pennsylvania State University

Marie C. Firestone, *Lecturer, Education*
B.A., M.A., Millersville University

Robert Firkal, *Lecturer, Mathematics*
A.A., Harrisburg Area Community College;
B.A., The Pennsylvania State University;
M.B.A., Lebanon Valley College

Joshua Fischel, *Lecturer, Philosophy*
B.A., The Pennsylvania State University;
M.A., The American University

Brad S. Fischer, *Lecturer,
Mathematics, Government & Politics*
B.S., Elizabethtown College;
M.Ed., Millersville University

Patricia A. Fischer, *Lecturer, English*
B.A., M.A., The Pennsylvania State University

Samuel Fisher, *Lecturer, Mathematics*
B.S., Shippensburg University;
M.Ed., Temple University

James Flannery, *Lecturer, Computer Information Systems*
B.S., Bloomsburg University;
Microsoft Certified Professional (MCP), A+ Certified

Chad E. Forry, *Lecturer, Physical Education*
B.S., Lock Haven University;
M.S., Villanova University

Cecelia Fox, *Lecturer, Information Science*
B.A., The Pennsylvania State University;
M.S.L.S., Clarion University

Patricia Frese, *Lecturer*
B.F.A., Millersville University

Jay Friedberg, *Lecturer, Management*
B.S., University of Pittsburgh;
M.B.A., Duquesne University

Ronald K. Fruth, *Lecturer, Accounting*
B.S. Geneva College; CPA

Margaret Fultz, *Lecturer, Nursing*
Diploma, St. Joseph Hospital School of Nursing;
B.S.N., Millersville University;
M.S., University of Delaware

Steven Funck, *Lecturer, Chemistry, Physical Science*
B.S., Grove City College;
M.S., University of Kansas;
M.A., United States Navy War College

Jeff D. Funston, *Lecturer, English*

Robert Galaskas, *Lecturer, Architecture*
B.I.D., Pratt Institute;
A.I.A.; N.C.A.R.B.

Richard Galley, *Lecturer, Computer Information Systems*
B.S., Elizabethtown College

Frederick A. Gantz, *Lecturer, Sociology*
A.S., B.S., York College;
M.A., University of Baltimore;
M.S., Shippensburg University

Turzah Gardner, *Lecturer, English*
B.S., Clarion University;
M.Ed., Shippensburg University

Gary Gates, *Lecturer, Comparative Religion/Humanities*
B.A., Messiah College;
M.A., The Pennsylvania State University

Francis H. Geiger, *Lecturer, Mathematics*
B.S., Millersville University;
M.Ed., Millersville University

Linda F. Gerencser, *Lecturer, Business*
B.A., Boston College;
M.A., S.U.N.Y. Albany;
J.D., Villanova University

David Giefer, *Lecturer, Chemistry*
B.S., M.S., Kansas State University;
M.B.A., Ph.D., The Pennsylvania State University

Tamara L. Gillis, *Lecturer, Speech*

Amy Gimbel, *Lecturer, Spanish*
B.A., Susquehanna University;
M.A., American University

Cynthia Glass, *Lecturer, Criminal Justice*
B.A., The Pennsylvania State University;
M.S., Shippensburg University

Demetrius Glass, *Lecturer, Information Systems*
B.A., Newberry College;
M.A., George Washington University, Washington, D.C.

Jeffrey Glass, *Lecturer, Social Science*
B.A., The Pennsylvania State University;
M.A., Temple University

Pamela Glindeman, *Lecturer, English*
B.A., Providence College;
M.A., Bridgewater State College

Frederick Gosart, *Lecturer, Sociology*
B.A., The Pennsylvania State University;
M.S., University of Scranton

Ray Granger, *Lecturer, Physical Education*
B.S., Albright College

Russell Green, *Lecturer, Computer Science*
B.S., Louisiana State University, Lebanon Valley College;
M.E., The Pennsylvania State University

Beth A. Greenberg, *Lecturer, Government and Politics*
A.A., B.A., College of St. Benedict;
M.P.A., M.A., University of Texas

Gary W. Grumbine, *Lecturer, Automotive*

Byron Gunsallus, *Lecturer, Mathematics*
B.S., Shippensburg University;
M.Ed., Pennsylvania State University

Personnel

Adjunct Faculty (continued)

Michael P. Gurgul, Lecturer, Mathematics
B.S., Eastern Michigan University;
M.S., University of Scranton

William Gustafson, Lecturer, History
B.A., The Pennsylvania State University;
M.A., University of Pittsburgh

Joyce Gustavson, Lecturer, English

Deborah J. Gutshall, Clinical Instructor, Nursing
A.D., Pennsylvania Junior College of Medical Arts;
A.D.N., Harrisburg Area Community College;
B.S.N., Millersville University

Carolyn S. Hack, Lecturer, Nursing
B.S.N., York College of Pennsylvania

Harriet E. Hacker, Lecturer, Art
B.F.A., Tyler School of Art;
M.F.A., The Pennsylvania State University

Larry Hagen, Lecturer, Economics
B.S., Lock Haven University;
M.A., George Mason University

Kum S. Ham, Lecturer, Sociology
M.A., Graduate Faculty New School for Social Research;
Ph.D., The Pennsylvania State University

David Hamacher, Lecturer, History
B.A., The Pennsylvania State University;
M.A., Indiana University of Pennsylvania

Lori Harkaway, Lecturer, Nursing
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University

Troy D. Harman, Lecturer, History
B.A., Lynchburg College;
M.A., Shippensburg University

Jessica J. Harnly, Lecturer, Mathematics
B.S.E., Mansfield University;
M.A., Millersville University

A Dianne Harper, Lecturer, English

David F. Harris, Lecturer, Psychology
B.S., York College of Pennsylvania;
M.S., Millersville University

Matthew B. Harris, Lecturer, Art, Humanities
B.A., M.A., The Pennsylvania State University

Lisa Harvey, Lecturer, Computer Information Systems
B.S., Indiana University of Pennsylvania;
M. Ed., Wilkes University

Kristofer B. Harzinski, Lecturer, Art
B.F.A., University of Nebraska;
M.F.A., The Pennsylvania State University

Dawn M. Hauck, Clinical Instructor, Nursing
B.S., Millersville University

Terry Havel, Lecturer, History
B.A., M.Ed., Wayne State University

Paul J. Hawthorn, Lecturer, Physical Education
A.A., A.A., A.A., Harrisburg Area Community College

Richard Hebel, Lecturer, Physical Plant Mechanic
A.S.E.E.T., Ryder Technical Institute;
B.S.E.E., Elizabethtown College

Raymond R. Hebert, Lecturer, Physical Education
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University

Lisa Heitzelman, Lecturer, Education
A.A., Harrisburg Area Community College;
B.S., Elizabethtown College;
M.Ed., Temple University

Raymond Hemphill, Lecturer, Economics
B.A., M.B.A. Lehigh University

Nathaniel D. Hensch, Lecturer, Management
A.A., Harrisburg Area Community College;
B.S., Lebanon Valley College;
M.B.A., The Pennsylvania State University

Tammy Hendrix, Lecturer, Sociology
B.S., The Pennsylvania State University;
M.S.W., San Francisco State University

Marci Henzi, Lecturer, Mathematics
B.S., University of Arkansas;
M. Ed., Shippensburg University

Richard P. Hermann, Lecturer, Education
B.A., Ursinus College;
M.Ed., Ed.D., Temple University

Edward Hess, Lecturer, Philosophy
B.A., Wheaton College;
M.A., Northern Illinois University;
M.S., Millersville University

Kathryn K. Hildebrand, Lecturer,
Computer Information Systems
B.S., LaSalle University;
M.S., Drexel University

Carl Hilton, Lecturer, Management/Marketing/English
B.S., University of Nebraska;
M.A.M., University of Phoenix

Edward Hine, Lecturer,
Mechanical Engineering Technology
B.S., Millersville University;
M.Ed., Shippensburg University

Alice A. Hinkle, Lecturer, Allied Health
RN, St. Joseph's Hospital School of Nursing;
B.S., St. Joseph's College

Beth Hockenbrock, Lecturer, Nursing
B.S.N., M.P.A., The Pennsylvania State University

Donald Hoepfer, Lecturer, Philosophy
B.A., Lebanon Valley College;
M.A., The Pennsylvania State University

Kelley J. Houtz, Lecturer, Mathematics
B.S., Shippensburg University

Sue Hoxworth, Lecturer, Education
B.S., Indiana University of Pennsylvania;
M.A., Millersville University

Jeff Hubert, Lecturer
B.A., Indiana University of Pennsylvania;
M.F.A., University of Delaware

Sughra A. Husain, Lecturer, Philosophy
B.A., Isabella Thoburn College, Lucknow University;
B.Ed., M.Ed., M.Phil., Ph.D., Aligarh Muslim University

Tonya A. Husic, Lecturer
B.A., Marymount College;
M.A., The Pennsylvania State University;
M.A., Shippensburg University

Adam Jenkins, Lecturer, Speech
B.A., York College of Pennsylvania;
M.A., Ball State University

Alfred Jensen, Lecturer, Mathematics
B.S., Shippensburg University;
Master's Equivalency, State of Pennsylvania

George Jensen, Lecturer, Mathematics
B.S., Millersville University;
M. Div., Winebrenner Seminary

Cecil E. Johnson, Lecturer, Vocational Instruction,
HVAC, Refrigeration and Appliance Repair;
M.A., The Pennsylvania State University

Judith C. Johnson, Lecturer, Art
A.A., Harrisburg Area Community College;
B.Hum., M.Hum., The Pennsylvania State University

Kathleen M. Johnston, Lecturer, Accounting
B.A., Lycoming College;
M.A., Lebanon Valley College;
C.P.A., Commonwealth of Pennsylvania

Belgica A. Jones, Lecturer, Spanish

Joseph J. Jucewicz, Lecturer, Government and Politics
B.A., Connecticut College;
Ph.D., The Johns Hopkins University

Jared P. Julius, Lecturer, Philosophy
B.A., Indiana University of Pennsylvania;
M.A., Ph.D., Southern Illinois University at Carbondale

Janise Kahl, Lecturer, Mathematics
B.S., Kutztown University

June Karschner, Lecturer, English

Judith Kartoz, Lecturer, Computer Information Systems
B.S., Ohio State University;
Master's Equivalency, Shippensburg University

Richard Katz, Lecturer, Paralegal
B.S., J.D., University of Florida

Mary Jo M. Keiter, Lecturer, English
B.A., St. John Fisher College;
M.A., Shippensburg University

Shirley J. Keith-Knox, Lecturer, Education
B.S., Millersville University;
M.S.W., Temple University

Robert Keller, Lecturer, English
B.A., University of Miami, Florida;
M.Ed., Millersville University

Yelena Khanzhina, Lecturer, English
M.S., University of Perm, Russia;
Ph.D., University of St. Petersburg, Russia

Leroy W. Killian, Lecturer, Metalworking

Jay Kirssin, Lecturer, Marketing
B.A., Lafayette College

Vasanthi Kittappa, Lecturer, Biology
B.S., Madras University, India;
M.S., Annamalai University, India

Thomas W. Kittinger, Lecturer, Music
B.A., Anderson University;
M.A., Towson University

Ann H. Kline, Lecturer, Business Law, Paralegal Studies
B.A., Duquesne University;
J.D., Dickinson School of Law

Samuel A. Kline, Lecturer, Paralegal Studies, Finance
B.S., Lehigh University;
J.D., Duquesne Law School

Robert D. Klouk, Lecturer, Mathematics
B.S., M.S.Ed., Bucknell University

Carole Knisely, Lecturer, Music, Music Merchandising
B.M., West Virginia University;
M.A., Vermont College of Norwich University

William Knisley, Lecturer, Education
B.S., Dickinson College;
M.S., Ph.D., The Pennsylvania State University

Paul Knouse, Lecturer, Automotive Technology

Connie Kondravy, Lecturer, English
B.A., Cedar Crest College;
M.A., University of Pennsylvania;
Ph.D., Lehigh University

Donald Konkle, Lecturer, Fire Science
A.A., Williamsport Area Community College;
B.S., The Pennsylvania State University

Marianne Kopp, Lecturer, Early Childhood Education
B.S., Kutztown University;
M.S., Temple University

Deborah L. Kramer, Lecturer, Physical Education
A.A., Lehigh County Community College

Lorie R. Kramer, Lecturer, Psychology
B.S., University of Pittsburgh;
M.S., Shippensburg University

Michael F. Krimmel, Lecturer, Paralegal
B.A., American University;
J.D., Widener University

Larry S. Landis, Lecturer, Music
B.A., Goshen College;
M.A., New York University;
Ph.D., University of Oregon

Gerald Laubach, Lecturer, Physical Science
B.S., Bloomsburg University;
M.Ed., The Pennsylvania State University

Yolanda Lauria, Lecturer, English/Speech
B.A., Millersville University;
M.A., The Pennsylvania State University

David W. Layman, Lecturer, Philosophy
B.A., University of Chicago;
Ph.D., Temple University

Pamela Leahey, Lecturer, English as a Second Language
B.S., Millersville University

Amy K. Leedy, Lecturer, English
B.A., University of Delaware;
M.A., The Pennsylvania State University

Keith Li, Lecturer, Technical Writing, Physical Education
B.S., M.E., Cornell University;
M.A., The Pennsylvania State University

Daniel M. Lieberman, Lecturer,
Business Law, Criminal Justice, Paralegal
B.S., The Pennsylvania State University;
J.D., Widener University School of Law

Kathryn S. Light, Lecturer, Philosophy
B.S., Millersville University;
M.A., Lancaster Theological Seminary

Janet L. Lincoln, Lecturer, German

Jay Walter Lilley, Lecturer, English
B.S.Ed., M.A., Millersville University

Linda Lindoerfer, Lecturer, Mathematics
B.S., California University of Pennsylvania;
M.Ed., Shippensburg University

Laura E. Logan, Lecturer, Mathematics
A.A., Edison Community College;
B.A., University of South Florida;
M.Ed., Millersville University

Jared C. Lobdell, Lecturer, Economics, Psychology,
Humanities, English, Social Science, Marketing
B.A., Yale University;
M.B.A., M.S., University of Wisconsin;
Ph.D., Carnegie Mellon University

Lac Longson, Lecturer, Mathematics
B.A., Lebanon Valley College;
MBA, Kutztown University

Bruce Lovett, Lecturer, Marketing
B.A., University of Rhode Island;
M.A., Saint Francis College of Pennsylvania

Gregg Lucas, Lecturer, Computer Information Systems
A.S., Pennsylvania College of Technology;
B.S., Mansfield University;
M.Ed., Shippensburg University

Dale A. Ludwig, Jr., Lecturer, Biology
B.A., Lycoming College;
Master of Forestry, Duke University

Barry L. Lutz, Lecturer, Management
B.B.A., The Pennsylvania State University;
M.B.A., Kutztown University

J. Robert Lutz, Lecturer, Mathematics
B.S., Millersville University;
M.A.T., Brown University

Deborah Everitt Lynch, Lecturer, English
B.A., Shippensburg University;
M.A., The Pennsylvania State University

Gregory R. Lyons, Lecturer Paralegal
B.A., Pennsylvania State University;
M.B.A., Florida State University;
J.D., Duquesne University

Robert Malick, Lecturer, History
B.A., Lycoming College,
M.A., Shippensburg University

Kathy Marley, Lecturer, Humanities

Tammy Marcin, Lecturer, Respiratory Care
A.S., Harrisburg Area Community College;
B.A., M.A., The Pennsylvania State University

Edward Marsico, Lecturer, Criminal Justice
B.A., University of Notre Dame;
J.D., Dickinson School of Law

Carol L. Martin, Lecturer, Computer Information Systems
B.S., Millersville University;
M.Ed., The Pennsylvania State University

Karen Martin, Lecturer, English
B.S. Ed., Millersville University;
M.A., University of South Carolina

Spencer R. Martin, Lecturer, Accounting
B.S., M.B.A., The Pennsylvania State University

Francis Matthes, Lecturer, Paralegal Studies
B.A., J.D., Widener University School of Law

Joanne E. Matusko, Lecturer, Phlebotomy
B.S., Beaver College;
M.A., Lebanon Valley College;
J.D., Widener University

Leisa E. McAlicher, Clinical Instructor, Nursing
B.S., Messiah College;
M.S., Widener University

Mary Kate McGowan, Lecturer,
Computer Information Systems
B.S., Misericordia College;
M.Ed., Shippensburg University

Dennis A. McLaughlin, Lecturer, Psychology
B.A., Waynesburg College;
M.S., Shippensburg;
Ph.D., Ball State

Barbara McNulty, Lecturer, Art

Suzanne V. Mead, Lecturer, Art

John Melesky, Lecturer, English
B.A., Northeastern University;
M.A., Bridgewater State College;
M.S., Ed.D., The University of Pennsylvania

Charlotte L. Meloney, Lecturer,
Cardiovascular Technology
A.S., Widener University

F. Marie Melusky, Lecturer, Computer and Music
B.M., M.M., Duquesne University

Nancie Menapace, Lecturer
M.A., University of Maryland, College Park

Becky L. Meyer, Lecturer, Physical Education

Harry P. Meyers, D.D.S., F.I.C.D., Lecturer, Dental Hygiene
B.A., Rutgers College;
D.D.S., Oral and Maxillofacial Surgery Residency,
New York, University College of Dentistry

Barbara Miller, Lecturer, Human Services, Gerontology
B.S., The Pennsylvania State University;
M.S.W., Temple University

Carol Miller, Lecturer, Criminal Justice
B.S., Radford University;
M.A.L.S., Georgetown University

Dale H. Miller, Lecturer, Computer Information Systems
B.A., Elizabethtown College;
M.Ed., Shippensburg University

Keith Miller, Lecturer, Mathematics,
Physical Science, Astronomy
B.S., Villanova University;
M.S., West Virginia University

Sally Miller, Lecturer, English as a Second Language
B.S., Lock Haven University;
M.S., The Pennsylvania State University

Julie Moffitt, Lecturer
B.A. Mus., M.A., Mus., Combs College of Music

Larry Moore, Lecturer, Mathematics
B.A., Messiah College

Holly Mora, Lecturer, Physical Education

Daniel Moseler, Lecturer, Administrative Office Systems/
Computer Information Systems
B.S., The American University;
MSBA, MSCIS, Boston University

Sheila M. Mulligan, Lecturer, English
B.S., M.A., Arizona State University

Lawrence Murray, Lecturer, Criminal Justice
B.A., Mount St. Mary's College;
M.A., The Pennsylvania State University;
M.S., Villanova University

Philip Muth, Lecturer, Education
B.S., Millersville University;
M.Ed., Shippensburg University

Personnel

Adjunct Faculty (continued)

James A. Myers, Lecturer, Welding
B.S., Cameron State College;
M.S., The Pennsylvania State University

Melissa A. Nagengast, Lecturer, Education
B.S., The Pennsylvania State University

Harold Nanovic, Lecturer, Geography
B.S., Shippensburg University;
M.A., Kent State University

Harry E. Neuhart, Lecturer, Accounting
B.S., The Pennsylvania State University

Felicia Newbury, Lecturer, Physical Education
B.S., Indiana University of Pennsylvania

Melinda L. Newmin, Lecturer, Accounting
B.S.B.A., Shippensburg University;
MBA, Lebanon Valley College

Carol Niblette, Lecturer, Education
B.S., Philadelphia College of Bible;
M.A., Southwestern Baptist Theology;
M.A., Millersville University

Gerald E. Nissley, Lecturer, Psychology
B.A., Messiah College;
M.S., Millersville University

Carol Noblit, CPA, Lecturer, Accounting
A.A., Harrisburg Area Community College;
B.B.A., M.B.A., The Pennsylvania State University

Lauri L. Norbeck, Lecturer, Biology
B.S., Millersville University;
M.S., The Pennsylvania State University

Robin L. O'Bryan, Lecturer, Art History
B.A., University of Maryland;
M.A., San Diego State University;
Ph.D., University of Virginia

Ronald A. O'Connor, Lecturer, Mathematics and Education
B.S., West Chester University;
M.E., Western Maryland College

Michele Orner, Lecturer, English
B.A., California University of Pennsylvania;
M.Ed., Shippensburg University

Tracie L. Osman, Lecturer, Physical Education

Christopher Owens, Lecturer, Mathematics
B.A., B.S., Marquette University;
M.S., Naval Postgraduate School

S. Jane Owens, Lecturer, Education
B.S., Mansfield University;
M.S., Nova Southeastern University

Louis Paoletti, Lecturer, Management and Marketing
B.S., The Pennsylvania State University;
M.B.A., Temple University

Barbara A. Park, Lecturer, English
B.S., Indiana University of Pennsylvania;
M.Ed., Temple University

Yvonne M. Parsons, Lecturer, Sociology
B.S., SUNY Oneonta;
M.S.W., Temple University

Heather U. Pasewicz, Lecturer, Mathematics
B.S., M.S., Ph.D., Carnegie Mellon University

Sandra Patsolic, Lecturer, English/Reading
B.S., California University of Pennsylvania;
M.Ed., Shippensburg University

Thomas E. Peck, Lecturer, Psychology
B.S., Millersville University;
M.S., Shippensburg University;
Ed.D., Lehigh University

Michael Peiffer, Lecturer, Psychology
B.S., Kutztown University;
M.S., Shippensburg University

Eleanor B. Pella, Lecturer, Nutrition

Barbara Perry, Lecturer, Mathematics
B.S., Lock Haven University

Frank Perry, Lecturer, Mathematics
B.S., Rensselaer Polytechnic Institute;
M. Ed., The Pennsylvania State University

Kelly A. Peters, Lecturer, English
B.S., University of Maryland, Okinawa, Japan;
M.A., Millersville University

Ronald Petyak, Lecturer, Criminal Justice
B.S., The Pennsylvania State University;
M.S., Shippensburg University

Jean Phiel, Lecturer, Speech
B.S., M.A., Millersville University

Barton K. Philipps, Lecturer, Biology
B.S., M.Ed., Shippensburg University;
Ph.D., University of Iowa

Stacey Pietras, Lecturer, Management
B.S., Clemson University;
M.B.A., The Pennsylvania State University

Edward D. Pitingolo, Lecturer, Accounting
B.B.A., The Pennsylvania State University;
M.B.A., Kutztown University

Gina Plamann, Lecturer, Biology
B.S., University of Maryland;
D.V.M., Auburn University

Steven L. Poffenberger, Lecturer, Paramedic
B.S., The Pennsylvania State University

Gretchen J. Plotkin, Lecturer, Nursing
A.S., Northeastern University;
B.S., M.S., Syracuse University;
B.S., Regents College;
M.A., Michigan State University

Thomas E. Potter, Lecturer, Architecture
B.A., The Pratt Institute

Champa Prasad, Lecturer, Computer Information Systems
A.A.S., Clarion University;
B.S., M.Sc., Bangalore University

Kathleen Pratt, Lecturer, Marketing
B.A., University of Dayton;
M.B.A., Mount St. Mary's College

Steven Prokopchak, Lecturer,
Computer Information Systems
B.A., Mercyhurst University;
M.Sc., Shippensburg University

Christine M. Purcell, Lecturer, Music
B.M., Berklee College of Music;
M.A., Duquesne University

James Quigley, CBO, Lecturer,
Building Codes Enforcement
B.A., Villanova University

Patricia Quinn, Lecturer, Mathematics
B.S., California University;
M.A.T., Indiana University

Patrick Quinn, Lecturer, Business
B.A., J.D., Dickinson School of Law

Vincent J. Quinn, Lecturer, Criminal Justice
B.A., St. Joseph's College;
J.D., University of Pennsylvania

Clara M. Rader, Lecturer, English
B.A., Bryn Mawr College;
M.A., Yale University

Sandra L. Ramsey, Lecturer, Biology
B.S., Colorado State University;
M.S., Shippensburg University

Erik D. Randolph, Lecturer, Economics
B.A., B.S., The Pennsylvania State University;
M.S., Rensselaer Polytechnic Inst.

Kerry E. Rapp, Lecturer, Mathematics
B.A., Grace College;
Certificate, Millersville University

Adeleh Redjaee, Lecturer, Mathematics
Certificate, Alvernia College;
B.S., Northeastern University

Deborah A. Reeves, Lecturer,
Computer Information Systems
B.S., Robert Morris College;
M.S., The Pennsylvania State University

Larry L. Reigle, Lecturer, Chemistry
B.S., Juniata College;
M.S., West Virginia University

Steven Remillard, D.C., Lecturer,
Psychology, Physical Education
B.S., St. Francis College;
M.A., Morehead State University;
D.C., Life Chiropractic University

Randal Rhoades, Lecturer, Music
A.A., Mt. Aloysius Jr. College;
B.S., Indiana University of Pennsylvania

Joseph C. Rich, Lecturer,
Automotive Technology
ASE Certified

James Riddle, Lecturer, History
B.S., Millersville University;
M.A., Wesleyan University

Joy Riley, Lecturer, Physical Education
B.S., Shippensburg University

Sally Roberts, Lecturer, Mathematics
B.S., M.Ed., The Pennsylvania State University

John D. Rochat, Lecturer, Criminal Justice
B.S., Randolph Macon College;
M.S., Virginia Commonwealth University

D. Stephen Rockwood, Lecturer, Government and Politics
B.A., Ohio Wesleyan University;
M.A., Miami University

Daniel D. Rocuskie, Lecturer,
Civil Engineering Technology
A.A., Harrisburg Area Community College;
B.S., Millersville University

Ilene R. Rosenberg, Lecturer, Humanities
B.A., SUNY at Binghamton;
M.A., The Pennsylvania State University

Angela Ruediger, Lecturer, Theatre/Music
B.A., The Pennsylvania State University;
M.A., Goddard College

Anne E. Russo, Lecturer, Mathematics/Physics
B.S., Shippensburg University;
M.S., University of Pennsylvania;
Ed.D., Indiana University of Pennsylvania

Patricia Schindel, Lecturer, Education
B.S., University of Maryland;
M.Ed., Shippensburg University

William R. Schleig, Lecturer, Mathematics
B.S., M.Ed., Shippensburg University

Edward Schlessler, Lecturer, Sociology
B.S.W., Brigham Young University;
M.S.W., Marywood College

Maretta K. Schmidt, Lecturer, English
B.S., M.Ed., Shippensburg University;
Administrative Certification, Temple University

Marcia Schreffler, Lecturer,
Education, Psychology
B.A., Muhlenberg College;
M.S., Temple University

Lillian Schreier, Lecturer, Accounting and Finance
B.S., Shippensburg University;
M.B.A., Lebanon Valley College

Tracy L. Schrey, Lecturer, Paralegal
A.A., Harrisburg Area Community College;
B.S., Wilson College;
J.D., Widener University

Deborah Schrock, Lecturer,
Computer Information Systems
B.S., M.Ed., Shippensburg University

Gary R. Schwartz, Lecturer, Business Law
B.S., Indiana University of Pennsylvania;
M.Ed., Syracuse University

Philip M. Sciotti, Lecturer, Mathematics
B.A., Shippensburg University;
M.S., Villanova University

Geoffrey Scott, Lecturer, Photography
B.S., Kutztown University;
M.A., The Rhode Island School of Design

Gerald D. Seiler, Lecturer, Chemistry
B.S., M.Ed., Shippensburg University

Steven Seitchik, Lecturer, Psychology
B.S., Florida State University;
M.A., Pepperdine University

Christine V. Shaffer, Lecturer, Management and Finance
B.A., Westminster College;
M.B.A., Robert Morris College

Robert Shannon, Lecturer, Mathematics
B.S., Indiana University of Pennsylvania

Connie Shatto, Lecturer, Mathematics
B.S., M.A.T., The Pennsylvania State University

David Shatto, Lecturer, Physical Education
B.S.B.A., Bloomsburg University

Velorous O. Shearer, Lecturer, Gerontology
B.A., Goshen College;
M.A., Marywood College

Nancy L. Sheerer, Lecturer, Physical Education
B.S., Lock Haven University;
M.S., Temple University;
M.Ed., The Pennsylvania State University

Gerald Shekleski, J.D., Lecturer, Paralegal Studies
B.A., Princeton University;
J.D., Ohio Northern University

Nancy A. Shertzer, Lecturer, Mathematics
B.A., Grove City College;
M.Ed., The Pennsylvania State University

Judy A. Sides, Lecturer, ESL
B.S., Messiah College;
M.Ed., Temple University

Wayne Silcox, Lecturer, Criminal Justice
B.S., Elizabethtown College;
M.S., University of Baltimore

David Simpson, Lecturer, Psychology
B.S., Mount St. Mary's College;
M.S., Shippensburg University

Kristina M. Sims, Lecturer, Psychology
B.A., Indiana University of Pennsylvania;
M.S., Millersville University

Bruce Six, Lecturer, Management and Finance
B.S., Shippensburg University;
M.B.A., Kutztown University

Anna Skamangas, Lecturer, Early Childhood Education
B.A., B.S., The Pennsylvania State University;
M.S., Lebanon Valley College

Bradley Smith, Lecturer, History
A.A., Harrisburg Area Community College;
B.A., Lock Haven University;
M.A., Shippensburg University

Kathleen K. Snavelly, Lecturer, Entrepreneur
B.A., Houghton College;
M.Ed., The Pennsylvania State University

Sharon L. Sontheimer, Lecturer, Biology
B.A., Kalamazoo College

David Spotts, Lecturer, Criminal Justice
B.A., Messiah College;
J.D., Widener University School of Law

DeAnna Spurlock, Lecturer, English
B.A., M.A., University of Wisconsin at Madison

Elizabeth A. Stager, Lecturer, Marketing
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University

Beverly Stanton, Lecturer, Sociology
B.S., College Misericordia;
M.Ed., Loyola College;
M.P.A., Nova University

Joseph R. Steenson, Lecturer, Physical Education
B.S., University of Delaware

Carter Stephan, D.C., Lecturer, Anatomy and Physiology
B.S., Millersville University;
D.C., Palmer College of Chiropractic

Carl D. Steinhart, Lecturer, Criminal Justice
A.A., Harrisburg Area Community College;
B.S., M.Ed., The Pennsylvania State University

Richard C. Stick, Lecturer, Mathematics
B.S., M.Ed., Millersville University

Todd M. Stine, Lecturer, Mathematics
B.S.Ed., M.S., Shippensburg University

Jo Stokes, Lecturer, Mathematics
B.S., Millersville University;
M.S., Temple University

Boyd P. Strain, Lecturer,
Mechanical Engineering Technology
B.S., Howard University;
B.S., Northwestern University

William Stremmel, Lecturer, Automotive Technology

Russell Sturmick, Lecturer, Chemistry
B.S., Slippery Rock University;
M.S., The Pennsylvania State University

David Suereth, Lecturer, Mathematics
B.S., Shippensburg University

Amy Sullivan, Lecturer, Mathematics
B.S., The Pennsylvania State University;
M.Ed., Temple University

Leonard Supenski, Lecturer, Criminal Justice
A.A., Essex Community College;
B.S., M.A., Towson State University;
L.L.B., LaSalle University

Diane Swartz, Lecturer, Respiratory Care
B.S., Millersville University;
M.Ed., The Pennsylvania State University

Beverly Sweger, Lecturer, English
B.H., Lock Haven University;
M.Ed., The Pennsylvania State University at Harrisburg

Peggy Szekeres, Lecturer, Computer Information Systems
AA., AA., Harrisburg Area Community College;
B.S., Shippensburg University;
M.S., The Pennsylvania State University

Rebecca Tartline, Lecturer
M.Ed., Millersville University

Florence Taylor, Lecturer, Accounting
B.S., Norfolk State University;
M.B.A., National University

Gregory Taylor, Lecturer, Computer Information Systems
B.S., West Virginia University;
M.Sc., Shippensburg University

Deebari P. Tee, Lecturer, Mathematics
B.S., M.S., Ph.D., Oklahoma State

Elizabeth Terry, Lecturer, English,
Humanities, Physical Education
B.S., M.A., The Pennsylvania State University

Vicky Therkildson, Lecturer, Psychology, Nursing
B.S.N., M.A., University of South Dakota

Debra Thomas, Lecturer, English and Humanities
B.A., M.A., The Pennsylvania State University

James N. Thomasson, Lecturer, Physical Education
B.S., Alderson Broaddus

R. B. Thompson, Lecturer, English

Anna F. Tilberg, Lecturer, Biology
B.A., University of Pennsylvania;
M.S., Millersville University

Barbara A. Tokarz, Lecturer, Early Childhood Education
B.A., Wilkes College;
M.A., Kutztown University

James Tomkins, Lecturer, Computer Information Systems
B.A., B.A., State University of New York at Buffalo;
M.B.A., The Pennsylvania State University;
M.S., Gannon University

Alex Torres, Lecturer, Respiratory Therapy
A.A., Harrisburg Area Community College;
B.S., California College for Health Sciences

Personnel

Adjunct Faculty (continued)

James J. Toth, Lecturer, Respiratory Care

Roshni V. Trivedi, Lecturer, Mathematics
B.S., The Pennsylvania State University

Wayne Trotta, Lecturer, Psychology
B.A., B.A., M.B.A., The Pennsylvania State University;
M.S., Gannon University

Douglas J. Tyson, Lecturer, Mathematics
B.A., Messiah College;
M.Ed., Millersville University

Robert Ulmer, Lecturer, Marketing
B.S., The Pennsylvania State University;
M.B.A., St. Mary's University

Cathie Umstead, Lecturer, Computer Information Systems
B.S., The Pennsylvania State University

Dennis J. Urban, Lecturer, Mathematics
B.A., Millersville University;
M.S., St. Joseph's University;
M.S., Villanova University

Allen Ulrich, Lecturer, Physical Education
B.S., Lock Haven University;
M.Ed., The Pennsylvania State University

Joseph Venezia, Lecturer, Computer Information Systems
B.A., Saint Francis College;
M.Ed., Millersville University

Jaci Verghese, Lecturer, Psychology
B.A., Elizabethtown College;
M.S., Shippensburg University

Vicki E. Villone, Lecturer, English
B.S., Messiah College;
M.A., Shippensburg University;
Ph.D., Lehigh University

Daniel W. Wagner, P.E., Lecturer, Industrial Automation
B.S., The Pennsylvania State University

David W. Walters, Lecturer, English
B.S., The Pennsylvania State University;
M.F.A., Goddard College

Ellen Wargo, Lecturer, Government & Politics
B.A., The Pennsylvania State University;
J.D., The University of Pittsburgh School of Law

Michael P. Weagley, Lecturer, Mathematics
B.S., M.Ed., Millersville University

Catherine Weaver, Lecturer, Mathematics
B.S., Mt. St. Mary's College;
M.S., Randolph Macon University;
Ed.D., Temple University

Joan Weaver, Lecturer, English
B.S., Millersville University;
M.A., University of Pennsylvania

Thomas Weible, Lecturer, Speech Communications
B.A., Lebanon Valley College;
M.Ed., The Pennsylvania State University

Angela E. Weidman, Lecturer, Nursing
B.S.N., Immaculata College

Shannon M. Weise, Lecturer, Art
B.F.A., Rochester Institute of Technology;
M.S.W., Temple University

Gerhard Wendt, Lecturer, Criminal Justice
B.S., West Chester University;
M.S., Shippensburg University

Allen M. Wenger, Lecturer, Business
B.S., University of Delaware;
M.S., Cornell University

Donna F. Wenger, Lecturer, English
B.A., Messiah College;
M.A., Lehigh University

Charles A. Whittier, Lecturer, Mathematics
B.S., University of Connecticut

Priscilla Wilczak, Lecturer, Mathematics
B.S., SUNY, Buffalo;
M.S., Carnisius College

Jacquelyn Wilder, Lecturer, Early Childhood Education
A.G.S., Montgomery County Community College;
B.A., Alvernia College;
M.Ed., Cabrini College

Thomas R. Willequer, Lecturer, Mathematics
B.S., M.S., The Pennsylvania State University

Dennis C. Wilson, Lecturer, Biology
B.S., The Pennsylvania State University

Marilyn Wilson, Lecturer, Mathematics
B.S., The Pennsylvania State University;
M.A., Kutztown University

Harold E. Wingert, Lecturer, Biology
B.A., M.Ed., Shippensburg University

Dorothy J. Wise, Lecturer, Business/Accounting
B.S., Clarion University

Michael D. Witmer, Lecturer, History
B.S., M.A., Millersville University

Patrick A. Witt, Lecturer, Mathematics
B.S., U.S. Naval Academy;
M.S., Naval Postgraduate School

Sharon M. Wolcott, Lecturer, Mathematics
B.A., Houghton College;
M.S., University of Delaware

Mary Elizabeth Wolf, Lecturer, Paralegal Studies
B.A., University of Villanova;
J.D., Villanova School of Law

Young Won, Lecturer
B.F.A., Maryland Institute, College of Art

Dennis Woodring, Lecturer, Fire Science

Reynold R. Woolf, Jr., Lecturer, Real Estate
B.S., Ohio State University

Charlene Wright, Lecturer, Geography
B.A., University of California;
M.A., San Diego State University

Frank Yeager, Lecturer, Computer Information Systems
B.S., Lebanon Valley College;
M.B.A., University of Pittsburgh

Carmen Yerpes-Brown, Lecturer, Spanish
B.A., Instituto de Utrera, Spain;
M.A., Ph.D., University of Georgia

Martin O. Yespy, Lecturer, Sociology
A.A., Harrisburg Area Community College;
B.A., Lebanon Valley College;
M.S.W., University of Maryland at Baltimore

Mary Elizabeth M. Youtz, Reading
M.Ed., Millersville University

Rosemary R. Yovic, Lecturer, Chemistry
B.S., Lock Haven University;
M.S., Drexel University

Leslie Zackey, Lecturer, English
B.A., M.Ed., University of Pittsburgh

Gerald Zell, Lecturer, Cabinetry (Millwork)
A.A., South Florida Junior College

Christopher Zentz, Lecturer, Physical Education
B.S., M.S., University of Delaware

Craig D. Zerby, Lecturer, Chemistry
B.S., M.S., Shippensburg University

Lori G. Zeshonsky, Lecturer, Music
B.S., West Chester University

Ingrid Ziedonis, Lecturer, Physical Education
B.S., West Chester University

Kenneth Zimmerman, Lecturer, Astronomy,
Physical Science
B.S., Millersville University;
M.S., Temple University

Classified Staff

The persons listed below have been associated with the College Classified and Professional staffs for five or more years and assist in administration, instruction, and maintenance.

Nada J. Ahearn, Senior Accountant
B.S., The Pennsylvania State University

Ada I. Alicea, Custodian I

Margaret N. Andrews, Technician I, Admissions

Kimberly M. Apgar, Custodian I

Tony K. Armstead, Material Clerk

Holly M. Bailor, Technician I, Human Resources
A.A., Harrisburg Area Community College

Sheila R. Baltimore, Cashier

Fanny I. Baumgartner, Sous Chef

Greg Beckley, Administrative Clerk II
A.A., Harrisburg Area Community College;
B.A., Lycoming College of Pennsylvania;
M.Div., Winebrenner Theological Seminary, Ohio

Margaret C. Beckley, Technician I, Credit Registration

Robert C. Bennett, Technical Analyst II
A.A., Harrisburg Area Community College

Angela M. Bentz, Administrative Secretary I
B.S., East Stroudsburg University

David S. Bishop, Security Officer II

Judy E. Blazi, Administrative Secretary II

Kim M. Bleacher, Administrative Secretary II

Sandra M. Box, Specialist II, Resource Development

Mary Jane Bratten, Administrative Secretary II
A.A., Harrisburg Area Community College

Kathleen M. Brickner, Manager, Business Services

Kathy J. Buerk, Assistant Group Supervisor
A.A., Anne Arundel Community College

Pedro P. Buitrago, Custodian I

Esther Carman, Administrative Secretary II

J. Richard Carson, Maintenance Mechanic III

Patricia A. Chapman, Custodian I

Patricia A. Conklin, Manager I, Business Services

Vanita L. Cowan, Technician I, Enrollment Services

Linda J. Dale, Technician III, Box Office Supervisor
B.S., Kutztown University

Donna Daversa, Technician II, Career Center

Suzanne L. Davis, Technician I, Purchasing

Andrew J. Dean, Secretary II
A.A., Harrisburg Area Community College

Scott C. Decker, Specialist II, Computer Network
A.S., Pikes Peak Community College;
B.S., York College of Pennsylvania

Deborah A. DeSantis, Secretary I

Terri S. Diehl, Custodial Aide

George E. Diggs, Custodian I

Beatrice A. Dixon-States, Secretary I

Arthur C. Doakes, Assistant Custodial Supervisor

Tom H. Doan, Maintenance Mechanic II/HVAC

Robert C. Dudley, Manager, Instructional Technology
B.A., The Pennsylvania State University

Derrick E. Dullebawn, Technical Analyst III

Bonny R. Ellis, Executive Secretary I

Marian L. Ellis, Custodian I

Brenda L. Etter, Technician II,
Group Supervisor/Lead Teacher
A.A., Harrisburg Area Community College

Kathleen M. Eves, Technician II, Payroll

Sally A. Feeser, Library Technician I
B.S., Shippensburg University;
M.L.S., University of Pittsburgh

Elizabeth A. Flack, Executive Secretary I

Louis W. Fredericks, Maintenance Mechanic II,
Conference Center

LuAnn P. Gallup, Secretary II
A.A., Harrisburg Area Community College

Doris Garcia, Security Officer II

Deanne L. Gerber, Accounting Clerk II/Accounts Payable

Maribel Gonzalez, Secretary III

Carol E. Gregorich, Specialist II, Acquisitions
B.S., Bloomsburg University

Fawn H. Grimes, Secretary III

Barbara A. Gruber, Administrative Assistant II

Janice M. Hackman, Library Technician II
B.S., Millersville University

Howard T. Haney, Technical Analyst II
A.A.S., The College of the Desert;
A+ Certified; IBM Certified

Karen A. Harrison, Merchandise Buyer

Shelly R. Hart, Executive Secretary I

Marie A. Hawthorne, Accounting Technician II
A.A., Harrisburg Area Community College

Tonya M. Heckman-Hann, Secretary II

Mary E. Hendrick, Library Technician I
B.A., Jersey City State College

Janice H. Henry, Technician I, Media Services
B.A., The Pennsylvania State University;
M.Ed., University of Pittsburgh

Karl J. Henry, Regional Campus Bookstore Specialist

Chad R. Hershey, Security Officer II

Melvin F. Hinton, Utility Worker

Cathryn A. Hintze, Manager I, Library Technical Services
B.A., Shippensburg University;
M.L.S., Clarion University

Albert C. Holton, Lead Security Officer
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University

Cheri D. Huston, Accounting Technician I

Concettina Ippolito, Custodian I

Mary L. Jenkins, Custodian I

Anthony E. Jackson, Prep Cook

Jennifer W. Jackson, Secretary II

Wendy A. Kaehler, Secretary I

Darlene Kalenevitch, Technician I, Registration

Margaret C. Keim, Secretary II

Anne Kelliher, ESL Teaching Assistant
B.A., St. Joseph's University;
M.A., West Chester University

Holly R. King, Secretary I
A.A., Harrisburg Area Community College

Susan J. Kirchoerfer, Secretary II

Myra A. Kitchen, Technician II/
Registration and Financial Services
A.A., Harrisburg Area Community College

Thomas P. Knaper, Lead Security Officer
A.A., York College

Ludmila Kucynski, Reference Desk Specialist
B.A., Kent State University

Wendy L. Kung, Accounting Technician II,
Student Accounts
B.A., Min Chung College

Deirdre A. Lake, Technician I, Student Services

Martha J. Lamprey, Secretary III
A.A., Harrisburg Area Community College

Thomas W. LaRue, Utility Worker

Patricia H. Lavinia, Secretary I

Virginia M. Leber, Accountant II/
HACC Foundation/Cash Accounting
A.A., Harrisburg Area Community College;
B.S., Albright College

Marsha A. Leonard, Administrative Clerk II
A.A., Harrisburg Area Community College;
B.A., The Pennsylvania State University

Rosemary C. Lippert, Administrative Assistant I
A.A., Harrisburg Area Community College

Deborah A. Livingston, Receptionist

Cindy A. Lucarelli, Administrative Secretary II

Holly B. Lukens, Technician II,
Group Supervisor/Lead Teacher
A.A., Harrisburg Area Community College

Patricia R. Magaro, Custodian I

Constance L. Martinez, Executive Secretary I

Tammie J. Mauck, Administrative Clerk I, Dental Clinic
A.A., Harrisburg Area Community College

Barbara H. Maurice, Secretary III

Wendell W. McCormick, Supervisor, Custodial Services

Benjamin H. McNeil, Administrative Clerk I/
Media Services

Lisa A. Metzger, Accounting Clerk II, Accounts Payable
A.A., South Hills Business School

Debra R. C. Miller, Publications Technician
B.F.A., Kutztown University

Peter L. Miller, Technician II, Instructional Technology
B.S., Kutztown University

Valarie J. Miller, Assistant Custodial Supervisor

Jill K. Mitzel, Administrative Assistant I
Diploma, American Institute for Paralegals

Paul J. Monko, Specialist IV, Computer Services

William R. Moses, Security Officer II

Rae C. Mosley-Brooks, Supervisor, Custodial Services

Wilbur W. Moyer, Security Officer II

Dawn K. Mull, Analyst I/Assistant to Controller
B.S., The Pennsylvania State University

Kay G. Murdock, Library Technician II
B.S., Ohio State University

Shirley A. Myers, Secretary I

Linda J. Neubaum, Secretary I

Cuc T. Nguyen, Custodian I

Huong T. Nguyen, Custodian I

Mary L. Noone, Technician I, Admissions

Kenneth W. Norton, Technical Support Specialist
A.A., Harrisburg Area Community College

Brandon D. O'Brien, Utility Worker

Karen L. O'Halloran, Secretary I

Timothy L. Oren, Maintenance Mechanic III/Electrical

Arlene Orth, Utility Worker/Facilities Management

Frances J. Paese, Switchboard Operator/Dispatcher

Wanda J. Page, Technician I, Distance Learning
A.A., Harrisburg Area Community College

Sharon D. Patterson-McCoy, Technical Analyst I
B.B.A., Bernard M. Baruch College

Jerome Perrin, Custodian I

G. Ramona Pierce, Cashier

Edward L. Polston, Financial Technician II
A.A., A.A., Harrisburg Area Community College

Christy R. Price, Technician I, Registration
A.A., Harrisburg Area Community College
B.B., The Pennsylvania State University

Roy E. Rager, Maintenance Mechanic/Facilities Assistant

Tiffany L. Raker, Technician I, Human Resources
A.A., National Education Center

Shirley M. Ream, Laboratory Assistant, Nursing
B.S.N., Messiah College

Santina A. Reigle, Administrative Secretary II

C. J. Rineer, Administrative Clerk II

Myra Robinson, Secretary I

Jennifer L. Rodichok, Executive Secretary I
A.A., Harrisburg Area Community College

Personnel

Classified Staff (continued)

Judy C. Rohacek, Secretary I
A.A., Harrisburg Area Community College

Holly L. Sanchez, Technician I

Barbara A. Saussaman, Administrative Secretary I

Angela M. Schuck, Administrative Assistant I

Jorge Segarra, Security Officer II

Kenneth E. Sellers, Security Officer II

Geoffrey H. Shaffer, Computer Lab Manager
A.A., Harrisburg Area Community College

Brandon A. Sheppard, Technician II,
Instructional Equipment

Sheila K. Shrauder, Technician I/Transcript Processing

Charity L. Shreffler, Dining Room Manager,
Conference Center
A.A., Harrisburg Area Community College

Gloria J. Shutter, Supervisor, Circulation Services, Library

Cynthia L. Sierk, Technician I,
Faculty Support/Publications

James T. Simmons, Technical Analyst I

Gina M. Simon, Manager, Cashiering
B.A., University of Northern Iowa

Machelle A. Snesavage, Technician I

Dorothy F. Snyder, Secretary II
A.A., Harrisburg Area Community College

Marion A. Spangler, Technician I, Student Registration

David R. Spirko, Distance Education
Engineering Technician
A.A., Central Penn College

James R. Staub, Maintenance Mechanic III/HVAC

Erika R. Steenland, Administrative Assistant I
B.S., Emerson College

Pamela A. Stein, Manager,
Sales/Marketing, Conference Center
A.A., Harrisburg Area Community College

John C. Strahler, Technician I, Testing Center

Linda S. Strawser, Bookstore Cashiering Supervisor

Shirley A. Stremmel, Technician I/
English Placement and Registration

Mata A. Stroup, Registration Specialist II

Lori L. Stump, Secretary III

Darlene C. Sutcliffe, Technician II, Registration

Thepcharin Suttvireeson, Accounting Clerk IV
B.A., Kokushikan University

Lori E. Swoyer, Computer Network Specialist

Jennifer G. Tarpe, Secretary III

Carole A. Thompson, Secretary I

Judy C. Thompson, Technician I, Payroll
A.A., Harrisburg Area Community College

Thomas C. Thompson, Security Officer II

Diane M. Trullinger, Secretary I

Catherine L. Via, Administrative Secretary II
A.A.S., North Central Missouri College;

Hong T. Vo, Custodian I

Thien V. Vu, Custodian I

Jenny R. Walker, Specialist I, Admissions

Helen E. Wallace, Administrative Assistant I
CAP

Michael F. Wallace, Library Technician II

Belinda L. Ward, Technical Analyst I

Marcia S. Waters, Administrative Assistant

Deborah J. Weller, Specialist I, Advising Center
A.A., A.A., Harrisburg Area Community College

Michele D. Wherley, Administrative Enrollment Specialist
A.D.N., Central Pennsylvania College

Judith White, Administrative Assistant

Carol B. Wideman, Technician I, Admission/Registration
A.A., Harrisburg Area Community College

Diane L. Wiedemann, Specialist II, Document Delivery

Karl K. Wiest, Maintenance Mechanic III

Raymond L. Wiersma, Groundskeeper/
Arboretum Specialist

Anna M. Wilson-Borges, Secretary I
A.A., Harrisburg Area Community College

Earl A. Wolfe, Lead Security Officer

Debra G. Wolfhope, Financial Analyst I

Carol A. Woods, Records Office Supervisor
A.A., A.A., Harrisburg Area Community College

Ronald D. Worby, Maintenance Mechanic III

Derek A. Zellers, Security Supervisor
A.A., Harrisburg Area Community College

Douglas B. Zook, Technical Analyst III

Professional Staff

Lori J. Amspacker, Administrative Specialist II
B.S., Indiana University of Pennsylvania

Warren H. Bair, Coordinator, Student Activities
B.S., East Stroudsburg University;
M.S., Virginia Polytech Institute and State University

Sean M. Beaver, Coordinator, Electrical Services

Patricia A. Benny, Administrative Specialist I,
Student Loans
A.A., Harrisburg Area Community College;
B.S.Ed., The Pennsylvania State University

Larry P. Berger, Education Specialist,
Automotive Technology

Robert Bernini, Senior Education Specialist, EMS/HC

Amy R. Berrier, Systems Analyst III
A.S., Harrisburg Area Community College,
B.S., M.B.A., The Pennsylvania State University

Beverley G. Bigham, Senior Administrative Specialist
B.A., Hollins College;
M.A., Hood College

Leslie M. Boon, Administrative Specialist II,
Office for Academic Success
A.A., Hillsborough Community College;
B.S., University of South Florida

Mary A. Bottorf, Administrative Specialist II,
Career Services
B.S., Lock Haven University;
M.Ed., Shippensburg University

Elisa S. Cohen, Administrative Specialist II,
Office for Academic Success
B.A., University of Kentucky;
M.A., Old Dominion University

Deborah L. Consevage, Support Software
System Administrator
A.A., B.B.A., The Pennsylvania State University

Kenneth J. Corbran, Coordinator, Information Technology
B.S., Rutgers University;
M.L.A., McDaniel College

Lori G. Corradino, Administrative Specialist II
B.A., M. Ed., The Pennsylvania State University

Jennifer Daley, Administrative Specialist II
B.S., The Pennsylvania State University

Sandra R. Daniels, Administrative Specialist II,
Admissions
A.A., Harrisburg Area Community College;
A.B., The Pennsylvania State University

Calvin E. Deiterich, Database Query and Report Analyst
A.A., Harrisburg Area Community College;
B.S., M.S., The Pennsylvania State University

Garrick M. Dorsett, Education Specialist, Photography
A.A., Harrisburg Area Community College;
B.F.A., University of the Arts

Rachelle A. Downing, Coordinator,
Student Information Technology
A.A., Schuylkill Business Institute

Debra J. Eichenberger, Coordinator, Grounds/Arboretum

Robert E. Finley, Coordinator, Facilities Services

Deborah J. Fitzgerald, Administrative Specialist II,
Financial Aid
B.A., Rutgers University

Leanne C. Frech, Senior Administrative Specialist,
Financial Aid
B.S., M.S., Indiana University of Pennsylvania

Lori Friedlander, Administrative Specialist II, Theatre
B.F.A., University of New Mexico

Vicki L. Gentzel, Administrative Specialist I
B.S., The Pennsylvania State University

Robin L. Gorini, Administrative Specialist II,
Enrollment Services
A.A., North Shore Community College;
B.A., University of Massachusetts;
M.Ed., Lesley University

Kelvin V. Harrison, Senior Education Specialist, Counseling
B.A., M.Ed., University of Texas

Joyce A. Hearn, Administrative Specialist II,
Accounts Payable
A.A., Harrisburg Area Community College

Charles R. Hilmer III, Academic Support Coordinator
A.A., A.A., Harrisburg Area Community College;
B.A., Eastern College

Marie E. Johnston, Coordinator, Nurse Aide

Kimberly R. Kelsey, Administrative Specialist II, Research
B.S., Susquehanna University;
M.S., Drexel University

Cheryl A. Kint, Administrative Specialist I,
Human Resources;
A.A., Harrisburg Area Community College

Robert Koenig, Coordinator,
Manufacturing Skills Development

Brenda L. Krebs, Analyst III, Budget and Finance
B.S., Millersville University

Jill C. Landis, Administrative Specialist II, Admissions
B.S., Point Park University;
M.A., Indiana University of Pennsylvania

Loretta L. Lehman, Systems Analyst II
A.A., Harrisburg Area Community College

Mildred O. Major, Coordinator,
Financial Information Technology

Robert Martin, Systems Analyst II
A.A., Santa Fe Community College

Jennifer S. Mason, Administrative Specialist II,
Financial Aid
B.A., Shippensburg University

Varsha N. Mehta, Senior Accountant
B.S., Bhuvan's College;
B.S., Elizabethtown College

Janice M. Miller-Zerbe, Administrative Specialist I
A.A., Harrisburg Area Community College

David R. Padfield, Senior Education Specialist,
Fire Training

Alice P. Parker, Administrative Specialist I
B.S., Philippines College

Larry Pierce, Administrative Executive Chef

Perry L. Pierich, Coordinator, Fire Training
A.A., Harrisburg Area Community College;
B.A., The Pennsylvania State University

Steven L. Poffenberger, Education Specialist,
Emergency Medical Service
A.A., Harrisburg Area Community College;
B.S., The Pennsylvania State University

Maureen J. Reber, Administrative Specialist II, Payroll
A.A., Harrisburg Area Community College

David A. Shaffer, Senior Technical Analyst
B.A., Indiana University of Pennsylvania

Jeffrey S. Snyder, Training Coordinator, Fire Science

Lorie L. Sonnen, Administrative Specialist I
B.A., M.S., Millersville University

Phunthip Sungkarat, Systems Analyst II
B.S., Kasetsart University;
M.S., Shippensburg University

Angela J. Sye, Coordinator, Custodial Services/
Office Management

Brett Thompson, Coordinator, Maintenance Services
A.A., Harrisburg Area Community College

Michael A. Tonkay, Coordinator, EMS
A.S., Allegheny County Community College;
A.S.T., Thompson Institute

Carroll T. Wagner, Coordinator,
Shumaker Public Safety Center
A.A., Harrisburg Area Community College;
B.S., York College;
M.S., Shippensburg University

James R. Waters, Manager II, Mail and Receiving

Mary Beth Yandrasitz, Groupwise Administrator
A.A., Harrisburg Area Community College;
B.A., The Pennsylvania State University

Virginia L. Young, Administrative Specialist I
A.B., Susquehanna University;
M.A., The Pennsylvania State University



Index – General

A

Absence	20
Academic Affairs	30-40
Academic Achievement policies	36
Academic load	19
Academic Major Codes	333
Academic monitoring	34
Academic Planning	30-36
Academic Program Index	1-6
Academic Program Requirements	30-32
Academic Programs, descriptions	41-241
Academic renewal	38
Academic Support services	26-27
Accreditation	20-21
Act 101 Program, Harrisburg Campus	27
Adding classes	20
Adjunct faculty, listing	319-326
Administration, listing	311-312
Admissions	334
Adult Basic Education and Developmental Studies	33
Advising	19
Advising and Transfer Centers	27
Alumni Affairs, Office of	11
Alumni Association	28
Anti-discrimination policy	8
Application form	335-336
Application instructions	334
Application requirements	334
Articulation agreements	27
Articulation agreements, high schools and career and technical education centers	33
Arts Center, Rose Lehrman	13
Associate degrees, defined	31
Athletics at HACC	28
Attendance	20
Auditing courses	19
Awards and scholarships	26

B

Board of Trustees	309
Bookstore, Maurice C. Overholt	13

C

Career Services Centers	27
Career programs, defined	31
CEEB examinations (College Entrance Examination Board)	32
Certificate of residence	22
Certificate programs, defined	30-31
Change of curriculum	37
Child Play Centers	28
CLEP examinations (College Level Examination Program)	32
College & Community Development	10-11
College Disciplinary Policy	38
College Mission, Vision & History	8-9
College Policies	38-40
Community Education Department, noncredit	10

Computer training, noncredit	10
Computer Use Policy	40
Cooper Student Center (Bruce E. Cooper)	13
Community Center for Technology and Arts, Harrisburg	14
Core requirements (general education requirements)	31
Core elective table	30-31
Counseling	19
Course codes	333
Course descriptions	242-308
Course repeat limitations	36
Credit courses, defined	32
Credit by examination	32
Credit by transfer	33
Credit for life experience	33
Credit for secondary-school work	32
C. Ted Lick Wildwood Conference Center	11, 14
Cultural programming	29

D

Degree programs, defined	31
Degrees awarded	31
Delegate Body	310
Developmental courses, defined	19, 33
Developmental education courses & services	33
Diploma programs, defined	30
Disabled students	27
Disability Services, Office for	27
Disciplinary policy	38
Dismissal	39
Dropping classes	20

E

Elective requirements	32
Emergency Medical Services training, noncredit	11
English as a Second Language	19, 34
Enrollment	19

F

Faculty, listing	313
FAFSA (Free Application for Federal Student Aid)	23
Federal Pell Grant	25
Federal Perkins Loan	25
Federal PLUS Loans	25
Federal Stafford Loans	25
Federal Supplemental Educational Opportunity Grant	25
Fees, see Tuition and Fees	22
FERPA – Family Educational Rights and Privacy Act	39
Final examinations	20
Finances	22-26
Financial aid, application for	23
Financial aid eligibility	23
Financial Aid Services, Office of	23
Fire Academy, Shumaker Public Safety Center	10
Foreign students	35
Fourth Estate, The (student newspaper)	28

G

Gallery (at Rose Lehrman Arts Center)	29
GED testing	33
General Education Transfer Electives	32

Gettysburg Campus	12
Grace Milliman Pollock Childcare & Early Childhood Education Center, Harrisburg	14
Grading system	36
Graduation request form	20
Grants and scholarships, financial aid	25

H

HACC Alumni Affairs	11
HACC Foundation	11
Harrisburg Campus	13-14
Health policy	29
Healthcare training, Shumaker Public Safety Center	11
High school students	33
History, College	9
Honorary Doctor of Public Service, recipients	310
Honor societies	28
Honors / Dean's List	37
Honors program	34-35
Housing policy	29
Human Development	34

I

I grade (incomplete)	36
Independent study	19
Inquiries	8
Institute for Entrepreneurial Studies	10
International education, study abroad	35
Internet Access Policy	40

L

Laboratory fees	22
Lancaster Campus	15
Learning Centers, tutoring	26
Lebanon Campus	16
Lethal weapons training, Shumaker Public Safety Center	10
Library, McCormick (Harrisburg Campus)	13
Library resources and services, all campuses	35

M

Manufacturing & Technical Training, noncredit	10
Midtown Center	14
Military Science	35
Mission and vision statement	8-9

O

Office for Academic Success	26
Office of Military and Veterans' Affairs	26
Office of Multicultural Affairs/International Education	27

P

Payment methods	23
Pell grant, financial aid	25
Penn Center, Harrisburg	14
PEP examinations (Placement Examination Programs)	32
Perkins loan, financial aid	25
PHEAA grants, financial aid	25
Phi Theta Kappa	28
Physical education and wellness requirement	31
Placement testing	19
PLUS loans	25

Police Academy, Shumaker Public Safety Center	10	Special Application Requirements	32	Transcript requests	38
Policies governing courses	19	Speech requirement	31	Transfer institutions	27
Privacy Act	39	Sponsoring school districts	23	Transfer of credits	27
Probation	37	Sponsorship at other PA comm. coll.	23	Transfer programs, defined	31
Professional Development & Management Training, noncredit	10	Sports at HACC	28	Tuition and fees	22-23
Public Safety Training	10	Staff, listing	326-329	Tuition subsidy	23
R		Stafford loans	25	Tutoring	26
Readmission	37	Student Affairs	22-29	V	
Refunds	23	Student Center, Cooper	13	Veterans' benefits	26
Registration	19	Student Government Association	28	Virtual Campus	17
Repeating courses	36	Student Handbook	28	W	
Rose Lehrman Arts Center, Harrisburg	13	Student Life	27-29	W grade (withdrawal)	36
ROTC (Military Science)	35	Student records	38	Withdrawal from College	38
S		Subsequent degrees	32	Workforce and Economic Development Division	10
Satisfactory academic progress	37	Supplemental instruction	26-27	Y	
Satisfactory academic progress, financial aid	24	Suspension, academic	37	Y grade (work in progress)	36
Scholarships/Awards	26	T		York Campus	18
Secondary Schools	33	Test Center	26	Z	
Select Medical Health Education Pavilion, Harrisburg	14	Textbooks, purchasing	19	Zero-level courses. See Developmental courses	33-34
SEOG grant	25	Theatre for Young People	29		
Senator John J. Shumaker Public Safety Center	10, 14	TheatreWorks	29		
		Tickets, Performing Artist Series events	29		



Program of Study/Major Codes (Question #11/#12)

Carefully review the list of majors and select the one code that most closely represents your educational goal (question 11). If the major code you select asks you to choose a concentration, please record the concentration you prefer (question 12).

SPECIAL MAJOR CODES

General Studies	7660
(Pursuing a General Studies Degree)	
General Studies/Undecided	7661
(Undecided about degree program choice.)	
Guest Student	GTST
(Currently enrolled in good standing at another college but taking course(s) at HACC to fulfill that institution's degree requirements)	
Non-Degree/Personal Enrichment	NDGR
(Seeking non-degree personal enrichment. Not eligible for financial aid.)	

TRANSFER CURRICULA

Transfer curricula are the equivalent of the first two years of a four-year program. After earning an associate degree, students transfer to a four-year institution to complete the last two years of the bachelor's degree.

Actuarial Science	4000
Architecture	4010
Art & Design	2130
Biology	3091
Biology Education	3101
Business Administration	1020
Business Education	1100
Chemistry	3020
Chiropractic	3140
Criminal Justice	6050
• Law Enforcement	LWEN
• Security Administration	SECR
• General Transfer	GNRL
• Corrections	CORR
Dietetics	3050
Elementary Education	5100
Engineering	4120
Environmental Associate*	3060
Environmental Science	3040
Fine Arts	2120
Humanities, Languages and the Arts	2091
Humanities, Languages, and the Arts Education	2101
International Studies	5030
Math/Computer Science	4030
Mathematics	4070
Mathematics Education	4150
Media Studies	2061
Performing Arts/Theatre Arts	2080
Photography, Visual Arts	2140
Physical Education/Exercise Science	3120
Physical Science	3070
Physical Science Education	3130
Psychology	5150
Social Sciences	5090
Social Sciences Education	5140
Social Services	5060

CAREER CURRICULA

Career curricula are Associate Degree programs that provide students with specific skills for employment.

Accounting	1460
Administrative Office Specialist	1921
Agribusiness and Management/ Food Systems	1830
Architectural Technology	4470
Auto Service Education GM (ASEP)*	4570
Automotive Technology*	4480
Building Construction Technology	4510
Business Management – Accounting	1470
Business Management – Computer	1480
Business Management – General	1510
Business Management – HRIM	1590
Business Studies	1500
Civil Technology	4720
Computer Information Systems	1792
• Computer Support Specialist	SUPP
• Database Analyst	DATA
• System Administrator	ADMN

Computer Networking Tech	4590
Computer Repair Technician	4620
Construction Codes & Safety Science	4730
Contemporary Crafts Marketing	2760
Court and Real-time Reporting	1840
Culinary Arts*	1581
Pre-CVT-Invasive Cardiovascular Technician**	351P
Pre-CVT-Cardiac Sonography**	353P
Pre-Dental Hygiene**	349P
Pre-Diagnostic Medical Sonography**	354P
Dietary Manager	1611
Early Childhood Education	5500
Electronic Engineering Technology	4580
Electrical Technology	4750
Pre-Emergency Health Services Mgmt*	3500
Entrepreneurial Leadership	1660
Environmental Specialist*	3570
Fire Science Technology	6630
Geospatial Technology	4760
Graphic Design*	2830
Pre-Health Science*	359P
Heating, Ventilation, Air Conditioning (HVAC)	4780
Home Building & Remodeling	4790
Hospitality Management	1600
Hotel and Lodging Management	1741
Human Services	5550
Industrial Maintenance Tech	4710
Marketing	1640
Marketing Management – Real Estate	1720
Marketing Management – Retailing	1730
Mechanical Engineering Technology	4700
Pre-Medical Assisting**	352P
Pre-Medical Laboratory Technician**	358P
Music Industry	1801
Nanofabrication Manufacturing	4690
Pre-Nuclear Medicine Technology**	363P
Pre-Nursing**	368P
Ornamental Horticulture	4810
Paralegal Studies	5701
Pre-Paramedic**	369P
Police Science	6800
Professional Bank & Financial Services	1491
Pre-Radiologic Technology** (Hospital Based)	375P
Pre-Radiologic Technology** (College Based)	376P
Pre-Respiratory Therapist**	392P
Restaurant & Food Service Management	1621
Pre-Surgical Technology**	362P
Technology Studies	4680
Transmission & Distribution Tech*	4770
Travel & Tourism	1900
Visual Arts/Photography	2820
Web Developer	1810

CERTIFICATE CURRICULA

Certificate curricula are concentrated programs in specific skill areas. They are designed to provide skills for employment. Students may continue to study for the associate degree in most curricula.

Accounting	1170
Administrative Office Specialist	1371
Agribusiness and Management/ Food Systems	1191
Architectural Technology	4170
Auctioneering	1160
Automotive Technology*	4200
Baking & Pastry Arts	1321
Building Construction Technology	4250
Business – General	1200
Child Care	5180
Civil Technology	4220
Computer Information Security	1211
Computer Information Systems	1312
• Computer Support Specialist	SS-C
• Database Analyst	DA-C
• System Administrator	SA-C
Computer Networking Tech	4230
Computer Repair Technology	4180
Construction Codes & Safety Science	4290
Corrections	6200
Court and Real-Time Reporting	1361
Culinary Arts*	1261

Pre-Dental Assistant**	320P
Electrical Technology	4370
Electronic Technology	4310
Entrepreneurship	1270
Fire Science Technology	6260
Geospatial Technology	4410
Gerontology	3300
Graphic Design*	2830
Heating, Ventilation, Air Conditioning (HVAC)	4280
Home Building & Remodeling	4430
Human Services	5430
Independent Electrical Contractor Apprenticeship Training	4390
Industrial Maintenance Technology	4260
Kinsley Carpentry Apprenticeship Training	4440
Management	1350
Mechanical Technology	4350
Pre-Medical Assisting**	321P
Ornamental Horticulture	4450
Paralegal Studies	5301
Pre-Paramedic**	333P
Police Science	6380
Pre-Practical Nursing*	327P
Precision Metalworking Technology	4210
Professional Banking & Financial Services	1251
Restaurant & Food Service Management	1421
Security Administration	6210
Pre-Surgical Technology**	322P
Technology Studies	4400
Travel & Tourism	1280
Visual Arts/Photography	2400
Web Developer	1450
Welding Technology	4161

DIPLOMA PROGRAMS

Diploma programs are less than one year in length and are designed to provide essential entry-level skills for immediate employment. In some programs some diploma credits may not apply to the certificate and associate degree. Ask your advisor for specific information.

Auctioneering	0100
Cabinetry	0510
Child Development Associate	0600
CIS – Software Specialist	0220
Civil Technology	0340
Construction Codes & Safety Science	0570
Construction Estimating	0520
Construction Field Supervision	0530
Construction Project Management	0540
Culinary Arts – Catering*	0121
Dietary Manager	0140
Electrical Occupations	0300
Entrepreneurial Leadership	0270
Gerontology	0231
GM Express Maintenance Technology*	0350
Heating, Ventilation, Air Conditioning (HVAC)	0280
Home Building & Remodeling	0290
Industrial Maintenance Technology	0460
Jewelry Repair	0610
Marketing Sales (Salesmanship)	0180
Music & Marketing	0630
Music Product Sales	0620
Music Technology & Marketing	0160
Pre-Phlebotomy Technician**	039P
Real Estate	0170
Senior Health Care Workplace Assistant	0240
Welding	0500

* These programs have additional requirements, procedures and deadlines beyond admission to the college.

** Pre-clinical students: Clinical programs are selective and competitive. Admission to the college does not guarantee acceptance into the clinical program.

All programs are not necessarily offered at all campuses. Please call the campus you plan to attend for more information.

Gettysburg Campus	(717) 337-3855
Harrisburg Campus	(717) 780-2400
Lancaster Campus	(717) 358-2966
Lebanon Campus	(717) 270-6330
Virtual Campus	(717) 780-2541
York Campus	(717) 718-0328

Updated 3/17/08

HACC APPLICATION FOR ADMISSION (Front)

Read the instructions carefully.
Please print and complete in ink.

If you are a first-time applicant, a \$35 non-refundable fee must be submitted with this application before it can be processed.

1. Student Social Security Number:

--	--	--	--	--	--	--	--	--	--

Your Social Security number is required for financial aid eligibility, veterans benefits, and IRS tax reporting purposes. To protect your privacy, it will not be used as your student identification number.

Student Date of Birth:

--	--

 /

--	--

 /

--	--	--	--

(Month) (Day) (Year)

2. Name and Mailing Address:

(Last Name)	(First Name)	(MI)	(Previous Last Name)
(Number)	(Street)		(Apartment)
(PO Box or Rural Route)	(City)	(State)	(Zip Code) (County)
(Preferred E-mail Address)			
(Phone)	(Cell Phone)		

3. Personal Information: (Used for statistical purposes and will not be used to determine admission.)

Gender: Male Female
 Are you a United States citizen? (Check one) Yes No (supply required information and answer questions in box below)

I am a permanent resident, and am submitting a copy of my Permanent Resident card with this application.
 I am a non-resident alien, have completed the questions below and am submitting a copy of my current visa and I-94 card with this application.

Country of citizenship? Current visa?

Is English your native (first) language? (Check one) Yes No (read information in next box)

If No, you will be required to complete college-level English as a Second Language (ESL) placement testing. SAT, ACT or TOEFL scores, and transcripts showing college-level coursework completed in the English language may be presented to the Office of Admissions for possible exemption from ESL placement testing.

Ethnicity: (Check one) Hispanic/Latino Non-Hispanic/Latino
 Race: (Check all that apply) American Indian / Alaskan Native Native Hawaiian / Other Pacific Islander Asian
 White Black / African American

4. Educational Background:

Secondary/High School Education: (Check all that apply)
 Are you currently in high school or a home school program? Yes No
 Did you graduate? Yes No
 Did you earn your General Education Development Diploma (GED)? Yes No

--	--	--	--

 /

--	--

 /

--	--	--	--

(Month) (Day) (Year)

Required fields for all high school or home school graduates:

Date of graduation or completion.

--	--	--	--

 /

--	--

 /

--	--	--	--

(Month) (Day) (Year)

(Name of high school) (State)

OFFICE USE ONLY

Student Type: N or R Admit Type: Term:

Application Status:

Complete (Pending Review) Staff Initials:

Decisioned (Acceptance Letter Pending) Staff Initials:

Incomplete (Checklist Items Outstanding) Staff Initials:

1. Date Status Card Mailed:

2.

HACC APPLICATION FOR ADMISSION (Back)

4. Educational Background (continued):

Post-Secondary Education: (List in order of most recent school attended)

(Name of Institution) (City, State) (Degree Earned) (From/To Dates)

(Name of Institution) (City, State) (Degree Earned) (From/To Dates)

Do you plan to transfer credit(s) from a previous college(s) to HACC? (Check one) Yes No

(If Yes, send OFFICIAL transcript to the Records Office at the HACC campus you plan to attend.)

5. When do you plan to enter HACC? (Fill in year and check term)

--	--	--	--

(Year)

Fall (August) Summer I (May, 6-week / May, 12-week / June, 8-week)

Spring (January) Summer II (July, 6-week, Harrisburg and Lancaster Campuses only)

6. Are you a Guest Student? Yes, select GTST as your major code in #11. No

Students currently enrolled and in good standing at another institution and taking courses at HACC to fulfill that institution's degree requirements.

7. Which HACC location do you plan to attend? Gettysburg Lancaster Lebanon Harrisburg York

8. Are you interested in online courses? (Check one) Yes No

9. What is your student type? New Student Returning Student (former student returning after 5 or more years)
(former student who applied but never took classes)

10. Indicate in which State and School District you reside: (You are considered a Pennsylvania resident only if you have lived in the state for one full year. Students currently residing in one of HACC's 22 sponsoring school districts located in Cumberland, Dauphin or Perry counties, must obtain a valid Certificate of Residence from their School District Office before they qualify to receive a lower tuition rate.)

(State)

(School District of Residence)

11. Program of study: (REQUIRED – Carefully review the list of majors and select the one code that most closely represents your educational goal.)

--	--	--	--

(Major)

12. If the major code you selected in question 11 has a four letter concentration code, please record the concentration you prefer.

--	--	--	--

(Concentration Code)

13. Which do you plan to earn at HACC? (Check one) Degree Certificate Diploma No Degree
(You must work toward a degree, certificate, or diploma to receive financial aid.)

14. What is your primary educational goal at HACC? (Check one)

Explore New Career Area (1) Prepare to Transfer (3) Personal Interest/Enrichment (5)
 Enter Immediately Into Career (2) Update Job Skills (4) Other (6)

15. Will you attend HACC full- or part-time? (Check one)

Full-time (12 or more credits) Part-time (less than 12 credits)

16. Military and Veteran Affairs Background:

Are you a veteran, eligible dependent, or member of the National Guard or Selected Reserves (VT)? Yes No

Are You Applying For Veteran's Educational Benefits (VA)? Yes No

I hereby understand that any misrepresentation of information in this application may result in denial of admission or dismissal.

Student Signature	Date
-------------------	------

Parent/Guardian Signature	Date
---------------------------	------

(Parent/Guardian signature required only if student is under 18 years of age.)

Federal law prohibits us from making pre-admission inquiry about disabilities. Any information received regarding disabilities will not adversely affect admissions decisions. If you require special services because of a disability, you should notify the Office for Disability Services (Harrisburg Campus), at (717) 780-2614, or the location you plan to attend. This voluntary self-identification allows us to prepare appropriate support services to facilitate your learning. This information will be kept in strict confidence and has no effect on your admission to the college.

Updated 3/17/08



Gettysburg Campus

731 Old Harrisburg Road
Gettysburg, Pennsylvania 17325-3403

Harrisburg Campus

One HACC Drive
Harrisburg, Pennsylvania 17110-2999

Lancaster Campus

1641 Old Philadelphia Pike
Lancaster, Pennsylvania 17602-2690

Lebanon Campus

735 Cumberland Street
Lebanon, Pennsylvania 17042-5235

Virtual Campus

One HACC Drive
Harrisburg, Pennsylvania 17110-2999

York Campus

2010 Pennsylvania Avenue
York, Pennsylvania 17404-1791

www.hacc.edu



HACC

Founded
in 1964



CENTRAL PENNSYLVANIA'S COMMUNITY COLLEGE

