

## Program Course Requirements

General Application Procedures: Business & Technologies  
General Application Procedures: Nursing and Health Careers  
Degree Career Programs by Technology  
Degree Career Programs Alphabetically

### General Application Procedures Business and Technology Programs

Certain programs at Cuyahoga Community College require students to meet proficiency requirements in order to progress to the next level of course work within the student's major area of study. In addition to the proficiency requirements, some may also require students to complete an application for that program.

Students are responsible for meeting the admission and/or proficiency requirements for a listed program major.

Prior to taking any course work, students should follow the regular procedures for admission to Cuyahoga Community College. These procedures can be found in Section II of the catalog.

In addition to the admission procedures, all students must do the following:

If you have not taken an English or Math course at CCC or another college or university, you must take the English and Math assessment tests to determine your placement in these subjects. The semester English and Math courses indicated on the chart are the minimum levels for eligibility.

If indicated on the chart, submit a completed application form to the program to which you wish to apply. Application forms may be obtained from the departmental office.

Complete all other requirements for your program as specified on the chart. Additional details about the program can be obtained from the program coordinator or by appointment with a CCC counselor.

If an application is required for your program, the application does not necessarily guarantee admission to that program.

NOTE: On the accompanying chart, the letter following the program title indicates the home campus for that program. Only the home campus offers all the required courses in the major field. Most prerequisites and other specific degree requirements may be completed at any CCC campus.

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## General Application Procedures: Applied Industrial Technology

	Applied Industrial Technology - Bricklaying	Applied Industrial Technology - Carpentry	Applied Industrial Technology - Cement Masonry	Applied Industrial Technology - Drywall Finishing [Apprenticeship Program]	Applied Industrial Technology - Electrical Construction
Program Application/ Information Form	Contact Apprenticeship Coordinator (216)361-1652	Contact Apprenticeship Coordinator (330)659-9495	Contact Apprenticeship Coordinator (216)781-3303	Contact (440) 239-4575	Contact Apprenticeship Coordinator (216)573-0400
High School Graduate or GED Equivalency	Not applicable	High School Diploma or GED Required	Not applicable	Not applicable	Not applicable
English Requirement	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Mathematics Requirement	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Other Courses/ Requirements	Not applicable	Not applicable	Aptitude Test	Not applicable	Aptitude Test
Notes/ Other Information	Intent-to-hire agreement with participating contractor.	Intent-to-hire agreement with participating contractor.	Selection by Committee	Intent-to-hire agreement with participating contractor.	Selection by Committee

	Applied Industrial Technology - Floorlaying [Apprenticeship Program]	Applied Industrial Technology - Glazing [Apprenticeship Program]	Applied Industrial Technology - Manufacturing Technology	Applied Industrial Technology - Operating Engineers [Apprenticeship Program]	Applied Industrial Technology - Painting [Apprenticeship Program]
Program Application/ Information Form	Contact (330) 659-9495	Contact (440) 239-4575	Contact Apprenticeship Coordinator (216) 987-3039	Contact (330) 659-4115	Contact (440) 239-4575
High School Graduate or GED Equivalency	Not applicable	Not applicable	Required	Not applicable	Not applicable
English Requirement	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Mathematics Requirement	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Other Courses/ Requirements	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Notes/ Other Information	Intent-to-hire agreement with participating contractor.	Intent-to-hire agreement with participating contractor.	Sponsorship by a participating employer.	Intent-to-hire agreement with participating contractor.	Intent-to-hire agreement with participating contractor.

\*Where the chart indicates "eligibility" for a particular course, eligibility may be demonstrated by any of the following:

- Completion of CCC's assessment with a score appropriate for placement into the specific course listed on the chart; OR
- Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

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## General Application Procedures: Business & Technologies

	Architectural and Construction Engr. Tech (M)	Automotive Technology (Degree) (W)	Commercial Art & Design Technology (Degree) (E-W)	Court Reporting and Captioning (M-W)	Deaf Interpretive Services (W)
Program Application/ Information Form	Required	Required of ASEP and ASSET applicants only	Not applicable	Required	Not applicable
High School Graduate or GED Equivalency	Required	Not required, but highly recommended	Not required, but highly recommended	Required	Not required, but highly recommended
English Requirement	Complete 1010 (or 101).	Not applicable	Eligibility* for 0990	Eligibility* for 1010 (or 101)	Eligibility* for 1010
Mathematics Requirement	Complete 1160 (or 116).	Not applicable	Not applicable	Not applicable	Not applicable
Other Courses/ Requirements	Complete the following: •MET-1100 (or ENGR-109) •ARCH-1410 (or 141)	•Dealership sponsor required for acceptance into ASEP and ASSET programs. •ASEP and ASSET student handbooks contain educational and worksite requirements for continuation in program.	Complete OADM-1010 (or OADM-119). May be waived if student types 20 wpm.	Type 30 wpm	Not applicable
Notes/ Other Information		•In addition, ASEP/ASSET students need to complete AUTO-2940 and AUTO-2950. •Enrollment in individual courses for students who are not degree majors permitted. •Students interested in programs or courses should contact the Automotive Technology Dept. at (216) 987-5330.	•Non-degree students may enroll for individual courses. •Options in graphic design, advertising design, illustration. •One-year certificate in graphic design available. •Contact program coordinator or counselor for additional information.	For Degree: Recommend C&CR-1000 (or 100) in the Spring or Summer prior to entering the program.	Non-degree students may enroll for individual courses, providing they meet the course specific prerequisites.

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- b) Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- c) Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

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## General Application Procedures: Business & Technologies

	Early Childhood Education/Pre-K (E-M-W)	Early Childhood Education/Pre-K (E-M-W) Infant Toddler Certificate	Electrical-Electronic Engineering Technology [Three Programs] (M)	Electrical-Electronic Engineering Technology (Computer Networking Hardware) (M)	Graphic Communications & Photography (Photography) (W)
Program Application/ Information Form	Required	Required Contact Infant Toddler Certificate Coordinator	Required	Not applicable	Required
High School Graduate or GED Equivalency	Required	Required	Required	Required	Not required, but highly recommended
English Requirement	Eligibility* for 1010 (or 101)	Complete placement test	Complete 1010 (or 101) with "C" or higher.	Complete 1010 <sup>2</sup> with "C" or higher.	Eligibility* for 1010 (or 101)
Mathematics Requirement	Complete placement test	Complete placement test	Complete 1160 (or 116) with "C" or higher.	Complete 1060 <sup>2</sup> or higher** with "C" or higher.	Not applicable
Other Courses/ Requirements	<ul style="list-style-type: none"> <li>•Complete ECED-1010 (or ECED-101 and 102)</li> <li>•Provide 3 letters of reference</li> </ul>		Complete the following with grade of "C" or higher: MET-1100 (or ENGR-109), MIT-1100 (or ENGR-128), EET-1110 (or ELEC-125).	Not applicable	<ul style="list-style-type: none"> <li>•Complete GCMT 1500 with grade of "B" or higher.</li> <li>•Submission of a portfolio.</li> </ul>
Notes/ Other Information	<ul style="list-style-type: none"> <li>•Complete 5 of the required 30 volunteer hrs.</li> <li>•Sign Ohio Department of Human Services Child Care Convictions Statement B.C.I.I. check (complete before ECED-1860). The Pre-Kindergarten Associate License is applied for when the Associate degree is completed with an overall average of 2.0, with a grade point average of 2.5 in all Early Childhood Courses and Health 1400, and with completion of 330 hours of faculty supervised field work, earning a 3.0 in student teaching.</li> </ul>	Applicants for Early Childhood Education must be able to sign the Ohio Department of Human Services Child Care Conviction Statement, attesting that they have never been convicted or pleaded guilty to child abuse or other crimes of violence (Sect. 5104.09 Ohio Revised Code) and that no child has been removed from their home (Sect.2151.353 Ohio Revised Code)	In addition to the basic Electrical-Electronic Engineering Technology program, concentrations are available in: <ul style="list-style-type: none"> <li>•Bio-Medical</li> <li>•Telecommunications</li> </ul>	<ul style="list-style-type: none"> <li>•Skills acquired prepare students to take industry certification exams.</li> <li>•Certificate available in Computer Maintenance Technology (A+ Certification)</li> </ul>	<ul style="list-style-type: none"> <li>•Portfolio reviews conducted twice per year, at end of Fall and Spring semesters.</li> <li>•Departmental approval may be granted for enrollment in individual courses for students who are not degree majors.</li> <li>•Some photography courses may be available at Metro campus; completion of degree requires attendance at Western campus.</li> </ul>

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- Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

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	Hospitality Management [Three Programs] (M)	Human Services (M)	Information Technology (5 programs) (E-M-W)	Law Enforcement (M-W)	Law Enforcement (Basic Police Academy) (UTC)
Program Application/ Information Form	Required – contact Hospitality Management department, Metro campus.	Not applicable	Not applicable	Not applicable	Required: Contact Police Academy Office at United Technology Center
High School Graduate or GED Equivalency	Not required, but highly recommended	Not required, but highly recommended	Not required, but highly recommended	Required (see notes below)	Required
English Requirement	Eligibility* for 1010 (or 101)	Eligibility* for 1010 (or 101)	Eligibility* for 1010	Not applicable	Not applicable
Mathematics Requirement	Eligibility* for 0950 (or 095) or higher	Not applicable	Not applicable	Not applicable	Not applicable
Other Courses/ Requirements	Complete HOSP-1010 (or 101) with grade of "C" or higher, or departmental approval for continuation in program.	HS-1300 and HS-1850 (or CMHT-121M and 126M) must be taken in sequence with a grade of "C" or higher in each course (see notes below).	Not applicable	<ul style="list-style-type: none"> <li>Complete LAWE-1000 (or 102) and</li> <li>LAWE-1100 (or 121)</li> </ul>	Not applicable
Notes/ Other Information	Consultation with Hospitality Department Program Manager, Metro Campus. Concentrations available: <ul style="list-style-type: none"> <li>Culinary Art</li> <li>Lodging-Tourism Management</li> <li>Restaurant/ Food Service Management</li> </ul>	<ul style="list-style-type: none"> <li>Must maintain a 2.00 GPA in all HS courses.</li> <li>Requirements listed above are the same for both generalist and alcohol/chemical dependency options.</li> <li>Schedules must be approved by HS faculty advisor prior to registration for second semester and beyond.</li> <li>Students who are not program majors may enroll in HS courses for which they have satisfied the prerequisite.</li> <li>Contact program coordinator for additional information.</li> </ul>	<ul style="list-style-type: none"> <li>Certificate available in Information Application Specialist</li> <li>Non-degree students may enroll for individual courses, providing they meet the course specific prerequisites.</li> </ul>	<ul style="list-style-type: none"> <li>Current valid driver's license.</li> <li>Most civil service exams require a high school diploma or GED equivalency. For additional information contact program coordinator.</li> <li>Must be currently or intend to be engaged in some phase of the criminal justice system.</li> </ul>	<ul style="list-style-type: none"> <li>Current valid driver's license.</li> <li>Must be at least 21 years of age at completion of academy.</li> <li>No felony convictions (misdemeanor convictions will be reviewed by Academy commander).</li> </ul>

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- Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

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	Law Enforcement - Security Administration (M-W)	Law Enforcement - Corrections (M)	Legal Nurse Consulting (Post-Degree Professional Certificate) (W)	Manufacturing/ Industrial Technology (Drafting) (M) (W)	Mechanical Engineering Technology (M)
Program Application/ Information Form	Not applicable	Not applicable	Required	Required	Required
High School Graduate or GED Equivalency	Required (see notes below)	Required (see notes below)	Submit all college transcripts verifying Associate or Bachelor degree.	Required	Required
English Requirement	Not applicable	Not applicable	Not applicable	Complete ENG-1010(or 101)	Complete ENG-1010(or 101)
Mathematics Requirement	Not applicable	Not applicable	Not applicable	Complete MATH-1160 (or 116)	Complete MATH-1160 (or 116)
Other Courses/ Requirements	<ul style="list-style-type: none"> <li>●Complete LAWE-1050 (or 150) and</li> <li>●LAWE-1100 (or 121)</li> </ul>	<ul style="list-style-type: none"> <li>●Complete LAWE-1070 (or 170) and</li> <li>●LAWE-1100 (or 121)</li> </ul>	Assessment of computer skills; current R.N. license; equivalent of two years clinical work experience	<ul style="list-style-type: none"> <li>●Complete MET-1100 (or ENGR-109) and</li> <li>IMIT-1200 (or ENGR-121) and</li> <li>IMIT-1250 (or MECH-150) and</li> <li>IMIT-1100 (or ENGR-128)</li> </ul>	<ul style="list-style-type: none"> <li>●Complete MET-1100 (or ENGR-109) and</li> <li>IMIT-1200 (or ENGR-121) and</li> <li>IMIT-1250 (or MECH-150)</li> </ul>
Notes/ Other Information	<ul style="list-style-type: none"> <li>●Current valid driver's license.</li> <li>●For additional information contact program coordinator.</li> <li>●Must be currently or intend to be engaged in some phase of the Private Security Field.</li> </ul>	<ul style="list-style-type: none"> <li>●Current valid driver's license.</li> <li>●Most civil service exams require a high school diploma or GED equivalency.</li> <li>For additional information contact program coordinator.</li> <li>●Must be currently or intend to be engaged in some phase of the corrections system.</li> </ul>	2.50 GPA. Fall admission	Certificate programs are available in the following concentrations: <ul style="list-style-type: none"> <li>●Computer-Aided Drafting (CAD).</li> <li>●Computer-Aided Manufacturing (CAM).</li> <li>●Machine Tools.</li> </ul>	

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- b) Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- c) Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

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## General Application Procedures: Business & Technologies

	Paralegal Studies (Degree) (W)	Plant Science and Landscape Technology (Degree and Certificate) (E)	Recording Arts & Technology (M)	Automotive Technology (Certificate of Proficiency) (W)	Commercial Art & Design Technology (Graphic Design Certificate) (E-W)
Program Application/ Information Form	Required	Not required	Required	Not applicable	Not applicable
High School Graduate or GED Equivalency	Required	Not required, but highly recommended	Required	Not required, but highly recommended	Not required, but highly recommended
English Requirement	Eligibility* for 1010 (or 101)	Eligibility* for 1010 (or 101)	Not applicable	Not applicable	Eligibility* for 0990 (or 099)
Mathematics Requirement	Not applicable	Complete placement test.	Not applicable	Not applicable	Not applicable
Other Courses/ Requirements	<ul style="list-style-type: none"> <li>●Complete PL-1000 with "B" or higher.</li> <li>●Personal narrative.</li> <li>●Assessment of college-level writing skills.</li> <li>●Assessment of thinking/ reading skills.</li> </ul>	Complete PST-1300 (or 101)	Basic Windows and Macintosh PC skills. Students will take assessment test.	Not applicable	Complete CART-1050 (or 105). May be waived if student possesses prior graphic design lab experience. Complete OADM-1010 (or OADM-119). May be waived if student types 20 wpm.
Notes/ Other Information	<ul style="list-style-type: none"> <li>●2.50 GPA.</li> <li>●Submit all college/ university transcripts.</li> </ul>	<ul style="list-style-type: none"> <li>●Submit all college transcripts.</li> <li>●Landscape Technician certificate available.</li> </ul>	For Degree: <ul style="list-style-type: none"> <li>●Recommend PC and Macintosh workshops or courses in the summer prior to entering the program.</li> <li>●Students interested in program or courses should contact the Recording Arts &amp; Technology Dept. at (216) 987-4252.</li> </ul>	<ul style="list-style-type: none"> <li>●Enrollment in individual courses for students who are not degree majors permitted.</li> <li>●Students interested in programs or courses should contact the Automotive Technology Dept. at (216) 987-5330.</li> </ul>	<ul style="list-style-type: none"> <li>●Non-degree students may enroll for individual courses.</li> <li>●Options in graphic design, advertising design, illustration.</li> <li>●Contact program coordinator or counselor for additional information.</li> </ul>

\*Where the chart indicates "eligibility" for a particular course, eligibility may be demonstrated by any of the following:

- a) Completion of CCC's assessment with a score appropriate for placement into the specific course listed on the chart; OR
- b) Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- c) Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

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	<b>Hospitality Management (Certificate of Proficiency) (4 Programs) (M)</b>	<b>Legal Nurse Consulting (Post-Degree Professional Certificate) (W)</b>	<b>Paralegal Studies (Post-Degree Professional Certificate) (W)</b>	<b>Plant Science and Landscape Technology (Degree and Certificate) (E)</b>
Program Application/ Information Form	Contact Hospitality Management Program Manager, Metro campus.	Required	Required	Not required
High School Graduate or GED Equivalency	Not required, but highly recommended	Submit all college transcripts verifying Associate or Bachelor degree.	Submit all college transcripts verifying Associate or Bachelor degree.	Not required, but highly recommended
English Requirement	Not applicable	Not applicable	Not applicable	Eligibility* for 1010 (or 101)
Mathematics Requirement	Not applicable	Not applicable	Not applicable	Complete placement test.
Other Courses/ Requirements	Not applicable	Assessment of computer skills; current R.N. license; equivalent of two years clinical work experience	<ul style="list-style-type: none"> <li>● Complete PL-1000 with "B" or higher.</li> <li>● Personal narrative.</li> <li>● Assessment of college- level writing skills.</li> <li>● Assessment of thinking/ reading skills.</li> </ul>	Complete PST-1300 (or 101)
Notes/ Other Information	Certificate Programs are available in: <ul style="list-style-type: none"> <li>● Food and Beverage Operations</li> <li>● Professional Baking</li> <li>● Lodging Room Division</li> <li>● Professional Culinarian/Cook</li> </ul>	2.50 GPA. Fall admission	<ul style="list-style-type: none"> <li>● 2.50 GPA.</li> <li>● Spring and Fall admission.</li> </ul>	<ul style="list-style-type: none"> <li>● Submit all college transcripts.</li> <li>● Landscape Technician certificate available.</li> </ul>

\*Where the chart indicates "eligibility" for a particular course, eligibility may be demonstrated by any of the following:

- a) Completion of CCC's assessment with a score appropriate for placement into the specific course listed on the chart; OR
- b) Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- c) Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

<sup>2</sup>Or prior completion of equivalent quarter course (where applicable). Contact Program Manager/Coordinator regarding eligible quarter courses.



### General Application Procedures: Nursing & Health Careers

Courses in health career programs are offered in a sequence which begins in the Fall semester (unless indicated otherwise in the accompanying chart).

Admission each year is limited to the number of openings in each program. Those students applying and meeting all of the specific admission requirements will be admitted in the order in which complete applications are received.

Those who wish to apply for any of these programs must complete the following general procedures; see the chart for additional application requirements.

1. Submit a completed application for Admission to Cuyahoga Community College, unless you have previously applied. Prior CCC students who have not been enrolled for three years or longer must submit an application for Admission/Readmission to CCC.
2. Contact the high school from which you graduated or the agency that issued your GED and have them send an official transcript directly to the Office of Admissions and Records at CCC.
3. Contact all colleges/universities you have attended and have them send an official transcript directly to the Office of Admissions and Records at CCC. To ensure time for processing, the transcript should be received at CCC at least six to eight weeks prior to the time you expect to apply to the nursing or health career program. Applicants who have attended institutions outside the USA must contact the Office of Admissions and Records for special procedures.
4. Complete all required courses and meet the grade point average (GPA) requirements as specified in the accompanying chart. If you have not taken an English or Math course at CCC or another college or university, you must take the English and Math assessment tests to determine your placement in these subjects. The semester English and Math courses indicated on the chart are the minimum levels for eligibility. In addition to academic requirements, programs may also require certain kinds of experience or other criteria; refer to the chart for additional information.
5. Obtain the Health Career Application Form from the College's Health Career Enrollment Center at the Metropolitan Campus (216-987-4247). Nursing applicants can obtain the Application for the Associate Degree Nursing Program from the Office of Nursing Education or the Application for the Practical Nursing Program from the Practical Nursing Office, both located at the Metropolitan Campus. With the Application form, you will receive more information about the steps for applying -- read and follow that information carefully.
6. Submit the program's application form to the appropriate office. Please note that additional documents may be required to accompany your Application form (such as additional copies of high school and college/university transcripts, even if already on file in the Office of Admissions and Records). You will receive directions concerning additional documents when you obtain the program's Application form.

Any falsification of information provided in the application will automatically disqualify applicant for admission to a program.

NOTE: On the accompanying chart, the letter following the program title shows the home campus for the program. Only the home campus offers all the required courses in the major field. Most prerequisites and other specific degree requirements may be completed at any CCC campus.

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	Dental Assisting 1+1 Program (M)	Dental Hygiene (M)	Diagnostic Medical Sonography (Program is listed in College Catalog Fall 2000 - Summer 2001 as Radiography (Diagnostic Medical Sonography))	Dietetic Technology (M)
Application Submission Date	Application may be submitted after meeting requirements listed below.	Application may be submitted after meeting requirements listed below.	Applications may be submitted after meeting all requirements listed below.	Applications may be submitted after meeting all requirements listed below.
HS/GED Required	Yes	Yes	Yes	Yes
English Core Requirement (also see GPA below)	Eligibility* for 1010 (check with program manager for part time option if ineligible).	Complete 1010 (or 101 and 102Z) with "C" or higher.	Complete 1010 with "C" or higher.	Eligibility* for 1010
Mathematics Core Requirement** (also see GPA below)	Complete CCC placement test.	Complete 1141 or higher with "C" or higher.	Complete 1141 (or higher) with "C" or higher.	Eligibility* for 1141 <sup>2</sup>
Other Core Courses/ Requirements (also see GPA below)	Not applicable	Complete all of the following: ●BIO-1100 (or BIO-121) and ●BIO-2330 (or BIO-143 and 144) and ●PSY-1010 (or PSY-101 and 102Z) with "C" or higher in each.	●Complete MA-1020 and ●PHIL-2050 with "C" or higher in each. ●Verification of Basic Heartsavers (CPR) required.	Not applicable
Time Limit on Core Courses (Prior to Application)	Not applicable	Five years (see Notes below)	Not applicable	Not applicable
GPA	No minimum	3.00 core courses 2.50 overall	2.5 core courses 2.0 overall	2.0 core courses 2.0 overall
Work Experience/ Volunteer	20 hours of recent observation or employment in a dental setting	20 hours observation/ employment in a dental setting. 8 of the 20 hours in the Metro Campus dental hygiene clinic.	Not required	Not required
Number Accepted/Year	20	26	10-15	20/yr
Notes/Other Information	●Interview with department staff member required.	●All science course must have been completed within five years of admission to program. ●BIO-2500 Microbiology may not be substituted for BIO-2520 Oral Microbiology and Immunology.	●It is recommended that students take a human anatomy and physiology (BIO-1220 or higher level Human Anatomy & Physiology course) before Fall program admission. ●Core courses may be repeated only once to improve a grade. ●After acceptance into the program and prior to clinical assignment, applicant must submit evidence of good health by fulfilling the health requirements of the Diagnostic Medical Sonography Program.	

\*Eligibility for a specific course may be demonstrated by any of the following:

- Completion of CCC's placement test with a score appropriate into the specific course listed on the chart; OR
- Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

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	Emergency Medical Technology (M-E)	Health Information Management (M)	Massotherapy [Two Programs] [E]	Medical Assisting (M)
Application Submission Date	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below.	Application must be submitted after meeting requirements listed below.	Applications may be submitted while meeting requirements listed below.
HS/GED Required	Yes	Yes	Yes. Transcripts to be mailed to State Medical Board with application form and \$35 for preliminary education approval.	Yes
English Core Requirement (also see GPA below)	Complete 1010 (or 101) with "C" or higher (AAS Degree only)	Complete 1010 (or 101) with "C" or higher	Complete 1010 (or 101) with "C" or higher.	Complete 1010 (or 101) or higher with "C" or higher.
Mathematics Core Requirement** (also see GPA below)	Complete 1141 or higher with "C" or higher (AAS Degree only)	Not applicable	Please see degree requirements.	Eligibility* for 0950 (093) or higher with "C" or higher.
Other Core Courses/ Requirements (also see GPA below)	<ul style="list-style-type: none"> <li>Must have valid driver's license for degree program.</li> <li>EMT basic Ohio certification for EMT-I and EMT-P programs.</li> <li>Signed felon statement form required.</li> </ul>	<ul style="list-style-type: none"> <li>Complete BIO-1100 (or BIO-121) and BIO-1430 (or BIO-143) and</li> <li>CS-1020 (or CS-102) and</li> <li>MA-1020 (or MA-102) with grade of "C" or higher in each.</li> </ul>	<ul style="list-style-type: none"> <li>Complete BIO-1100 (or 121) and</li> <li>BIO-1430 with "C" or higher in each and</li> <li>PSY-1010 (or 101)</li> </ul>	<ul style="list-style-type: none"> <li>MA-1020 (or MA-102) with "C" or higher.</li> <li>Typing speed of 30 words/minute or OADM-1010.</li> </ul>
Time Limit on Core Courses (Prior to Application)	Not applicable	None	Seven years (see Notes below)	Seven years (see Notes below)
GPA	2.00 core courses 2.00 overall	2.50 core courses 2.00 overall	3.00 core courses 2.50 overall	2.50 core courses 2.00 overall
Work Experience/ Volunteer	1 year EMT-B experience preferred for entry into EMT-P.	Not required	Not required	Not required
Number Accepted/Year	200 per year EMT-basic; 10 per year EMT-I; 100 per year EMT-P.	20	25	15
Notes/Other Information	<ul style="list-style-type: none"> <li>EMT-B available at all campuses. EMT-I and EMT-P available at Metro and East.</li> <li>Courses offered at all three campus locations as listed in schedule for each semester.</li> <li>Must be 18 years of age prior to National Registry exam.</li> <li>Personal narrative required for EMT-I and EMT-P.</li> <li>Reference forms required for EMT-I (one) and EMT-P (three).</li> <li>Pre-Test required for admission to EMT-P program. Parametric entry test given mid-July, and as needs dictate throughout the year.</li> <li>EMT-1300, 1310, 1740 must be completed with "C" or higher within one year.</li> </ul>	Upon acceptance into program and prior to clinical practice, student must submit evidence of good health.	<ul style="list-style-type: none"> <li>Science courses must have been completed within the past seven years at time of application submission, and may only be repeated once to improve a grade.</li> <li>Upon acceptance to the program and prior to matriculation, students must submit evidence of good health.</li> <li>Accepted candidates will be required to attend a group observation session prior to matriculation.</li> <li>Preliminary educational approval certificate from State Medical board to be submitted prior to acceptance.</li> </ul>	<ul style="list-style-type: none"> <li>Science and math courses required for degree must have been completed within seven years of date of application, and may only be repeated once to improve a grade.</li> <li>One year (three semesters) Medical Assisting Certificate available at CCC.</li> <li>Sterile Processing and Distribution Technology Certificate available at CCC.</li> </ul>

\*Eligibility for a specific course may be demonstrated by any of the following:

- Completion of CCC's placement test with a score appropriate into the specific course listed on the chart; OR
- Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

\*\*MATH-1800/2800 (or 270) will not meet this requirement.

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## General Application Procedures: Nursing & Health Careers

	Medical Laboratory Technology (M)	Nursing	Nursing (Accelerated Track)	Occupational Therapy Assistant (M)
Application Submission Date	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below.
HS/GED Required	Yes	Yes	Submit all college transcripts verifying Bachelor degree	Yes
English Core Requirement (also see GPA below)	Complete 1010 (or 101) with "C" or higher.	Complete ENG-1010 <sup>2</sup> with "C" or higher	Complete ENG-1010 <sup>2</sup> with "C" or higher	Complete 1010 with "B" or higher.
Mathematics Core Requirement** (also see GPA below)	Complete 1200 (or 120) or higher with "C" or higher.	Complete MATH-1141 <sup>2</sup> or higher with "C" or higher**	Complete MATH-1141 <sup>2</sup> or higher with "C" or higher**	MATH-1200 or higher with "B" or higher.
Other Core Courses/ Requirements (also see GPA below)	<ul style="list-style-type: none"> <li>Complete BIO-1100 (or BIO-121) and</li> <li>CHEM-1300 and CHEM-130L (or CHEM-130 and 135) with "C" or higher in each.</li> </ul>	<ul style="list-style-type: none"> <li>Complete BIO-1100 or CHEM-1010 and 1020 and</li> <li>IPSY-1010<sup>2</sup> with "C" or higher in each.</li> </ul>	<ul style="list-style-type: none"> <li>Complete</li> <li>BIO-1100<sup>2</sup> or CHEM-1010 and 1020<sup>2</sup> and</li> <li>BIO-2330<sup>2</sup> and</li> <li>BIO-2340<sup>2</sup> and</li> <li>BIO-2500<sup>2</sup> and</li> <li>PSY-1010<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Complete BIO-1100 and</li> <li>BIO-1430 and</li> <li>MA-1020 with "B" or higher in each</li> </ul>
Time Limit on Core Courses (Prior to Application)	Seven years (see Notes below)	Science courses listed above must have been completed within the past seven years at the time Pre-Admission Examination, and when RN application is submitted.	Science courses listed above must have been completed within the past seven years when the RN application is submitted.	Seven years (see Notes below)
GPA	2.50 core courses 2.50 overall	2.00 core courses 2.50 overall	2.00 core courses 2.50 overall	3.00 core courses 2.70 overall
Work Experience/ Volunteer	Not required	Not required	Not required	25 hours volunteer work in Occupational Therapy department under supervision of licensed occupational therapist or occupational therapist assistant. Volunteer hours must be documented.
Number Accepted/Year	15	Day class admitted Fall and Spring. Modified evening class admitted Fall only. Space available basis.	Accelerated Track admitted Summer, Day section only. space available basis.	26
Notes/Other Information	<ul style="list-style-type: none"> <li>Science and math courses must have been completed within the past seven years, and may only be repeated once to improve a grade. Applicants with bachelor's or higher degree in sciences may have 7-year limit on science and math courses waived (contact program manager).</li> <li>Laboratory Phlebotomy Competency Award available at CCC.</li> </ul>	<ul style="list-style-type: none"> <li>NET Pre-Admission Exam required after successfully completing 4 core courses listed above and an overall 2.50 GPA</li> <li>Only 1 of the 4 core courses may be repeated if first grade is "D"/"F" within past 7 years.</li> <li>Only 1 of the 3 Biology courses BIO2330 (or 1430), 2340 (or 1440) and 2500 may be repeated if the first grade is "D"/"F" within past 7 years.</li> <li>LPN's may apply for ACCESS in Nursing (see department for details).</li> <li>Once beginning the nursing course sequence, all nursing courses must be completed in four years.</li> <li>CHEM 1010 and CHEM 1020 replace BIO 1100 for students planning to transfer to a Baccalaureate Nursing Program.</li> <li>Transfer students must meet all admission and progression requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Pre-Admission test not required</li> <li>Only 1 of the following core courses: ENG-1010, PSY-1010, MATH-1141, BIO-1100 may be repeated if first grade is "D"/"F" within past 7 years.</li> <li>Only 1 of the remaining Biology core courses: BIO-2330 (or 1430), 2340 (or 1440) and 2500 may be repeated if the first grade is "D"/"F" within past 7 years.</li> <li>Once beginning the nursing course sequence, all nursing courses must be completed in 2.5 years.</li> <li>CHEM 1010 and CHEM 1020 replace BIO-1100 for students planning to transfer to a Baccalaureate Nursing Program.</li> <li>Transfer students must meet all admission and progression requirements.</li> </ul>	<ul style="list-style-type: none"> <li>English, math and science courses may be repeated only one time to earn a grade of "B".</li> <li>Science and math courses may not be more than seven years old at time of application.</li> </ul>

\*Eligibility for a specific course may be demonstrated by any of the following:

- Completion of CCC's placement test with a score appropriate into the specific course listed on the chart; OR
- Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

\*\*MATH-1800/2800 (or 270) will not meet this requirement.

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## General Application Procedures: Nursing & Health Careers

	Optical Technology (M)	Pharmacy Technology (E)	Physical Therapist Assisting (M)
Application Submission Date	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting all requirements listed below.
HS/GED Required	Yes	Yes	Yes
English Core Requirement (also see GPA below)	Eligibility* for ENG-1010 (or 101) with "C" or higher.	Complete 1010 (or 101) with "C" or higher.	Complete 1010 with "C" or higher.
Mathematics Core Requirement** (also see GPA below)	Eligibility* for MATH-1060 (or 106) or higher with "C" or higher.	Eligibility* for MATH-1140; (or completion of MATH-100N or higher with "C" or higher).	Complete 1200 or higher with "C" or higher.
Other Core Courses/ Requirements (also see GPA below)	Not applicable	Complete BIO-1100 (or 121) with "C" or higher.	<ul style="list-style-type: none"> <li>•Complete BIO-1430 (or 143) [see Notes below] and</li> <li>•MA-1020 (or 102) with "C" or higher</li> </ul>
Time Limit on Core Courses Prior to Application	Not applicable	Seven years (see Notes below)	Ten years (see Notes below)
GPA	2.00 overall	2.00 core courses 2.00 overall	3.00 core courses 2.70 overall
Work Experience/ Volunteer	Not required	Not required	100 hours volunteer work in Physical Therapy department under supervision of licensed physical therapist or physical therapist assistant. Volunteer hours must be documented.
Number Accepted per Year	25	48	32
Notes/Other Information	<ul style="list-style-type: none"> <li>•Certificate Available</li> </ul>	<ul style="list-style-type: none"> <li>•Science and math courses must have been completed within the past seven years at time of admission to program, and may only be repeated once to improve a grade. *MATH-100N will no longer be accepted for admittance into program after Fall 2001.</li> <li>•Interview with program manager encouraged.</li> <li>•Pharmacy Technician Certificate available.</li> </ul>	<ul style="list-style-type: none"> <li>•Science and math courses must have been completed within the past ten years. Core courses may only be repeated once to improve a grade.</li> <li>•BIO-1430 requires prerequisite course BIO-1100 (or 121).</li> <li>•BIO-1100 is required for the AAS degree in Physical Therapy.</li> </ul>

\*Eligibility for a specific course may be demonstrated by any of the following:

- a) Completion of CCC's placement test with a score appropriate into the specific course listed on the chart; OR
- b) Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- c) Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

<sup>2</sup>Or prior completion of equivalent quarter course (where applicable). Contact Program Manager/Coordinator regarding eligible quarter courses.

\*\*MATH-1800/1820 and 2800/2820 will not meet this requirement. **In Nursing**, MATH-1160 and 1250 will not meet this requirement as well.

For students admitted to begin this program prior to Fall 2004, MATH-1140, Applied Algebra, will meet the new math degree requirement for admission to this program. MATH-1140 will also meet the College's math requirement for graduation through summer 2006. Students admitted to begin this program Fall 2004 and after must complete MATH-1141 Applied Algebra and Mathematical Reasoning, or higher.

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## General Application Procedures: Nursing & Health Careers

	Physician Assistant (W)	Practical Nursing (M) (Certificate)	Radiography (W)
Application Submission Date	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below. Send to Program Manager, Ms. Janice Melnick, Metro Campus, 216-987-3138	Applications may be submitted after meeting all requirements listed below.
HS/GED Required	Not required	Recommended, not required	Yes
English Core Requirement (also see GPA below)	Complete 1010 (or 101) with grade of "C" or higher.	Eligibility* for 1010	Complete 1010 (or 101) with "C" or higher.
Mathematics Core Requirement** (also see GPA below)	Complete 1140 (or 114 or 100N) or higher with "C" or higher.	Eligibility* for 1141	Complete 1140 (or 114) or higher with "C" or higher.
Other Core Courses/ Requirements (also see GPA below)	<ul style="list-style-type: none"> <li>●Complete BIO-1100 (or BIO-121) and BIO-1430 and 1440 (or BIO-143, 144, 145 or equivalent transition courses) with "C" or higher in each.</li> </ul>	Not applicable	<ul style="list-style-type: none"> <li>●Complete MA-1020 (or 102) and PSY-1010 (or 101) with "C" or higher in each.</li> <li>●Verification of Basic Heart Savers (CPR) required.</li> </ul>
Time Limit on Core Courses Prior to Application	Seven years (except for English) (see Notes below)	Seven years (see notes below)	Seven years (see Notes below)
GPA	Minimum 3.00 for English, Math, and BIO-1100. Minimum 3.00 calculated for BIO-1430 and 1440. Each of these courses may be repeated only once to improve a grade below "C". 2.70 overall (in program required courses). A minimum grade of "C" must be earned in each course, (i.e. a "D" in one of these courses will not be accepted.)	2.00 overall	2.50 core courses 2.00 overall
Work Experience/ Volunteer	Verification of completion of an accredited health career education program (minimum of 12 months in duration; an associate or higher degree or medical training in the US Military will be accepted in lieu of an accredited health career education program); and verification of a minimum of at least two years full-time (or 4,000 hours) recent (within the last 7 years) health care experience related to patient care. Does not include clinical experience time obtained as part of an educational or training program or volunteer experience.	Not required	Not required
Number Accepted per Year	25	Day class admitted Fall only. space available basis.	40-50 (2 classes - Fall and Spring start)
Notes/Other Information	<ul style="list-style-type: none"> <li>●Science and math courses must have been completed within the past seven years at time of application, and may only be repeated once to improve a grade. If a prior math course is over seven years old, contact Program Manager for other option.</li> <li>●Upon acceptance to the program and prior to matriculation, students must submit evidence of good health, and the ability to undertake the defined technical standards of the program. A copy of the Technical Standards for the PA Program is available "on reserve" in each of the CCC Campus libraries, and is also available upon request by calling the PA Program Assistant at 216-987-5266.</li> <li>●Accepted candidates will be required to attend a group orientation session prior to matriculation.</li> <li>●The student will be required to take a medical terminology departmental proficiency test which will be given at the new student group orientation session after acceptance into the program.</li> </ul>	<ul style="list-style-type: none"> <li>●BIO-1100 [CHEM-1010 and CHEM-1020 replace BIO-1100<sup>2</sup> for students planning to transfer credits] and BIO-2330 (or 1430) <sup>2</sup> not required for admission but cannot be more than 7 years old from date of admission. Only one science course may be repeated once to improve a grade of less than "C".</li> <li>●Once Practical Nursing courses have begun, all other classes must be taken in program sequence.</li> <li>●A grade of "C" or higher required for ENG-1010 and MATH-1141.</li> <li>●Pass Nurse Entrance Test (NET); achieve a grade of 50% or higher in Reading and Comprehension.</li> <li>●ACCESS in Nursing available for graduates of this Certificate program.</li> <li>HS/GED required</li> </ul>	<ul style="list-style-type: none"> <li>●Core course may be repeated only once to improve a grade below "C".</li> <li>●Upon acceptance into the program, and prior to clinical assignment, applicant must fulfill the health requirements of the Radiography Program. Student must submit evidence of good health.</li> </ul>

\*Eligibility for a specific course may be demonstrated by any of the following:

- Completion of CCC's placement test with a score appropriate into the specific course listed on the chart; OR
- Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

<sup>2</sup>Or prior completion of equivalent quarter course (where applicable). Contact Program Manager/Coordinator regarding eligible quarter courses.

\*\*For Practical Nursing, MATH-1160,1250, 1800/1820 and 2800/2820 will not meet this requirement.

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## General Application Procedures: Nursing & Health Careers

	<b>Respiratory Care (W)</b>	<b>Surgical Physician Assistant (W)</b>
Application Submission Date	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below.
HS/GED Required	Yes	Not required
English Core Requirement (also see GPA below)	Complete 1010 (or 101) with "C" or higher.	Complete 1010 (or 101) with "C" or higher.
Mathematics Core Requirement** (also see GPA below)	Complete 1140 (or 114) or higher with "C" or higher.	Complete 1140 (or 114 or 100N) or higher with "C" or higher.
Other Core Courses/ Requirements (also see GPA below)	<ul style="list-style-type: none"> <li>Complete BIO-1100 or CHEM-1010 and 1020 (or BIO-121 or CHEM-101 and 102), and IBIO-1430 (or BIO-143) with "C" or higher in each.</li> </ul>	<ul style="list-style-type: none"> <li>Complete BIO-1100 (BIO-121) with "C" or higher.</li> <li>Complete BIO-1430 and 1440 (or BIO-143, 144, and 145, or equivalent transition courses) with "C" or higher in each.</li> </ul>
Time Limit on Core Courses Prior to Application	No time limit required	Seven years (except for English) (see Notes below)
GPA	2.50 core courses 2.00 overall	Minimum 3.00 for English, Math, and BIO-1100. Minimum 3.00 calculated for BIO-1430 and 1440. Each of these courses may be repeated only once to improve a grade below "C". 2.70 overall (in program required courses). Minimum grade of "C" must be earned in each course (i.e. a "D" in one of these courses will not be accepted).
Work Experience/ Volunteer	Observation visit required (see details in application packet)	Verification of completion of an accredited health career education program (minimum of 12 months in duration; an associate or higher degree or medical training in the US Military will be accepted in lieu of an accredited health career education program); and verification of a minimum of at least two years full-time (or 4,000 hours) recent (within the last 7 years) health care experience related to patient care. Does not include clinical experience time obtained as part of an educational or training program or volunteer experience.
Number Accepted per Year	25	25
Notes/Other Information	<ul style="list-style-type: none"> <li>Pre-admission status may be offered if core requirements are incomplete. Contact David Lucas at 216-987-5267.</li> <li>Core courses may be repeated only once to improve a grade below "C".</li> <li>Accepted applicants must attend a group information session prior to Fall semester.</li> <li>Polysomnography (Sleep Disorders) Internal Award available. Contact David Lucas, Program Manager, at (216) 987-5267 for information or application packet.</li> </ul>	<ul style="list-style-type: none"> <li>Science and math courses must have been completed within the past seven years at time of application, and may only be repeated once to improve a grade. If a prior math course is over seven years old, contact Program Manager for other option.</li> <li>Upon acceptance to the program and prior to matriculation, students must submit evidence of good health, and the ability to undertake the defined technical standards of the program. A copy of the <u>Technical Standards for the Surgical PA Program</u> is available "on reserve" in each of the CCC Campus libraries, and is also available upon request by calling the Surgical PA Program Assistant at 216-987-5266.</li> <li>Accepted candidates will be required to attend a group orientation session prior to matriculation.</li> <li>The student will be required to take a medical terminology departmental proficiency test which will be given at the new student group orientation session after acceptance into the program.</li> </ul>

\*Eligibility for a specific course may be demonstrated by any of the following:

- Completion of CCC's placement test with a score appropriate into the specific course listed on the chart; OR
- Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

\*\*MATH-1800/2800 (or 270) will not meet this requirement.

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## General Application Procedures: Nursing & Health Careers

	<b>Surgical Technology (M)</b>	<b>Veterinary Technology (W)</b>
Application Submission Date	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below.
HS/GED Required	Yes	Yes
English Core Requirement (also see GPA below)	Complete 1010 (or 101) with "C" or higher (see Notes below).	Complete 1010 (or 101) or higher with "C" or higher
Mathematics Core Requirement** (also see GPA below)	Complete 1140 (or 114) or higher with "C" or higher.	Complete 1140 (or 114) or higher with "C" or higher.
Other Core Courses/ Requirements (also see GPA below)	<ul style="list-style-type: none"> <li>●Complete MA-1020 (or MA-102) and 1BIO-1100 (or BIO-121) and</li> <li>●BIO-1430 (or BIO-143) with "C" or higher in each (see notes below).</li> </ul>	Complete BIO-1100 (or 121) with "C" or higher.
Time Limit on Core Courses Prior to Application	Seven years (see notes below)	None
GPA	2.50 core courses 2.00 overall	2.50 core courses 2.00 overall in program required courses
Work Experience/ Volunteer	Not required	Not required
Number Accepted per Year	20-24 Contingent upon available clinical sites	25
Notes/Other Information	<ul style="list-style-type: none"> <li>●In Fall 2001 semester: ENG-1010 and BIO-1430 may be taken concurrently with surgical technologist courses during Fall semester.</li> <li>●Sciences and math courses must have been completed within the past seven years, and may only be repeated once to improve a grade.</li> <li>●Upon acceptance to the program and prior to enrollment, students must submit evidence of personal healthcare insurance coverage and evidence of good health.</li> <li>●Accepted candidates will be required to attend a student group orientation session after acceptance into the program.</li> </ul>	<ul style="list-style-type: none"> <li>●*MATH-100N will no longer be accepted for admittance into program after Fall 2001.</li> <li>●Core courses may be repeated only once to improve a grade below "C" within the past seven years at the time a complete application is submitted.</li> <li>●Upon acceptance to the program and prior to matriculation, the applicant will be required to fulfill the health requirements of the veterinary technology program.</li> <li>●Accepted candidates will be required to attend a group information session prior to Fall Semester. Date, time and location will be indicated in the acceptance letter.</li> </ul>

\*Eligibility for a specific course may be demonstrated by any of the following:

- a) Completion of CCC's placement test with a score appropriate into the specific course listed on the chart; OR
- b) Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- c) Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

\*\*MATH-1800/2800 (or 270) will not meet this requirement.



# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## General Application Procedures: Nursing & Health Careers

	Dental Assisting (M) (Certificate)	Diagnostic Medical Sonography (Post-Degree Professional Certificate) (W)(	Massotherapy (Post-Degree Professional Certificate) (E)	Medical Assisting (Certificate)	Optical Technology (M) (Certificate)
Application Submission Date	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting all requirements listed below.	Application may be submitted after meeting requirements listed below	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below.
HS/GED Required	Yes	Submit all college transcripts verifying Associate or Bachelor degree.	Yes. Transcripts to be mailed to State Medical Board with application form and \$35 for preliminary education approval.	Yes	Yes
English Core Requirement (also see GPA below)	Eligibility* for 1010 (or 101).	Not applicable	Associate or Bachelor degree required.	Complete 1010 (or 101) with "C" or higher.	Not applicable
Mathematics Core Requirement** (also see GPA below)	Complete placement test.	Not applicable	Not applicable	Complete 1140 (or 114) or higher with "C" or higher.	Not applicable
Other Core Courses/ Requirements (also see GPA below)	Not applicable	Not applicable	Complete MT-1240 and MT-1270 or any equivalent college level anatomy and physiology courses; and MT-1100 with "C" or higher in each.	<ul style="list-style-type: none"> <li>Complete HTEC-1610 (or 161) and IMA-1020 (or 102) with "C" or higher in each.</li> <li>Typing speed of 30 words per minute</li> </ul>	Not applicable
Time Limit on Core Courses Prior to Application	Not applicable	Not applicable	Seven years (see Notes below)	Seven years (see Notes below)	Not applicable
GPA	No minimum	2.5 core courses 2.0 overall	2.50 core course 2.5 overall	2.00 core courses 2.00 overall	Not applicable
Work Experience/ Volunteer	20 hours of recent observation or work in dental assisting A	Verification of license/credential of one of the following: Diagnostic Medical Sonographer, Radiologic Technologist, Respiratory Therapist, Occupational Therapist, Physical Therapist, or Registered Nurse.	Not required	Not required	Not required
Number Accepted per Year	20	30-45/yr	25	15	25
Notes/Other Information	<p>A See program manager if unable to meet this requirement.</p> <ul style="list-style-type: none"> <li>Interview with department staff member required.</li> </ul>	<ul style="list-style-type: none"> <li>After acceptance into program and prior to clinical assignment, applicant must submit verification of current Basic Heartsavers (CPR) and evidence of good health by fulfilling health requirements of DMS Program. Students admitted to begin this program Fall 2004 and after must complete MATH-1141 Applied Algebra and Mathematical Reasoning, or higher.</li> </ul>	<ul style="list-style-type: none"> <li>Science courses must have been completed within the past seven years at time of application submission, and may only be repeated once to improve a grade.</li> <li>Upon acceptance to the program and prior to matriculation, students must submit evidence of good health.</li> <li>Accepted candidates will be required to attend a group observation session prior to matriculation.</li> <li>Preliminary educational approval certificate from State medical board to be submitted prior to acceptance.</li> </ul>	<ul style="list-style-type: none"> <li>Science and math courses must have been completed within seven years of date of application, and may only be repeated once to improve a grade.</li> </ul>	

\*Eligibility for a specific course may be demonstrated by any of the following:

- Completion of CCC's placement test with a score appropriate into the specific course listed on the chart; OR
- Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

<sup>2</sup>Or prior completion of equivalent quarter course (where applicable). Contact Program Manager/Coordinator regarding eligible quarter courses.

\*\*MATH-1800/2800 and 2800/2820 will not meet this requirement.

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## General Application Procedures: Nursing & Health Careers

	Pharmacy Technician (E) (Certificate)	Practical Nursing (Certificate) (E)	Sterile Processing and Distribution Technology (M) (Certificate)
Application Submission Date	Applications may be submitted after meeting requirements listed below.	Applications may be submitted after meeting requirements listed below. Send to Eastern Campus, East I.	Applications may be submitted after meeting requirements listed below.
HS/GED Required	Yes	Recommended, not required	Yes
English Core Requirement (also see GPA below)	Complete 1010 (or 101) with "C" or higher.	Eligibility* for ENG-1010 (or 101 and 102 or 102Z).	Complete 1010 (or 101) with "C" or higher.
Mathematics Core Requirement** (also see GPA below)	Eligibility* for 1140 (or completion of 100N or higher with "C" or higher).	Eligibility* for 1140 (or 114).	Complete 1060 (106) or higher with "C" or higher.
Other Core Courses/ Requirements (also see GPA below)	Complete BIO-1100 (or 121) with "C" or higher.	Not applicable.	Complete MA-1010 or 1020 (or 100 or 102) with "C" or higher.
Time Limit on Core Courses Prior to Application	Seven years (see Notes below)	Seven years (see Notes below)	Seven years
GPA	2.00 core courses 2.00 overall	2.00 overall	2.00 core courses 2.00 overall
Work Experience/ Volunteer	Not required	Not required	None
Number Accepted per Year	Varies	Day class admitted Fall only. Space available basis.	15
Notes/Other Information	<ul style="list-style-type: none"> <li>● Science and math courses must have been completed within the past seven years at the time of admission to the program, and may be repeated only once to improve a grade. *MATH-100N will no longer be accepted for admittance into program after Fall 2001.</li> <li>● Interview with program manager encouraged.</li> </ul>	<ul style="list-style-type: none"> <li>● BIO-1100 (or 121) [CHEM-1010 and CHEM-1020 replace BIO-1100 for students planning to transfer credits] and BIO-1430 (or 143) are not required for admission but cannot be more than seven years old from date of admission. Each may be repeated once to improve a grade of less than "C".</li> <li>● Pass Nurse Entrance Test (NET); achieve a grade of 50% or higher in Essential Math Skills; and a grade of 50% or higher in Reading and Comprehension.</li> <li>● ACCESS in Nursing available for graduates of this certificate program.</li> </ul>	

\*Eligibility for a specific course may be demonstrated by any of the following:

- a) Completion of CCC's placement test with a score appropriate into the specific course listed on the chart; OR
- b) Completion of the prerequisite for the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university); OR
- c) Completion of the course listed on the chart with a grade of "C" or higher (including equivalent courses transferred in from another college or university).

\*\*MATH-1800/2800 (or 270) will not meet this requirement.

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### PLANT SCIENCE AND LANDSCAPE TECHNOLOGY

#### Associate of Applied Science Degree in Plant Science and Landscape Technology

This ornamental horticulture program prepares students for entry level to middle management positions in the landscape contracting industry. Graduates of this program are in great demand to help fill the increasing need for skilled professionals in this fast expanding industry. Plant science and landscape technicians help to maintain and develop the urban and suburban green spaces and assist homeowners in maintaining and improving their grounds. Much of the course work of this landscape program is also applicable to other areas of horticulture. The curriculum of this two year, full-time program includes a summer field experience between the first and second years and is composed of a balance of classroom, laboratory and practical educational experiences. Classes are available both day and evening and students may enroll on either a full or part-time basis.

Program Manager - Mr. David Emmitt (216-987-2235). This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
ENG-1010	College Composition I	3
MATH-1060	Survey of Mathematics or higher*	3
PST-1300	Horticultural Botany	3
PST-1310	Landscape Plants I	3
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)**	3
		18
<u>Second Semester</u>		
IT 1010	Introduction to Microcomputer Applications	3
MARK-2010	Principles of Marketing	3
PST-1320	Landscape Plants II	3
PST-1350	Plant Production	2
SPCH-1000	Fundamentals of Interpersonal Communication	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		16
<u>Summer Semester</u>		
PST-2950	Field Experience	3
		3
<u>Third Semester</u>		
BADM-1300	Small Business Management	4
PSCI-1020	Chemistry	3
PSCI-102L	Chemistry Lab	1
PST-2330	Entomology	3
PST-2340	Plant Pathology	3
PST-2410	Garden Center Operations I	3
		17
<u>Fourth Semester</u>		
EMT-1310	Cardiopulmonary Resuscitation	1
PST-2310	Soil Technology	3
PST-2300	Interior Foliage Identification & Culture... OR	2
PST-2xxx	Any 2000-level PST elective course***	
PST-2360	Landscape Design	3
PST-2420	Garden Center Operations II C	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		15
	PROGRAM TOTAL	69

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits

\*\*\*PST-2300 is recommended

Note: PT/General Education Requirement courses as listed satisfy competencies C&S.

C = Capstone Course

### Business Technologies

Associate of Applied Business Degree

- Accounting
- Business Management - Basic
- Business Management - Human Resources Management
- Business Management - Office Operations Management
- Business Management - Small Business Management
- Commercial Art and Design
- Court Reporting and Captioning
- Hospitality Management - Culinary Art
- Hospitality Management - Lodging-Tourism Management
- Hospitality Management - Restaurant/Food Service Management
- Information Technology - Information Application Specialist
- Information Technology - Mainframe Programming
- Information Technology - Microcomputer Specialist
- Information Technology - Networking Software
- Information Technology - Web Page Development and Maintenance
- Interior Design
- Marketing
- Paralegal Studies
- Purchasing Management
- Real Estate - Basic Program
- Real Estate - Mortgage Finance

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## ACCOUNTING

### Associate of Applied Business Degree in Accounting

The Associate Degree Program in Accounting addresses the fundamentals of accounting education: namely, verbal and written communication skills, decision-making abilities and sound technical competence. The program concentrates on providing a foundation in preparation for paraprofessional accounting careers and future advancement into supervisory positions. Current technology has been integrated and new areas of study added to provide students with both the theory and practical skills necessary to meet the demands of today's business environment.

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<b>First Semester</b>		
ACCT-1310	Financial Accounting	4
BADM-1020	Introduction to Business.....OR	3-4
BADM-1120	Principles of Management	
ECON-2610	Principles of Macroeconomics*	4
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
		<b>17-18</b>
<b>Second Semester</b>		
ACCT-1030	Payroll	3
ACCT-1340	Managerial Accounting	4
ECON-2620	Principles of Microeconomics*	4
ENG-1020	College Composition II.....OR	3
SPCH-1000	Fundamentals of Interpersonal Communication.....OR	
SPCH-1010	Fundamentals of Speech Communication	
MATH-1060	Survey of Mathematics or higher**	3
		<b>17</b>
<b>Third Semester</b>		
ACCT-1040	Individual Taxation	3
ACCT-2310	Intermediate Accounting I	4
ACCT/FIN-xxxx....	Any ACCT/FIN elective course	2-4
BADM 2010	Business Communications.....OR	3-4
BADM-2150	Business Law	
FIN-2100	Financial Management	3
		<b>15-18</b>
<b>Fourth Semester</b>		
ACCT-1320	Accounting with Computer Applications <u>C</u>	4
ACCT-2040	Business Taxation	3
ACCT-2340	Cost Accounting	4
ACCT-2xxx	Any 2000-level ACCT elective course	4
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>64-68</b>

\*Minimum 8 semester credits of Arts & Humanities/Social & Behavioral Science required – must include ECON-2610 and 2620.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## Business Management

### Associate of Applied Business Degree in Business Management

This program offers a broad scope of training for general management. Entry level positions in industrial and retailing are possible. The program offers the basics for large and small businesses as well. For the experienced manager, the program provides the foundations for career advancement.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
BADM-2200	Human Relations in Business	3
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
MATH-1060	Survey of Mathematics or higher*	3
		<b>15</b>
<u>Second Semester</u>		
BADM-1120	Principles of Management	4
ECON-2610	Principles of Macroeconomics**	4
ENG-1020	College Composition II	3
MARK-2010	Principles of Marketing	3
SPCH-1010	Fundamentals of Speech Communications.....OR	3
BADM 2010	Business Communications	
		<b>17</b>
<u>Third Semester</u>		
ACCT-1010	Quantitative Applications for Accounting and Business...OR	3-4
ACCT-1310	Financial Accounting	
BADM-1210	Labor-Management Relations	2
BADM 2150	Business Law	4
BADM 2160	Introduction to Purchasing	3
ECON 2620	Principles of Microeconomics**	4
		<b>17-18</b>
<u>Fourth Semester</u>		
ANTH-1010	Cultural Anthropology.....OR	3
POL-1010	American National Government...OR	
PSY-1010	General Psychology.....OR	
SOC-1010	Introductory Sociology	
BADM-2110	Production/Operations Management	3
BADM-2330	Human Resource Management	3
BADM-2410	Office Management	3
BADM-2500	Strategic Management <u>C</u>	3
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>64-65</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits of Arts & Humanities/Social & Behavioral Science required – must include ECON-2610 and 2620.

Note: Courses as listed satisfy competencies C&S.

Note: Courses as listed satisfy the minimum of 20 semester credits at the 2000 level.

C = Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## BUSINESS MANAGEMENT (Human Resource Management)

### Associate of Applied Business Degree in Business Management with a Concentration in Human Resource Management

Students experience and develop Human Resource generalist capabilities through this competency-driven and applications-based Human Resource program. By combining a dynamic market designed and driven Human Resource Concentration with a well rounded Business Management Degree, the student is preparing to become a marketable Human Resource practitioner with a business partner orientation. Those already in the function can develop and advance their career potential through this up-to-date program

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
BADM-2200	Human Relations in Business	3
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
MATH-1060	Survey of Mathematics or higher*	3
		<b>15</b>
<u>Second Semester</u>		
BADM-1120	Principles of Management	4
BADM-2330	Human Resource Management	3
ECON-2610	Principles of Macroeconomics**	4
ENG-1020	College Composition II	3
SPCH-1010	Fundamentals of Speech Communications...OR	3
BADM-2010	Business Communications	
		<b>17</b>
<u>Third Semester</u>		
ACCT-1010	Quantitative Applications for Accounting and Business OR	3-4
ACCT-1310	Financial Accounting	
BADM-1210	Labor-Management Relations	3
BADM-2150	Business Law	4
BADM-2340	Human Resource Law and Application	3
ECON-2620	Principles of Microeconomics**	4
		<b>17-18</b>
<u>Fourth Semester</u>		
ANTH-1010	Cultural Anthropology.....OR	3
POL-1010	American National Government...OR	
PSY-1010	General Psychology.....OR	
SOC-1010	Introductory Sociology	
BADM-2210	Quality Management	3
BADM-2390	Advanced Human Resource Practices <u>C</u>	3
MARK-2010	Principles of Marketing	3
PL-1460	Worker's Compensation Law	3
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>64-65</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – must include ECON-2610 and 2620.

Note: Courses as listed satisfy competencies C&S.

Note: Courses as listed satisfy the minimum of 20 semester credits at the 2000 level.

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### BUSINESS MANAGEMENT (Office Operations Management)

(formerly Office Administration-Administrative Assistant)

#### Associate of Applied Business Degree in Business Management with a Concentration in Office Operations Management

Students develop competencies in office procedures, information processing, communications, organizational skills, time management, project management, and computer usage. They further develop the fundamental skills necessary for supervision, office management, information processing, accounting, spreadsheet organization, and other techniques that provide the base for a broad range of office jobs.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1000	Business Language Skills	2
BADM-1020	Introduction to Business	3
ENG-1010	College Composition I	3
IT-1000	Keyboarding *	2
IT-1010	Introduction to Microcomputer Applications	3
IT-1030	Internet Fundamentals	2
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
		<b>18</b>
<u>Second Semester</u>		
BADM-1120	Principles of Management	4
ITAP-1200	Word Processing I	3
ITAP-1230	Basic Business Formatting	3
ITAP-1240	Basic Filing with Microcomputer Applications	3
MATH-1060	Survey of Mathematics or higher***	3
Communication...	(See AAB Degree Requirements)	3
		<b>19</b>
<u>Third Semester</u>		
BADM-2010	Business Communications	3
BADM-2200	Human Relations in Business	3
BADM-2410	Office Management	3
ITAP-1250	Electronic Spreadsheet Use and Design	3
SPCH-1000	Fundamentals of Interpersonal Communication **	3
		<b>15</b>
<u>Fourth Semester</u>		
ACCT-xxxx	ACCT elective course	3
BADM-2150	Business Law	4
BADM-2990	Office Procedures and Practices <u>C</u>	3
IT-2300	Database Use and Design	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	2
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>67</b>

\*May be waived through demonstration of 20 wpm skills or equivalent proficiency.

\*\*Minimum 8 semester credits – must include SPCH-1000 and a minimum of 1 credit at the 2000-level.

\*\*\*MATH-1141, 1800/2800, 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) [See Competency and Skills Certification list in College Catalog.]

C = Capstone Course



# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## BUSINESS MANAGEMENT (Small Business Management)

### Associate of Applied Business Degree in Business Management with a Concentration in Small Business Management

This program is designed for those who aspire to be entrepreneurs as well as for those already operating a small business.

Fundamentals of entrepreneurship are emphasized. A solid management foundation is provided.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ANTH-1010	Cultural Anthropology.....OR	3
POL-1010	American National Government.....OR	
PSY-1010	General Psychology.....OR	
SOC-1010	Introductory Sociology	
BADM-1020	Introduction to Business	3
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
MATH-1060	Survey of Mathematics or higher*	3
		<b>15</b>
<u>Second Semester</u>		
ACCT-1310	Financial Accounting	4
BADM-1300	Small Business Management	4
ECON-2610	Principles of Macroeconomics**	4
ENG-1020	College Composition II	3
SPCH-1010	Fundamentals of Speech Communications	3
		<b>18</b>
<u>Third Semester</u>		
BADM-1120	Principles of Management	4
BADM-2200	Human Relations in Business	4
BADM-2450	New Business Development <u>C</u>	5
ECON-2620	Principles of Microeconomics**	4
MARK-2010	Principles of Marketing	3
		<b>19</b>
<u>Fourth Semester</u>		
BADM-2010	Business Communications	3
BADM-2150	Business Law	4
BADM-2160	Introduction to Purchasing	3
BADM-2470	Marketing Techniques for Small Business <u>C</u>	3
MARK-2270	Principles of Advertising	3
		<b>16</b>
	<b>PROGRAM TOTAL</b>	<b>68</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits of Arts & Humanities/Social & Behavioral Science required – must include ECON-2610 and 2620.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

**Commercial Art and Design**

**Associate of Applied Business Degree in Commercial Art and Design**

The Commercial Art & Design program is based on professional standards in building a marketable portfolio preparing the graduates for a variety of full-time or freelance employment. The emphasis is on design and studio skills, conceptual thinking and problem solving as they relate to the commercial artist and the designer.

Students have the opportunity to develop or upgrade traditional drawing board and computer art skills for communicating graphically. The program offers three degree options along with a one-year certificate in Graphic Design.

1. Advertising Design Option: This option offers qualified students the opportunity to prepare for careers in advertising agencies, graphic and corporate communication firms, art studios, public relations firms, direct marketing and publication.

2. Graphic Design Option: This option offers qualified students the opportunity to prepare for positions as graphic designers with art and corporate art studios, exhibit and package design firms, publishers, the broadcasting media, department stores, typographers, service bureaus and printers.

3. Illustration Option: This option offers qualified students the opportunity to prepare for positions as illustrators in art studios, department stores, ad agencies, publishing services and media studios.

This program has application and/or progression requirements.

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
CART-1020	Macintosh Basics	1
CART-1050	Introduction to Commercial Art and Graphic Design	2
CART-1060	History and Trends in CART	3
CART-1300	Typography and Layout	2
CART-1310	Graphic Design Drawing	1
CART-131L	Graphic Design Drawing Studio	1
CART-1340	Rendering Techniques	2
ENG-1010	College Composition I	3
		<b>18</b>
<u>Second Semester</u>		
ART-1050	Drawing I	3
CART-1400	Decorative Design.....OR	2-3
MARK-2010	Principles of Marketing	
CART-1500	Advertising and Design	2
CART-1600	Imaging and Design	1
CART-160L	Imaging and Design Studio	1
MATH-1060	Survey of Mathematics or higher*	3
Communications...	(See AAB Degree Requirements)	3
		<b>15-16</b>
<u>Third Semester</u>		
ART-xxxx	ART elective course**	3
CART-2300	Page Layout and Design	2
CART-2310	Graphic Design and Illustration	2
CART-2320	Designing for Production	2
CART-2340	Illustration in Pen and Ink.....OR	2-3
CART-2410	Corporate Graphics.....OR	
MARK-2270	Principles of Advertising	
CART-xxxx	CART elective course***	1-2
CART-xxxx	CART elective course.....OR	2-3
GCMT-1500	Black and White Photography I	
		<b>14-17</b>

# Program Course Requirements

Fall 2001-Summer 2003 Catalog

## Commercial Art and Design

### Associate of Applied Business Degree in Commercial Art and Design (cont).

#### Fourth Semester

CART-2330	Graphic Production	2
CART-2350	Illustration with Prismacolor.....OR	2
CART-2420	Publication Design	
CART-2360	Illustration with Watercolor.....OR	2
CART-2430	Magazine Design.....OR	
CART-2500	Creative Advertising Campaign	
CART-2440	Package Design	2
CART-2450	Media Design	2
CART-2700	Portfolio Preparation <u>C</u>	2
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)	2
		<b>14</b>

#### PROGRAM TOTAL

61-65

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

#### \*\*Art Electives:

- ART-1010 Art Appreciation
- ART-1030 Art History II
- ART-1060 Drawing II
- ART-2000 Life Drawing I

#### \*\*\*CART Electives:

- CART-1800/2800 Special Topics in Commercial Art and Design
- CART-2820 Independent Study in Commercial Art and Design
- CART-2830 Cooperative Field Experience

Note: Courses as listed satisfy competencies C&S.

Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C = Capstone Course

#### (1) Advertising Design Option

- CART-2500 Creative Advertising Campaign
- MARK-2010 Principles of Marketing
- MARK-2270 Principles of Advertising

#### (2) Graphic Design Option

- CART-1400 Decorative Design
- CART-2410 Corporate Graphics
- CART-2420 Publication Design
- CART-2430 Magazine Design

#### (3) Illustration Option

- CART-1400 Decorative Design
- CART-2340 Illustration in Pen and Ink
- CART-2350 Illustration with Prismacolor
- CART-2360 Illustration with Watercolor

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## Court Reporting and Captioning

### Associate of Applied Business Degree in Court Reporting and Captioning

Within the legal field, court reporters are entrusted to record everything said in court, at depositions, and legal meetings; reporters use computer technology and specialized software in their work today. Thus, "realtime" court reporters now find many applications for their skills outside the legal field in areas such as captioning and cyberconferencing. This program provides the student with skills required to meet the challenges and opportunities available to court reporters in the modern workplace.

Program meets current degree requirements - pre Fall 2001. Program Manager - Ms. Mary A. Reis (216-987-4431). This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
C&CR-1000	Introduction to Court Reporting	1
C&CR-1300	Realtime Theory	4
C&CR-1350	Legal Terminology	3
ENG-1010	College Composition I	3
LAWE-1120	Criminal Procedures and Evidence	2
IT-1060	Introduction to Windows	1
		<b>15</b>
<u>Second Semester</u>		
C&CR-1310	Advanced Realtime Theory	2
C&CR-1371	Using Court Report Technology	2
C&CR-1400	Speedbuilding and Transcription at 100 WPM	2
MATH-xxxx	1000-level MATH course or higher I	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
Communication...	(See AAB Degree Requirements)	3
		<b>15</b>
<u>Summer Semester</u>		
BADM-1000	Business Language Skills	2
C&CR-1450	Speedbuilding and Transcription at 140WPM	2
C&CR-xxxx	Any C&CR elective course	1
		<b>5</b>
<u>Third Semester</u>		
C&CR-2300	Court Procedures I	3
C&CR-2350	Editing Legal Documents	2
C&CR-2400	Speedbuilding and Transcription at 180 WPM	2
C&CR-2600	Technical Terminology I.....OR	3
C&CR-2651	Technical Terminology II	
MA-1020	Medical Terminology I	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
		<b>16</b>
<u>Fourth Semester</u>		
C&CR-2450	Speedbuilding and Transcription at 225 WPM	2
C&CR-2470	Advanced Technology <u>C</u>	3
C&CR-2840	Internship	1
C&CR-xxxx	Any C&CR elective course	1-3
LAWE-1330	Criminal Law***	3
MA-2010	Medical Terminology II	2
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	2
		<b>14-16</b>
	<b>PROGRAM TOTAL</b>	<b>64-66</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits--must include a minimum two semester credits at the 2000-level.

\*\*\*LAWE-1330 may be waived for students who have taken LAWE-1100 Criminal Procedures and Evidence (see C&CR program manager).

Note: Courses as listed satisfy competencies C&S.

C= Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### HOSPITALITY MANAGEMENT (Culinary Art)

#### Associate of Applied Business Degree in Hospitality Management with a Concentration in Culinary Art

The culinary art curriculum follows the guidelines of the American Culinary Federation, preparing students for careers as professional chefs, caterers, kitchen supervisors and cooks. The culinary concentration emphasizes hands-on food preparation, including advanced techniques in garde-manger, contemporary and classical cuisine.

Program Manager - Ms. Jan DeLucia (216-987-4081). This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
HOSP-1010	Introduction to the Hospitality Industry	2
HOSP-1020	Sanitation and Safety	2
HOSP-1030	Basic Food Preparation	3
HOSP-1040	Customer Services	2
HOSP-1350	Menu Planning and Nutrition	3
MATH-1060	Survey of Mathematics or higher*	3
		<b>18</b>
<u>Second Semester</u>		
ACCT-1020	Applied Accounting	3
ENG-1020	College Composition II	3
HOSP-1450	Advanced Food Preparation	4
HOSP-1551	Baking Production and Sales	3
HOSP-1650	Dining Room Operations	2
IT-1010	Introduction to Microcomputer Applications	3
		<b>18</b>
<u>Summer Semester</u>		
HOSP-1860	Hospitality Practicum and Seminar	3
		<b>3</b>
<u>Third Semester</u>		
HOSP-2300	Facilities Design and Maintenance	2
HOSP-2350	Restaurant Operations .....OR	3
HOSP-xxxx	HOSP elective course **	
HOSP-2400	Hospitality Management and Supervision	3
HOSP-2700	Hospitality Purchasing	2
Arts & Hum/Soc & Beh Sci..	(See AAB Degree Requirements)***	2
Arts & Hum/Soc & Beh Sci..	(See AAB Degree Requirements)***	3
		<b>15</b>
<u>Fourth Semester</u>		
HOSP-2500	Hospitality Cost Control	3
HOSP-2650	Restaurant Management Experience <u>C</u>	4
HOSP-2990	Advanced Culinary Skills & Evaluation <u>C</u>	2
Arts & Hum/Soc & Beh Sci..	(See AAB Degree Requirements)***	3
		<b>12</b>
	<b>PROGRAM TOTAL</b>	<b>66</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Elective course may be selected with written approval from the HOSP department.

\*\*\*Minimum 8 semester credits – SPCH-1010 highly recommended and to include a minimum of 4 semester credits at the 2000-level.

Note: Courses as listed satisfy competencies C&S.

C= Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### HOSPITALITY MANAGEMENT (Lodging-Tourism Management)

(formerly Hotel-Motel Management)

#### Associate of Applied Business Degree in Hospitality Management with a Concentration in Lodging-Tourism Management

The lodging-tourism management concentration prepares students for entry-level supervision in front office, sales and convention management. This leads to increasingly responsible management positions in hotels, motels and clubs. Included is a minimum component of foodservice and observations of front-office and sales/marketing and convention planning functions.

Program Manager - Ms. Jan DeLucia (216-987-4081). This program has application and/or progression requirements

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
HOSP-1010	Introduction to the Hospitality Industry	2
HOSP-1020	Sanitation and Safety	2
HOSP-1030	Basic Food Preparation	3
HOSP-1040	Customer Services	2
IT-1010	Introduction to Microcomputer Applications	3
MATH-1060	Survey of Mathematics or higher*	3
		<b>18</b>
<u>Second Semester</u>		
ACCT-1020	Applied Accounting	3
ENG-1020	College Composition II	3
HOSP-1380	Dimensions of Tourism	3
HOSP-1480	Housekeeping Operations	2
HOSP-1580	Front Office Operations	2
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
		<b>16</b>
<u>Summer Semester</u>		
HOSP-1860	Hospitality Practicum and Seminar	3
		3
<u>Third Semester</u>		
HOSP-2300	Facilities Design and Maintenance	2
HOSP-2380	Hospitality Marketing and Sales	3
HOSP-2400	Hospitality Management & Supervision	3
HOSP-2480	Hospitality Law	3
HOSP-2700	Hospitality Purchasing	2
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	2
		<b>15</b>
<u>Fourth Semester</u>		
HOSP-2500	Hospitality Cost Control	3
HOSP-2580	Convention Management Meeting and Planning	2
HOSP-2860	Hotel Management Experience Practicum <u>C</u>	4
Arts & Hum/Soc & Beh Sci.	(See AAB Degree Requirements)**	3
		<b>12</b>
	<b>PROGRAM TOTAL</b>	<b>64</b>

\*MATH -1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – SPCH-1010 highly recommended.

Note: Courses as listed satisfy competencies C&S.

C= Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### HOSPITALITY MANAGEMENT (Restaurant/Food Service Management)

#### Associate of Applied Business Degree in Hospitality Management with a Concentration in Restaurant/Food Service Management

Students are prepared for entry-level front-and back-of-the-house supervisory positions in both restaurant and institutional foodservice establishments. Students prepare for future positions as kitchen managers, dining room managers, banquet managers, purchasing agents, food and beverage controllers and restaurant/food service managers.

Program Manager - Ms. Jan DeLucia (216-987-4081). This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
HOSP-1010	Introduction to the Hospitality Industry	2
HOSP-1020	Sanitation and Safety	2
HOSP-1030	Basic Food Preparation	3
HOSP-1040	Customer Services	2
HOSP-1370	Food and Beverage Operations I	3
MATH-1060	Survey of Mathematics or higher*	3
		<b>18</b>
<u>Second Semester</u>		
ACCT-1020	Applied Accounting	3
ENG-1020	College Composition II	3
HOSP-1450	Advanced Food Preparation	4
HOSP-1670	Food and Beverage Operations II	3
IT-1010	Introduction to Microcomputer Applications	3
		<b>16</b>
<u>Summer Semester</u>		
HOSP-1860	Hospitality Practicum and Seminar	3
		<b>3</b>
<u>Third Semester</u>		
HOSP-2300	Facilities Design and Maintenance	2
HOSP-2350	Restaurant Operations	3
HOSP-2400	Hospitality Management and Supervision	3
HOSP-2480	Hospitality Law	3
HOSP-2700	Hospitality Purchasing	2
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	2
		<b>15</b>
<u>Fourth Semester</u>		
HOSP-2500	Hospitality Cost Control	3
HOSP-2870	Food and Beverage Management Experience <u>C</u>	4
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
		<b>13</b>
	<b>PROGRAM TOTAL</b>	<b>65</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – SPCH-1010 highly recommended.

Note: Courses as listed satisfy competencies C&S.

C= Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### INFORMATION TECHNOLOGY (Information Application Specialist)

(formerly Office Administration - Information Specialist)

#### Associate of Applied Business Degree in Information Technology with a Concentration as an Information Application Specialist

Students will be prepared for careers dealing with the professional applications of word processing, spreadsheets, power point presentations, databases and desktop publishing. Students will gain the necessary skills to produce documents, reports and correspondence while maintaining files electronically by integrating various software applications/functions. Skills acquired will assist students in preparing to take industry certification exams. This program has application and/or progression requirements

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1000	Business Language Skills	2
BADM-1020	Introduction to Business	3
ENG-1010	College Composition I	3
IT-1000	Keyboarding	2
IT-1010	Introduction to Microcomputer Applications	3
IT-1030	Internet Fundamentals	2
IT-1060	Introduction to Windows	2
		<b>17</b>
<u>Second Semester</u>		
IT-1020	Information Technology Concepts	2
ITAP-1200	Word Processing I	3
ITAP-1230	Basic Business Formatting	3
ITAP-1240	Basic Filing with Microcomputer Applications	3
MATH-1060	Survey of Mathematics or higher *	3
Communications...	(See AAB Degree Requirements)	3
		<b>17</b>
<u>Third Semester</u>		
BADM-2010	Business Communications	3
ITAP-1220	Speed Building	2
ITAP-1250	Electronic Spreadsheet Use and Design	3
ITAP-2200	Word Processing II	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	2
		<b>16</b>
<u>Fourth Semester</u>		
ACCT-xxxx	Any ACCT elective course	3
BADM-2990	Office Procedures and Practices <u>C</u>	3
IT-2300	Database Use and Design	3
ITAP-2270	Desktop Publishing	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>65</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits - must include 5 semester credits at the 2000-level.

Note: Courses as listed satisfy competencies C&S. Select one course to meet C&S Cultural Diversity – see Section VI.

C = Capstone Course



# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## INFORMATION TECHNOLOGY (Mainframe Programming)

(formerly Computer Studies - Mainframe)

### Associate of Applied Business Degree in Information Technology with a Concentration in Mainframe Programming

The mainframe programming prepares graduates for entry-level positions as programmer/analysts within information centers utilizing large computer systems. The mainframe concentration provides students with entry-level skills in the following areas: problem solving techniques; program design, creation and maintenance; systems analysis and design; database management; and interactive processing methods. This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
ENG-1010	College Composition I	3
IT-1010	Introduction Microcomputer Applications	3
IT-1020	Information Technology Concepts	2
IT-1050	Programming Logic	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)*	3
		<b>17</b>
<u>Second Semester</u>		
ACCT-1310	Financial Accounting	4
ENG-1020	College Composition II	3
ITMF-1310	Internal Computer Functions	2
ITMF-1500	Application Program Development I: COBOL	5
MATH-1180	Intermediate Algebra for Technologies...OR	4
MATH-1200	Intermediate Algebra or higher *	
		<b>18</b>
<u>Third Semester</u>		
ITMF-2530	Application Program Development II: COBOL, CICS	5
ITMF-2610	Assembly Language Programming	4
MATH-1410	Elementary Probability & Statistics I	3
SPCH-1000	Fundamentals of Interpersonal Communication.....OR	3
SPCH-1010	Fundamentals of Speech Communication**	
		<b>15</b>
<u>Fourth Semester</u>		
IT-2700	Systems Analysis and Design	3
IT-2xxx	2000-level IT programming language elective	4
ITMF-2550	Application Program Development III: COBOL, CICS, SQL <u>C</u>	5
Arts & Hum/Soc & Beh Sci...	(see AAB Degree Requirements)**	2
		<b>14</b>
	<b>PROGRAM TOTAL</b>	<b>64</b>

\*Minimum 8 semester credits – must include SPCH 1000 or 1010. ECON-2610 and 2620 highly recommended.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S.

C = Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### INFORMATION TECHNOLOGY (Microcomputer Specialist)

(formerly Computer Studies - Microcomputer)

#### Associate of Applied Business Degree in Information Technology with a Concentration as a Microcomputer Specialist

A microcomputer applications concentration provides the education and training necessary for graduates to work in a wide variety of businesses and industry using integrated microcomputer applications. Students receive entry-level skills in microcomputer applications for word processing, spreadsheet applications, graphics and data base design and implementation; systems analysis, design and implementation; problem-solving in a microcomputer environment; operating system installation and maintenance; network administration; and internet document design, creation and maintenance. This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
IT-1010	Introduction to Microcomputer Applications	3
IT-1020	Information Technology Concepts	2
IT-1030	Internet Fundamentals	2
IT-1050	Programming Logic	3
MATH-1180	Intermediate Algebra for Technologies...OR	4
MATH-1200	Intermediate Algebra or higher*	4
		<b>17</b>
<u>Second Semester</u>		
ACCT-1310	Financial Accounting	4
ENG-1010	College Composition I	3
IT-1040	Microcomputer Operating Systems	3
ITAP-1250	Electronic Spreadsheet Use and Design	3
ITMP-2620	Visual Basic Programming	4
		<b>17</b>
<u>Third Semester</u>		
ENG-1020	College Composition II	3
IT-2300	Database Use and Design	3
IT-2700	Systems Analysis and Design	3
MATH-1410	Elementary Probability & Statistics I	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
		<b>15</b>
<u>Fourth Semester</u>		
ITMP-2630	Advanced Visual Basic Programming...OR	4
ITMP-2650	Java Programming .....OR	
ITMP-2670	C/C++ Programming Language	
ITMP-2990	Microcomputer Project <u>C</u>	3
ITNT-2300	Networking Fundamentals	3
SPCH-1000	Fundamentals of Interpersonal Communication ...OR	3
SPCH-1010	Fundamentals of Speech Communication **	
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	2
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>64</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – must include SPCH-1000 or 1010.

Note: Courses as listed satisfy competencies C&S.

Note: Courses as listed satisfy the minimum of 20 semester credits at the 2000 level.

C = Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### INFORMATION TECHNOLOGY (Networking Software)

#### Associate of Applied Business Degree in Information Technology with a Concentration in Networking Software

Students will be prepared for careers dealing with network software systems analysis, planning and implementation to create, manage and support networks. Students will gain the necessary skills to analyze network system needs for design, installation, maintenance and management of network software systems. Skills acquired will assist students in preparing to take industry certification exams. This program has application and/or progression requirements

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
EET-1010	DOS for Technicians	2
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
IT-1020	Information Technology Concepts	2
IT 1030	Internet Fundamentals	2
IT-1040	Microcomputer Operating Systems	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)*	3
		<b>18</b>
<u>Second Semester</u>		
EET-1080	Service Operations and Communications Procedures	1
ENG-2150	Technical Writing	3
ITNT-2300	Networking Fundamental	3
ITNT-2310	TCP/IP	3
MATH-1180	Intermediate Algebra for Technologies or higher **	4
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)*	2
		<b>16</b>
<u>Third Semester</u>		
EET-1000	Introduction to PC Maintenance	2
EET-1020	Basic Software Troubleshooting	2
EET-1030	Installing and Configuring Operating Systems	2
EET-1050	PC Systems Servicing and Troubleshooting	3
ITNT-2320	Network Administration I	3
ITNT-2340	NetWare Administration I	3
		<b>15</b>
<u>Fourth Semester</u>		
BADM-1020	Introduction to Business	3
EET-1040	On-line Communications	1
EET-1070	PC Laser Printer Installation and Repair	1
EET-1090	Test Preparation for A+ Certification	1
ITNT-2990	Networking Capstone <u>C</u>	3
ITNT-2xxx	2000-level ITNT elective course***	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)*	3
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>64</b>

\*Minimum 8 semester credits – ECON-2610 and ECON-2620 highly recommended.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*\*ITNT Electives:

ITNT-2330 Systems Administration for SQL Server

ITNT-2350 Microsoft Exchange Server: Concepts and Administration

ITNT-2360 Microsoft Internet Information Server

ITNT-2420 Network Administration II

ITNT-2440 NetWare Administration II

Note: Courses as listed satisfy competencies C&S. Choose one course from C&S Cultural Diversity – see Section VI.

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### INFORMATION TECHNOLOGY (Web Page Development and Maintenance)

#### Associate of Applied Business Degree in Information Technology with a Concentration in Web Page Development and Maintenance

Students develop competencies in implementing and maintaining hypertext-based web sites using authoring and scripting languages, creating web content, using web management tools and digital media tools within the PC environment. Students will implement strategies to develop web sites, evaluate design tools, discuss future technology standards and explore the incompatibility issues surrounding current browsers. Skills acquired will assist students in preparing to take industry certification exams. This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
IT-1020	Information Technology Concepts	2
IT-1030	Internet Fundamentals	2
IT-1050	Programming Logic	3
MATH-1180	Intermediate Algebra for Technologies.....OR	4
MATH-1200	Intermediate Algebra or higher *	
		<b>17</b>
<u>Second Semester</u>		
CART-1600	Imaging and Design	1
CART-160L	Imaging and Design Studio	1
IT-1040	Microcomputer Operating Systems	3
IT-1070	Advanced Internet Concepts	3
ITWM-1010	Creating Web Pages with HTML and JavaScript	3
ITWM-2320	Interactive Internet Programming	4
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>18</b>
<u>Third Semester</u>		
BADM-1020	Introduction to Business	3
CART-2450	Media Design	2
FIN-1060	Consumer Finance.....OR	2-3
MARK-2010	Principles of Marketing	
IT-2300	Database Use and Design	3
ITNT-2300	Networking Fundamentals	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>18-19</b>
<u>Fourth Semester</u>		
ITMP-2670	C/C++ Programming Language.....OR	4
IT-2xxx	Any 2000-level IT programming course	
ITWM-2030	Active Server Pages	4
ITWM-2990	E-Commerce Technologies <u>C</u>	3
MATH-1410	Elementary Probability and Statistics I	3
SPCH-1000	Fundamentals of Interpersonal Communication.....OR	3
SPCH-1010	Fundamentals of Speech Communications	
		<b>17</b>
	<b>PROGRAM TOTAL</b>	<b>70-71</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – ECON-2610 and ECON-2620 highly recommended.

Note: Courses as listed satisfy competencies C&S.

C= Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### INTERIOR DESIGN

#### Associate of Applied Business Degree in Interior Design

The interior designer helps to solve the functional and aesthetic design problems in residential and commercial interiors. The program prepares students for employment in interior design studios, architectural firms, showrooms, retail and furniture stores and manufacturing firms.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ARCH-1410	Architectural Drafting and CAD I	3
ART-1020	Art History I	3
ART-1050	Drawing I	3
ART-1080	Visual Design I	3
ENG-1010	College Composition I	3
INTD-1110	Introduction to Interior Design	1
MIT-1220	Introduction to AutoCAD	2
		<b>18</b>
<u>Second Semester</u>		
ART-1030	Art History II	3
ART-1060	Drawing II	3
ART-1090	Visual Design II	3
ENG-1020	College Composition II.....OR	3
SPCH-1000	Fundamentals of Interpersonal Communication	
MATH-xxxx	1000-level MATH course or higher*	3
		<b>15</b>
<u>Third Semester</u>		
INTD-2300	Interior Design Studio I	3
INTD-2320	History of Interiors	3
INTD-2330	Interior Design Materials and Sources	3
INTD-2350	Textiles	3
INTD-2380	Fundamentals of Lighting	3
MARK-2020	Principles of Salesmanship	3
		<b>18</b>
<u>Fourth Semester</u>		
INTD-2400	Interior Design Studio II	3
INTD-2430	Architectural Materials and Methods	3
INTD-2460	Interior Design Presentation	3
INTD-2470	Professional Practice of Interior Design	3
INTD-2850	Interior Design Practicum <u>C</u>	3
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>66</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S.

C = Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## MARKETING

### Associate of Applied Business Degree in Marketing

The program addresses the broad scope of activities performed in the buying and selling of goods and services to the consuming sectors of the economy. Students are prepared for a variety of marketing positions via a broad working knowledge of the theories and practices of marketing. General marketing, international marketing and professional selling are options.

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
ECON-2610	Principles of Macroeconomics*	4
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
MATH-1060	Survey of Mathematics or higher**	<u>3</u>
		<b>16</b>
<u>Second Semester</u>		
ACCT-1310	Financial Accounting	4
BADM-2010	Business Communications	3
ECON-2620	Principles of Microeconomics*	4
ENG-1020	College Composition II.....OR	3-4
SPCH-1010	Fundamentals of Speech Communication.....OR	
Foreign Language...	Any foreign language course	
MARK-2010	Principles of Marketing	<u>3</u>
		<b>17-18</b>
<u>Third Semester</u>		
BADM-2150	Business Law	4
BADM-2160	Introduction to Purchasing	3
MARK-2020	Principles of Salesmanship	3
MARK-2270	Principles of Advertising	<u>3</u>
		<b>13</b>
<u>Fourth Semester</u>		
BADM-1120	Principles of Management	4
BADM-2200	Human Relations in Business	3
MARK-2990	Marketing Case Analysis <u>C</u>	2
MARK-2xxx	Elective – Select from Option 1, 2 or 3***	3
MARK-2xxx	Elective – Select from Option 1, 2 or 3***	3
MARK-2xxx	Elective – Select from Option 1, 2 or 3***	<u>3</u>
		<b>17</b>
	<b>PROGRAM TOTAL</b>	<b>63-64</b>

\*Minimum 8 semester credits – must include ECON-2610 and 2620.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*\*Select one option from below and complete the group of courses in that option:

#### Option # 1 (Basic)

MARK-2110 Introduction to World Trade  
 MARK-2260 Sales Promotion and Public Relations  
 MARK-2500 Business-to-Business/Organizational Marketing

#### Option # 2 (International Business)

MARK-2110 Introduction to World Trade  
 MARK-2120 Import/Export Procedures and Documentation  
 MARK-2130 International Payments, Credits and Collections

#### Option # 3 (Sales)

MARK-2240 Effective Selling Practices  
 MARK-2660 Sales Management  
 MARK-2xxx Any 2000-level MARK elective

Note: Courses as listed satisfy competencies C&S.

C = Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## PARALEGAL STUDIES

### Associate of Applied Business Degree in Paralegal Studies

The program is designed to educate/train paralegals to work independently under the supervision of attorneys in all areas of law. Graduates are prepared for careers in law firms, insurance companies, government agencies, title companies and large corporations. Paralegals organize and manage the flow of work, generally in law offices, and handle routine legal documents in other office settings. They conduct background research and investigation for attorneys, research legal issues, interview and prepare witnesses and clients for depositions and court appearances. They prepare drafts of briefs or arguments, maintain files and letters about cases, organize, file, and maintain case histories. They may conduct business with the police, other attorneys, government officials and the courts. Paralegals cannot accept a case, set fees, give legal advice, or represent a client in court. This is an American Bar Association approved program.

Program Manager - Ms. Lisa O'Rear-Lassen (216-987-5112). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ACCT-1020	Applied Accounting	3
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications*	3
PL-1000	Introduction to Paralegal Profession	2
PL-1300	Civil Procedure	3
POL-1010	American National Government *	3
		<b>17</b>
<u>Second Semester</u>		
ENG-1020	College Composition II	3
MATH-1060	Survey of Mathematics or higher**	3
PL-1400	Basic Legal Research and Writing	3
PL-1501	Law Office Technology	2
PL-xxxx	Any PL elective course	2-3
POL-1100	Introduction to Constitutional Law ...OR	3
PSY-1010	General Psychology .....OR	
UST-1010	Introduction to Urban Studies *	
		<b>16-17</b>
<u>Third Semester</u>		
ACCT-1310	Financial Accounting.....OR	2-4
EHST-1310	Introduction to Environmental Law.....OR	
FIN-1110	Principles of Finance.....OR	
HS-1420	Legal Issues.....OR	
MA-1010	Introduction to Medical Terminology.....OR	
REAL-1401	Real Estate Law.....AND	
REAL-1601	Real Estate Finance	
PL-2301	Torts and Evidence	4
PL-2440	Business Transactions	3
PL-xxxx	Any PL elective course	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)*	2
		<b>14-16</b>
<u>Fourth Semester</u>		
PL-2400	Computer Assisted Legal Research	3
PL-2420	Probate Law	3
PL-2460	Business Organizations	3
PL-2851	Paralegal Practicum***	1
PL-2990	Paralegal Capstone <u>C</u>	2
PL-2xxx	Any 2000-level PL elective course	3
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>62-65</b>

\*Can be waived with satisfactory score on computer test administered by department.

\*\*Minimum of 8 semester credits in general education required-must include POL-1010 and POL-1100 or PSY-1010 or UST-1010.

\*\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*\*\*Can be waived with documentation of equivalent experience.

NOTE: Courses as listed satisfy competencies C&S. C = Capstone Course.

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## PURCHASING MANAGEMENT

### Associate of Applied Business Degree in Purchasing Management

Purchases of materials, supplies and equipment represent a large part of a business or industrial firm's total cost of operation.

Purchasing, because of its importance, is often designated as a separate responsibility to be handled by one or more individuals.

Purchasing agents and their assistants are responsible for obtaining raw materials, goods and services at the lowest cost consistent with required quality. The majority of the nation's purchasing personnel are employed in manufacturing firms. Many also work in government agencies, public utilities, schools and hospitals.

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
BADM-2160	Introduction to Purchasing	3
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
MATH-1060	Survey of Mathematics or higher *	3
		<b>15</b>
<u>Second Semester</u>		
ACCT-1310	Financial Accounting	4
BADM-2010	Business Communications	3
BADM-2110	Production/Operations Management	3
ECON-2610	Principles of Macroeconomics**	4
ENG-1020	College Composition II.....OR	3
SPCH-1010	Fundamentals of Speech Communication	
		<b>17</b>
<u>Third Semester</u>		
BADM-1120	Principles of Management	4
BADM-2200	Human Relations in Business	3
BADM-2230	Value Analysis	3
ECON-2620	Principles of Microeconomics**	4
		<b>14</b>
<u>Fourth Semester</u>		
BADM-2150	Business Law	4
BADM-2180	Purchasing Management <u>C</u>	3
BADM-2240	Negotiations	3
BADM-2300	Principles of Freight Management	3
MARK-2010	Principles of Marketing	3
		<b>16</b>
	<b>PROGRAM TOTAL</b>	<b>62</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits of Arts & Humanities/Social & Behavioral Science required – must include ECON-2610 and 2620.

Note: Courses as listed satisfy competencies C&S.

C = Capstone Course



# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## REAL ESTATE

### Associate of Applied Business Degree in Real Estate

This curriculum is designed to fulfill academic requirements leading to real estate licensure in the State of Ohio and to prepare students for a professional career in the real estate industry. Graduates of the program are educationally qualified for positions as brokers, sales agents, real estate managers, counselors and real estate financiers.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
ECON-2610	Principles of Macroeconomics	4
ENG-1010	College Composition I	3
MATH-xxxx	1000-level MATH course or higher*	3
REAL-1301	Principles & Practices of Real Estate	3
REAL-1501	Valuation of Residential Properties	1
		<b>17</b>
<u>Second Semester</u>		
BADM-2010	Business Communications	3
ECON-2620	Principles of Microeconomics	4
ENG-1020	College Composition I	3
REAL-1320	Diversity Awareness and Fair Lending	2
REAL-1401	Real Estate Law	3
REAL-1601	Real Estate Finance	1
		<b>16</b>
<u>Third Semester</u>		
ACCT-1310	Financial Accounting	4
BADM-1120	Principles of Management.....OR	3-4
MARK-2010	Principles of Marketing	
BADM-2150	Business Law	4
REAL-2400	Real Estate Sales	2
SPCH 1010	Fundamentals of Speech Communication	3
		<b>16-17</b>
<u>Fourth Semester</u>		
BADM-2330	Human Resource Management	3
IT-1010	Introduction to Microcomputer Applications	3
REAL-2300	Real Estate Brokerage.....OR	2
REAL-2xxx	2000-level REAL elective course**	
REAL-2500	Commercial & Industrial Real Estate <u>C</u>	2
REAL-2600	Real Estate Management	2
REAL-2700	Valuation of Income Properties	2
		<b>14</b>
	<b>PROGRAM TOTAL</b>	<b>63-64</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Elective course may be selected with written approval from the REAL department.

Note: Courses as listed satisfy competencies C&S.

C = Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## REAL ESTATE (Mortgage Finance)

### Associate of Applied Business Degree in Real Estate with a Concentration in Mortgage Finance

The Mortgage Finance Program offers a combination of courses, field experience and professional training in preparing students for a career in the mortgage finance/real estate industry. Students are taught by industry experts and upon completion of the academic requirements are prepared to enter such challenging careers as loan originators, underwriters, home buying counselors and loan processors. Interim Program Manager - Mary Reis (216-987-4431).

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
MATH-xxxx	1000-level MATH course or higher *	3
REAL-1301	Principles and Practices of Real Estate	3
REAL-1330	Loan Origination	2
REAL-1501	Valuation of Residential Properties	1
		<b>18</b>
<u>Second Semester</u>		
ENG-1020	College Composition I	3
REAL-1320	Diversity Awareness & Fair Lending	2
REAL-1401	Real Estate Law	3
REAL-1601	Real Estate Finance	1
SPCH-1010	Fundamentals of Speech Communication**	3
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	3
		<b>15</b>
<u>Third Semester</u>		
ACCT-1010	Quantitative Applications for Accounting and Business.....OR	3
ACCT-1020	Applied Accounting	
REAL-2310	Loan Processing	2
REAL-2320	Affordable Housing	2
REAL-2330	Loan Underwriting	2
REAL-2340	Loan Servicing.....OR	2
REAL-2xxx	Any 2000-level REAL elective course	
REAL-2350	Homebuyers Education and Counseling	2
Arts & Hum/Soc & Beh Sci...	(See AAB Degree Requirements)**	2
		<b>15</b>
<u>Fourth Semester</u>		
BADM-1120	Principles of Management	4
BADM-1300	Small Business	4
MARK-2010	Principles of Marketing	3
MARK-2020	Principles of Salesmanship	3
REAL-281S	Special Advanced Laboratory Topics in REAL	1
REAL-2820	Independent Study Course <u>C</u> .....OR	1-2
REAL-2940	Mortgage Finance Field Experience <u>C</u>	
		<b>16-17</b>
	<b>PROGRAM TOTAL</b>	<b>64-65</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – must include SPCH-1010 and two semester credits in a 2000-level course.

Note: Courses as listed satisfy competencies C&S.

C = Capstone Course

### Engineering and Other Technologies

#### Associate of Applied Science Degree

- Architectural and Construction Engineering Technology
- Automotive Technology
- Electrical/Electronic Engineering Technology - Basic Program
- Electrical/Electronic Engineering Technology - Bio-Medical
- Electrical/Electronic Engineering Technology - Computer Networking Hardware
- Electrical/Electronic Engineering Technology - Telecommunications
- Graphic Communications and Photography - Graphic Communications Management
- Graphic Communications and Photography - Multimedia
- Graphic Communications and Photography - Photography
- Manufacturing/Industrial Technology - Basic Program
- Manufacturing/Industrial Technology - Drafting Technology
- Mechanical Engineering Technology
- Recording Arts and Technology

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### ARCHITECTURAL AND CONSTRUCTION ENGINEERING TECHNOLOGY

#### Associate of Applied Science Degree in Architectural and Construction Engineering Technology

The construction industry is made up of one of the largest labor forces in the nation. This program prepares students for a wide variety of careers in the vast construction industry. Course work includes a comprehensive study of construction means and methods with laboratory work in computerized drafting and electronic surveying.

This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ARCH-1410	Architectural Drafting & CAD I	3
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
MIT-1100	Computer Applications & Programming	2
MIT-1220	Introduction to AutoCAD	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>17</b>
<u>Second Semester</u>		
ARCH-1420	Architectural Drafting & CAD II	3
ESCI-1410	Physical Geology	3
FIRE-2350	Building Construction for Fire Prevention	2
MATH-1360	Technical Mathematics II	5
MET-1600	Technical Statics	2
PHYS-1210	College Physics I	4
		<b>19</b>
<u>Third Semester</u>		
ARCH-1430	Architectural Drafting & CAD III	3
ARCH-2210	Mechanical Equipment for Buildings	3
ARCH-2310	Construction Contracts, Specifications and Procedures <u>C</u>	3
ARCH-2410	Principles of Structural Design I	3
MET-2200	Strength of Materials	3
Communication...	(See AAS Degree Requirements)**	3
		<b>18</b>
<u>Fourth Semester</u>		
ARCH-2110	Surveying and Site Engineering	3
ARCH-2220	Electrical Equipment for Buildings	3
ARCH-2320	Construction Methods, Materials and Estimating <u>C</u>	3
ARCH-2420	Principles of Structural Design II	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>17</b>
	<b>PROGRAM TOTAL</b>	<b>71</b>

\*Minimum 8 semester credits required.

\*\*SPCH course highly recommended.

Note: Courses as listed satisfy competencies C&S.

Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C= Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## AUTOMOTIVE TECHNOLOGY

### Associate of Applied Science Degree in Automotive Technology

Students are taught to diagnose, correct and repair electrical, fuel, emissions and mechanical problems found in today's modern automobile through classroom, laboratory and field experience. Graduates are prepared for entry level positions as technicians in fleet service, manufacturer's dealerships, national oil company and transmission repair facilities or independent garages. Course work prepares student for the National Institute for Automotive Service Excellence (ASE) automotive tech tests. The AUTO Program is certified by the National Automotive Technicians Education Foundation (NATEF) in all eight ASE categories. The Automotive Service Educational Program (ASEP) and Automotive Student Service Education Training Program (ASSET) require alternating school and General Motors or Ford dealership work experience sessions. In addition, ASEP/ASSET students need to complete AUTO-2940 and AUTO-2950. Please call the Automotive Technology department for more information. Program Manager - Mr. Edward E. Kopp (216-987-5330). This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
AUTO-1050	Numerical Applications in Automotive Service	3
AUTO-1100	Introduction to Automotive Service Procedures	2
AUTO-1400	Automotive Alignment, Steering & Suspension	3
AUTO-1450	Automotive Braking Systems	3
AUTO-1500	Automotive Electrical Fundamentals	2
ENG-1010	College Composition I	3
		<b>16</b>
<u>Second Semester</u>		
AUTO-1300	Automotive Engines	3
AUTO-1940	Automotive Field Experience I	1
AUTO-2400	Engine Performance	3
AUTO-2470	Automotive Electrical Systems	2
IT-1010	Introduction to Microcomputer Applications	3
Communications...	(See AAS Degree Requirements)	3
		<b>15</b>
<u>Third Semester</u>		
AUTO-1350	Manual Transmission and Drivetrain	2
AUTO-1950	Automotive Field Experience II	1
AUTO-2350	Automotive HVAC	2
AUTO-2450	Automotive Electronic Engine Controls	3
BADM-1020	Introduction to Business.....OR	3-4
BADM-1300	Small Business Management.....OR	
BADM-2200	Human Relations in Business.....OR	
BADM-2330	Human Resource Management	
MATH-xxxx	1000-level MATH course or higher*	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>17-18</b>
<u>Fourth Semester</u>		
AUTO-1960	Automotive Field Experience III ***	1
AUTO-2500	Automotive Electrical Diagnosis	2
AUTO-2700	Automotive Service Operations	2
AUTO-2990	Automotive Professional Study <u>C</u>	1
AUTO-2300	Automatic Transmissions.....OR	3
AUTO-2xxx	2000-level AUTO elective course****	
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>14</b>
<b>PROGRAM TOTAL</b>		<b>61-63</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – must include minimum 2 semester credits at the 2000-level (ASEP & ASSET students will automatically meet this requirement).

\*\*\*ASEP/ASSET students must also complete AUTO-2940/2950.

\*\*\*\*Elective course may be selected with written approval from the AUTO department.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity)

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY (Bio-Medical)

#### Associate of Applied Science Degree in Electrical/Electronic Engineering Technology with a Concentration in Bio-Medical Engineering

Technology has impacted biomedical equipment in the health field. Bio-medical engineering technicians are needed to perform preventive maintenance, calibration and repair various bio-medical pieces of equipment. This general bio-medical equipment may involve patient monitors, electrosurgery units, defibrillators and other medical apparatus. Students completing the biomedical program in electrical engineering technology will find jobs in hospitals, medical equipment manufacturers or third-party service organizations associated with hospitals. This program has application and/or progression requirements.

Course No	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
EET-1110	DC Electric Circuits	3
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
MET-1100	Technology Orientation	2
MIT-1100	Computer Applications & Programming	2
		<b>17</b>
<u>Second Semester</u>		
EET-1210	AC Electric Circuits	3
EET-1230	Telecommunications I	3
EET-1240	Digital Circuits/Microprocessors I	3
MATH-1360	Technical Mathematics II	5
PHYS-1210	College Physics I	4
		<b>18</b>
<u>Third Semester</u>		
EET-2110	Industrial Electronics I	3
EET-2120	Electronics I	3
EET-2140	Digital Circuits/Microprocessors II	3
EET-2400	Biomedical Instrumentation I	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Communications...	(See AAS Degree Requirements)*	3
		<b>18</b>
<u>Fourth Semester</u>		
EET-2220	Electronics II	3
EET-2410	Biomedical Instrumentation II	3
EET-2490	Biomedical Design Project <u>C</u>	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>13</b>
<u>Summer Semester</u>		
EET-2900	Clinical Internship	4
		<b>4</b>
	<b>PROGRAM TOTAL</b>	<b>70</b>

\*ENG-1020 College Composition II or SPCH course highly recommended.

\*\*Minimum 8 semester credits.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity)—see Section VI.

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY (Computer Networking Hardware)

#### Associate of Applied Science Degree in Electrical-Electronic Engineering Technology with a Concentration in Computer Networking Hardware

Students will be prepared for careers dealing with network hardware systems analysis, planning and implementation. Students will gain the necessary skills to design, build and maintain small to medium size networks, and management of network hardware systems. Skills acquired will assist students in preparing to take industry certification exams.

This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
EET-1300	Cisco I: LAN Design	2
ENG-1010	College Composition I	3
IT-1000	Keyboarding*	2
IT-1010	Introduction to Microcomputer Applications	3
IT-1020	Information Technology Concepts	2
IT-1030	Internet Fundamentals	2
IT-1040	Microcomputer Operating Systems	3
		<b>17</b>
<u>Second Semester</u>		
EET-1000	Introduction to PC Maintenance	2
EET-1010	DOS for Technicians	2
EET-1020	Basic Software Troubleshooting	2
EET-1080	Service Operations and Communications Procedures	1
EET-1310	Cisco II: Basic Router Configuration	2
ITNT-2300	Networking Fundamentals	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>15</b>
<u>Third Semester</u>		
EET-1030	Installing and Configuring Operating Systems	2
EET-1050	PC Systems Servicing and Troubleshooting	3
EET-2300	Cisco III: LAN Management	2
ENG-2150	Technical Writing	3
ITNT-2310	TCP/IP	3
MATH-1060	Survey of Mathematics ....OR	3
MATH-1141	Applied Algebra and Mathematical Reasoning .....OR	
MATH-1180	Intermediate Algebra for Technologies or higher**	
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>18</b>
<u>Fourth Semester</u>		
BADM-1020	Introduction to Business	3
EET-1040	On-Line Communications	1
EET-1060	PC Networking	2
EET-1070	PC Laser Printer/Installation and Repair	1
EET-1090	Test Preparations for A+ Certification	1
EET-2310	Cisco IV: WAN Management	2
ITNT-2990	Networking Capstone <u>C</u>	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>16</b>
	<b>PROGRAM TOTAL</b>	<b>66</b>

\*Waived if student possesses 20-wpm skills or high school typing course, and departmental approval from IT department.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*\*Minimum 8 semester credits. Program sequence as listed requires an additional 4 semester credits at the 2000-level. General Education Requirements should be used to fulfill this requirement.

C = Capstone Course

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) (see Competencies and Skills Certification listing in College Catalog).

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY (Telecommunications)

#### Associate of Applied Science Degree in Electrical/Electronic Engineering Technology with a Concentration in Telecommunications

Graduates of the Telecommunications Engineering Technology Program are employed as technical specialists in a broad and diverse field of telecommunications in such areas as installation, operation and maintenance of analog and digital telecommunications systems. The program emphasizes both theory and application and consists of course work and lab work in basic electronic circuits, digital and microprocessor systems, computer maintenance and networking, analog and digital communications circuits and system and telecommunications media (fiber optics, broadband cable systems and microwave systems). This program has application and/or progression requirements.

Course No	Course Title	Credit Hrs.
<u>First Semester</u>		
EET-1110	DC Electric Circuits	3
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
MIT-1100	Computer Applications & Programming	2
Arts & Hum/Soc & Beh Sci....	(See AAS Degree Requirements)*	3
Arts & Hum/Soc & Beh Sci....	(See AAS Degree Requirements)*	3
		<b>18</b>
<u>Second Semester</u>		
EET-1210	AC Electric Circuits	3
EET-1230	Telecommunications I	3
EET-1240	Digital Circuits/Microprocessors I	3
MATH-1360	Technical Mathematics II	5
PHYS-1210	College Physics I	4
		<b>18</b>
<u>Third Semester</u>		
EET-2110	Industrial Electronics I	3
EET-2120	Electronics I	3
EET-2130	Telecommunications II	4
EET-2140	Digital Circuits/Microprocessors II	3
PHYS-1220	College Physics II	4
Communications...	(See AAS Degree Requirements)	3
		<b>20</b>
<u>Fourth Semester</u>		
EET-2220	Electronics II	3
EET-2230	Telecommunications III	3
EET-2241	Microprocessors and Hardware Interface with C Programming	3
EET-2590	Telecommunications Design Project <u>C</u>	2
ITNT-2300	Network Fundamentals	3
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)*	2
		<b>16</b>
	<b>PROGRAM TOTAL</b>	<b>72</b>

\*Minimum 8 semester credits.

Note: Courses as listed satisfy competencies C&S

Choose at least one course from C&S (Cultural Diversity)

C = Capstone Course



# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## GRAPHIC COMMUNICATIONS AND PHOTOGRAPHY (Graphic Communications Management)

### Associate of Applied Science Degree in Graphic Communications and Photography with a Concentration in Graphic Communications Management

The demand for high quality communications materials has increased the need for well-trained graphic communications professionals. CCC's Graphic Communications Management program addresses many facets of the visual information industry, including, traditional offset printing and electronic imaging and publishing specialties, while maintaining the flexibility to take on new technologies as they develop. The Graphic Communications Management Concentration prepares individuals for middle management, customer service-sales support, production supervision, quality control and entrepreneurial opportunities within the industry. Technical preparation focuses on the areas of electronic publishing, prepress operations, color reproduction, offset printing, finishing operations, print on demand. Preparation for National Skill's Standards Certification is available, as well as a Sheetfed Offset Press Competency Award. Effective Fall 2000: Program sequence meets new AAS degree requirements.

Course No	Course Title	Credit Hrs.
<u>First Semester</u>		
BADM-1020	Introduction to Business	3
ENG-1010	College Composition I	3
GCMT-1001	Orientation to the Publishing Industries	2
GCMT-1010	Orientation to Publishing Laboratory	1
GCMT-1020	Macintosh Basics	1
GCMT-1300	Introduction to Visual Communications	2
GCMT-1400	Computer Applications for Publishing	3
GCMT-1410	Integrating Production & Design for Graphic Products	3
GCMT-1530	Photography for Non-Majors	1
		<b>19</b>
<u>Second Semester</u>		
BADM-1120	Principles of Management	4
ENG-1020	College Composition II.....OR	3
SPCH-1010	Fundamentals of Speech Communication	
GCMT-1600	Digital Imaging I	3
GCMT-2410	Electronic Publishing I	2
GCMT-2430	Color Scanning and Reproduction	2
MATH-1060	Survey of Mathematics * or higher	3
		<b>17</b>
<u>Third Semester</u>		
GCMT-2300	Print Production Materials	2
GCMT-2311	Substrate Imaging and Finishing	4
GCMT-2440	Vector Graphics	2
GCMT-xxxx	Any GCMT elective course	2
MARK-2010	Principles of Marketing	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>18</b>
<u>Fourth Semester</u>		
GCMT-2360	Customer Service and Sales Support	2
GCMT-2380	Estimating and Production Management <b>C</b>	3
GCMT-2450	Prepress/Service Bureau Procedures I	2
GCMT-2460	Prepress/Service Bureau Procedures II	2
GCMT-2471	Internet/World Wide Web Publishing I	3
GCMT-1850	Graphic Communication Practicum .....OR	1-2
GCMT-2830	Cooperative Field Experience.....OR	
GCMT-2840	Internship	
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>16-17</b>
	<b>PROGRAM TOTAL</b>	<b>70-71</b>

\*MATH 1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum of 8 semester credits -- ECON-1210 or ECO-2610 or ECON-2620 highly recommended.

Note: Courses as listed satisfy competencies and skills C&S

**C**=Capstone course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## GRAPHIC COMMUNICATIONS AND PHOTOGRAPHY (Multimedia)

### Associate of Applied Science Degree in Graphic Communications and Photography with a Concentration in Multimedia

The mission of the CCC Multimedia Degree Program – part of the Visual Communication Center of Excellence – is to prepare our graduates for a rewarding career in the ever expanding Internet and Multimedia industries. The curriculum is based on professional standards, students are assisted in the development of professional and studio skills while building a strong, marketable, digital portfolio. Effective Fall 2000: Program sequence meets new AAS degree requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
CART-1050	Introduction to Commercial Art and Graphic Design	2
ENG-1010	College Composition I	3
GCMT-1020	Macintosh Basics	1
GCMT-1300	Introduction to Visual Communications	2
GCMT-1530	Photography for Non-Majors	1
GCMT-1600	Digital Imaging I	3
MATH-1060	Survey of Mathematics* or higher	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>17</b>
<u>Second Semester</u>		
CART-1300	Typography and Layout	2
GCMT-2440	Vector Graphics	2
GCMT-2471	Internet/WWW Publishing I	3
GCMT-2600	Digital Imaging II	3
JMC-1010	Introduction to Mass Communications I	4
MARK-2010	Principles of Marketing	3
		<b>17</b>
<u>Third Semester</u>		
CART-2450	Media Design	2
GCMT-2480	Internet/WWW Publishing II	3
GCMT-2700	Digital Video I	3
PSY-1010	General Psychology	3
Program Elective-xxxx	Select from Option 1 or 2***	2-3
Program Elective-xxxx	Select from Option 1 or 2***	2-3
		<b>15-17</b>
<u>Fourth Semester</u>		
GCMT-2510	Portfolio Preparation <u>C</u>	2
GCMT-2530	Professional Photographic Practices	3
GCMT-2711	Interactive Multimedia	3
Arts & Hum/Soc & Beh Sci	(See AAS Degree Requirements)**	3
Program Elective-xxxx	Select from Option 1 or 2***	2-3
		<b>13-14</b>
	<b>PROGRAM TOTAL</b>	<b>65-68</b>

MATH 1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits -- must include PSY-1010. Art courses highly recommended.

\*\*\*Select one option and complete 6-9 semester credits in same option.

Note: Courses as listed satisfy competencies and skills C&S. C = Capstone course.

#### Option #1 Visual Communication Emphasis:

- GCMT-1500 Black & White Photography I
- GCMT-1610 Virtual Reality Imaging
- GCMT-2490 Animation for the Web and Multimedia
- GCMT-2800 Special Advanced Topics in Graphic Communications...AND
- GCMT-281S Special Advanced Laboratory Topics in Graphic Communications
- MUS-1130 MIDI Technology I
- ART-xxxx As recommended by Art and Graphics departments
- CART-xxxx As recommended by Commercial Art and Graphics departments.

#### Option #2 Technical Emphasis:

- IT-xxxx Select 6 to 9 credits from Information Technology courses as recommended by Information Technology & Graphics departments.

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### GRAPHIC COMMUNICATIONS AND PHOTOGRAPHY (Photography)

#### Associate of Applied Science Degree in Graphic Communications and Photography with a Concentration in Photography

This curriculum provides a foundation program in the technical and aesthetic components of black and white, color and digital photography. It prepares students to work in film labs and service bureaus, photographic studios, multimedia production, in-house photography departments, and photographic sales and related services, as well as providing opportunities for those currently employed in the field to update their skills. Effective Fall 2000: Program sequence meets new AAS degree requirements.

This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
GCMT-1020	Macintosh Basics	1
GCMT-1300	Introduction to Visual Communications	2
GCMT-1500	Black and White Photography I	3
GCMT-1540	History of Photography	3
ENG-1010	College Composition I	3
JMC-1010	Introduction to Mass Communication I	4
		<b>16</b>
<u>Second Semester</u>		
GCMT-1510	Black and White Photography II	3
GCMT-1520	Color Photography I	3
GCMT-1600	Digital Imaging I	3
GCMT-2440	Vector Graphics	2
MATH-1060	Survey of Mathematics* or higher	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>17</b>
<u>Third Semester</u>		
GCMT-2500	Commercial Studio Techniques I	3
GCMT-2520	Color Photography II	3
GCMT-2550	Introduction to Photo Journalism	3
GCMT-2600	Digital Imaging II	3
GCMT-2700	Digital Video	3
GCMT-xxxx	Elective	1-3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>19-21</b>
<u>Fourth Semester</u>		
GCMT-2510	Portfolio Preparation <u>C</u>	2
GCMT-2530	Professional Photographic Practices	3
GCMT-2540	Individual Projects in Photography and Graphic Communications	2
GCMT-2560	Commercial Studio Techniques II	3
GCMT-2711	Interactive Media	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>67-69</b>

\*MATH-1800/2800 and 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits.

Note: Courses as listed satisfy competencies and skills C&S.

C = Capstone course.

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### MANUFACTURING/INDUSTRIAL TECHNOLOGY

#### Associate of Applied Science Degree in Manufacturing/ Industrial Technology

Manufacturing is instrumental to the function of society today and will remain indispensable for the future. This program recognizes the impact of manufacturing on the economy of a nation. The program provides graduates with a unique blend of theoretical and hands-on-knowledge with computer integration in a manufacturing environment that directly corresponds to modern applications used in industry. Graduates are employed in a wide variety of areas relevant to manufacturing industries. (Certificate programs also available.)

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
MET-1100	Technology Orientation	2
MIT-1100	Computer Applications & Programming	2
MIT-1200	Engineering Drawing	2
MIT-1220	Introduction to AutoCAD	2
MIT-1250	Materials and Machine Tools	3
		<b>18</b>
<u>Second Semester</u>		
MATH-1360	Technical Mathematics II	5
MIT-1300	Metallurgy & Manufacturing Processes	3
MIT-1600	CNC Programming	3
MIT-2040	Industrial CAD I	3
PHYS-1210	College Physics I	4
		<b>18</b>
<u>Third Semester</u>		
MIT-2000	CAD/CAM I	3
MIT-2100	Advanced Machine Tools	3
MIT-2150	Motion and Time Study	3
PHYS-1220	College Physics II	4
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
Communications...	(See AAS Degree Requirements)	3
		<b>19</b>
<u>Fourth Semester</u>		
MIT-2200	Computer Integrated Manufacturing <u>C</u>	3
MIT-2400	Statistical Process Control	3
MIT-2830	Cooperative Field Experience	3
MIT-2xxx	Any 2000-level MIT elective course	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>17</b>
	<b>PROGRAM TOTAL</b>	<b>72</b>

\*Minimum 8 semester credits required.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C= Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### MANUFACTURING/INDUSTRIAL TECHNOLOGY (Drafting)

#### Associate of Applied Science Degree in Manufacturing/Industrial Technology with a Concentration in Drafting Technology

Manufacturing is instrumental to the function of society in this technological age and will remain so, far into the future. The Manufacturing/Industrial Technology program with a concentration in drafting, recognizes drafting as an indispensable tool and enabler of manufacturing. The program provides its graduates with a unique blend of theoretical knowledge and skills in computer-aided and traditional drafting that correspond to modern drafting technologies applied in manufacturing industries.

Graduates are employed in a wide variety of areas relevant to manufacturing industries. (Certificate program also available.)

This program has application and/or progression requirements

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
MET-1100	Technology Orientation	2
MIT-1100	Computer Applications & Programming	2
MIT-1200	Engineering Drawing	2
MIT-1220	Introduction to AutoCAD	2
MIT-1250	Materials and Machine Tools	3
		<b>18</b>
<u>Second Semester</u>		
MATH-1360	Technical Mathematics II	5
MIT-1300	Metallurgy & Manufacturing Processes	3
MIT-1600	CNC Programming	3
MIT-2040	Industrial CAD I	3
PHYS-1210	College Physics I	4
		<b>18</b>
<u>Third Semester</u>		
ARCH-1410	Architectural Drawing & CAD I	3
EET-1220	Circuits & Electronics	3
ENG-1020	College Composition II	3
MIT-2030	Industrial Drawing Essentials	3
PHYS-1220	College Physics II	4
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>19</b>
<u>Fourth Semester</u>		
EET-2500	Instrumentation and Control.....OR	3
MET-2300	Fluid Power.....OR	
MIT-2000	CAD/CAM I.....OR	
MIT-2830	Cooperative Field Experience	
MIT-2051	Industrial CAD II <u>C</u>	3
MIT-2100	Advanced Machine Tools	3
MIT-2220	Advanced AutoCAD	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>17</b>
	<b>PROGRAM TOTAL</b>	<b>72</b>

\*Minimum 8 semester credits required.

Note: Courses as listed satisfy competencies C&S

Note: Additional two semester credits at the 2000 level required.

C = Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### MECHANICAL ENGINEERING TECHNOLOGY

#### Associate of Applied Science Degree in Mechanical Engineering Technology

This program prepares students to pursue a career in the areas of design, development, manufacturing, installation, measurement, testing, operation and control, maintenance and sales of mechanical devices and systems. The curriculum emphasizes hands-on-learning and the use of current computer-aided techniques found in modern industry. Graduates are employed in a variety of industries such as automotive, manufacturing, aero-space, construction, transportation, power generation, petrochemical, as well as in research and development laboratories. This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
MET-1100	Technology Orientation	2
MIT-1200	Engineering Drawing	2
MIT-1220	Introduction to AutoCAD	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>16</b>
<u>Second Semester</u>		
MATH-1360	Technical Mathematics II	5
MET-1600	Technical Statics	2
MET-1620	Technical Dynamics	2
MIT-1100	Computer Applications and Programming	2
MIT-1250	Materials and Machine Tools	3
PHYS-1210	College Physics I	4
		<b>18</b>
<u>Third Semester</u>		
EET-1220	Circuits and Electronics	3
ENG-1020	College Composition II	3
MET-2200	Strength of Materials	3
MET-2300	Fluid Power	3
MIT-1300	Metallurgy and Manufacturing Processes	3
PHYS-1220	College Physics II	4
		<b>19</b>
<u>Fourth Semester</u>		
EET-2500	Instrumentation and Control	3
MET-2600	Mechanical Computer-Aided Engineering	3
MET-2700	Machine Design <u>C</u>	4
MIT-2040	Industrial CAD I	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>18</b>
	<b>PROGRAM TOTAL</b>	<b>71</b>

\*Minimum 8 semesters – credits must include one 2000-level course.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### RECORDING ARTS AND TECHNOLOGY

#### Associate of Applied Science Degree in Recording Arts and Technology

The Recording Arts and Technology Program trains students for entry-level positions within the audio industry. Students receive broad-based training in music recording and mixing, location sound, commercial production, audio for video and television, multimedia and internet audio, record production and live sound reinforcement. A field experience/internship component provides on the job training at local and national facilities. Graduates are employed in a wide variety of positions within the audio recording services industry. Program Manager - (216-987-4252). This program has application and/or progression requirements.

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>
<u>First Semester</u>		
MATH-1060	Survey of Mathematics or higher*	3
MUS-1130	MIDI Technology I	23
MUS-1230	Critical Listening	1
RAT-1300	Introduction to Recording	3
RAT 1310	Studio Operations	4
RAT-1320	Audio Transducers	3
		<b>17</b>
<u>Second Semester</u>		
EET-1130	Basic Audio Electronics	3
ENG-1010	College Composition I	3
RAT-1500	Recording Theory I	3
RAT-1510	Recording Lab I	3
RAT-1520	Audio Signal Processing	3
RAT-1530	Digital Audio Theory	3
		<b>18</b>
<u>Third Semester</u>		
MUS-1110	Music Business I	3
MUS-2140	Studio Music	2
RAT-2300	Recording Theory II	3
RAT-2310	Recording Lab II	3
RAT-2330	Digital Audio Mixing	3
RAT-2340	Location Recording	3
		<b>17</b>
<u>Fourth Semester</u>		
BADM-1300	Small Business Management	4
MUS-1050	Survey of World Music	3
RAT-2540	Live Sound Reinforcement	3
RAT-2990	Recording Arts and Technology Capstone <u>C</u>	3
RAT-xxxx	Any RAT elective course	1
SPCH-1000	Fundamentals of Interpersonal Communications	3
		<b>17</b>
<u>Summer Semester</u>		
RAT-2940	Audio Recording Field Experience	1-2
		<b>1-2</b>
	<b>PROGRAM TOTAL</b>	<b>70-71</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S.

C = Capstone Course

## Health Careers

Associate of Applied Science Degree  
Dental Assisting (1+1 program)  
Dental Hygiene  
Diagnostic Medical Sonography  
Dietetic Technology  
Emergency Medical Technology  
Health Information Management  
Human Services  
Masseotherapy - General Massage Therapy  
Masseotherapy - Geriatric Massage Therapy  
Medical Assisting  
Medical Laboratory Technology  
Nuclear Medicine Technology  
Nursing  
Occupational Therapy Assistant Technology  
Optical Technology  
Pharmacy Technology  
Physical Therapist Assisting Technology  
Physician Assistant  
Radiography  
Respiratory Care  
Surgical Physician Assistant  
Surgical Technology  
Veterinary Technology



## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### Dental Assisting

#### Associate of Applied Science Degree in Dental Assisting (1+1 Program)

Dental assistants are competent in technical, interpersonal, and management areas. They work directly with the dentist and patients and have responsibility for chairside assisting, radiographs (x-rays), laboratory procedures, business procedures and patient management. This program prepares graduates for entry-level positions and eligibility to take the Dental Assisting National Board certification exam and the Ohio Dental Assistant Radiographer Exam. Program meets current degree requirements - pre Fall 2001. Program Manager - Ms. Mary Lou Gerosky (216-987-4494). This program has specific admission requirements.

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<u>First Semester</u>		
BIO-1050	Human Biology	3
BIO-1200	Oral Structure and Development	3
DAST-1300	Dental Assisting Methods I	5
DAST-1310	Dental Assisting Radiography I	3
DAST-1320	Dental Office Management	3
		<b>17</b>
<u>Second Semester</u>		
DAST-1400	Dental Assisting Methods II	3
DAST-1410	Dental Assisting Radiography II	2
DAST-1420	Current Concepts for the Dental Assistant	1
DAST-1860	Dental Assisting Practicum	4
HTEC-1100	Allied Dental Pharmacology	2
HTEC-1200	Patient Management for Health Career Professionals	1
		<b>16</b>
<u>Summer Semester</u>		
ENG -1010	College Composition I	3
MATH-1141	Applied Algebra and Mathematical Reasoning or higher*	3
		<b>6</b>
	<b>Program Total</b>	<b>36</b>

\*MATH-1800/2800 may not be used to meet this requirement.

NOTE: The Associate of Applied Science Degree in Dental Assisting can be achieved through a second year of study in expanded functions at Jefferson Community College in Steubenville, OH.

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## Dental Hygiene

### Associate of Applied Science Degree in Dental Hygiene

Dental hygienists are employed in solo and group practices, health care agencies, hospitals, the military, sales, government research programs and in dental hygiene education programs. Working under the supervision of a dentist, dental hygienists scale and polish teeth, chart abnormalities, take radiographs, apply fluoride and pit and fissure sealants, impart dental health information and perform other chairside and office duties. Upon successful completion of this curriculum, the student may take national and state board examinations and apply for licensure.

Program Manager - Ms. Mary Lou Gerosky (216-987-4494). This program has application and/or progression requirements.

Course No	Course Title	Credit Hrs.
<u>Summer Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
BIO-2330	Anatomy and Physiology I	4
ENG-1010	College Composition I	3
MATH-1141	Applied Algebra and Mathematical Reasoning or higher*	3
PSY-1010	General Psychology **	3
SPCH-1000	Fundamentals of Interpersonal Communication	3
		<b>19</b>
<u>First Semester</u>		
BIO-1210	General and Oral Histopathology	4
DENT-1300	Preventive Oral Health Services I	4
DENT-1310	Dental Anatomy	2
DENT-1330	Radiology	3
DENT-1340	Dental Hygiene Care Ethics	1
		<b>14</b>
<u>Second Semester</u>		
BIO-2520	Microbiology and Immunology	3
DENT-1400	Preventive Oral Health Services II	5
DENT-1410	Current Concepts in Dental Materials	2
DENT-1420	Periodontics I	2
DENT-1430	Head and Neck Anatomy	3
		<b>15</b>
<u>Third Semester</u>		
DENT-2300	Preventive Oral Health Services III	5
DENT-2320	Periodontics II	2
DENT-2331	Pharmacology and Therapeutics	3
DIET-1220	Basic Nutrition for Dental Hygiene	2
		<b>12</b>
<u>Fourth Semester</u>		
DENT-2400	Preventive Oral Health Services IV	5
DENT-2410	Community Oral Health	2
DENT-xxx	DENT elective**	
DENT-2430	Dental Hygiene Practice <u>C</u>	1
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>13</b>
	<b>PROGRAM TOTAL</b>	<b>73</b>

\*MATH-1800/2800 may not be used to meet this requirement.

\*\*DENT-2410 Community Oral Health is recommended. Another course may be selected with written departmental approval.

\*\*\*Minimum 8 semester credits--must include PSY-1010. Sociology course highly recommended.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## Diagnostic Medical Sonography

### Associate of Applied Science Degree in Diagnostic Medical Sonography

The Associate of Applied Science Degree prepares the student for an entry-level position as a Diagnostic Medical Sonographer for employment in hospitals and other health care agencies. The Diagnostic Medical Sonographer produces, evaluates, and understands ultrasound images and related data. Sonographers provide a summary of their technical findings to the qualified interpreting physician to aid in rendering a medical decision. The curriculum consists of on-campus didactic and lab instruction, as well as off-campus clinical applications at our affiliated health care institutions. The program offers specialty training in the following options: abdominal sonography, echocardiography, obstetrical/gynecological sonography and vascular technology. The Diagnostic Medical Sonography program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Upon completion of the Diagnostic Medical Sonography program, graduates are eligible to take the national certifying exams by the American Registry of Diagnostic Medical Sonography (ARDMS) in the exam offerings of their specialty option.

Effective Fall 2000: Program Sequence meets new AAS degree requirements. Program Manager - Ms. Denise Kinches (216-987-5564)

This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1221	Anatomy and Physiology for Diagnostic Medical Imaging	4
DMS-1301	Introductory Sonographic Scanning	3
DMS-1350	Patient Care and Basic Medical Techniques	1
DMS-1360	Anatomy & Physiology for Cardiovascular Sonographers (2, 4)	0-2
DMS-1370	Clinical Cardiovascular Assessment (2, 4) ... OR	0-2
DMS-1400	Abdominal Sonography I (1) *	
MATH-1141	Applied Algebra & Mathematical Reasoning or higher*	3
PHYS-1070	Physical Concepts in Diagnostic Sonography	2
		<b>13-17</b>
<u>Second Semester</u>		
DMS-1500	Gynecologic & Obstetrical Sonography (3) ...OR	2-4
DMS-1600	Echocardiography I (2) .... OR	
DMS-1700	Vascular Sonography I (4) ..... OR	
DMS-2400	Abdominal Sonography II (1)	
DMS-1910	Initial Directed Practice	3
DMS-2300	Intermediate Sonographic Scanning	1
DMS-2350	Sonographic Instruments and Physics.....OR	3
DMS-2370	Advanced Sonographic Physical Principles and Flows	
ENG-1010	College Composition I	3
		<b>12-14</b>
<u>Summer Semester</u>		
DMS-1920	Directed Practice I	4
DMS-2600	Echocardiography II (2) .... OR	0-2
DMS-2700	Vascular Sonography II (4)	
		<b>4-6</b>
<u>Third Semester</u>		
DMS-1380	Cardiac Diagnostic Procedures (2) OR	0-4
DMS-2500	Obstetrical Sonography (3) OR	
DMS-2970	Vascular Surgical Procedures and Clinical Correlations (4)	
DMS-2910	Directed Practice II	4
DMS-xxxx	DMS elective course III	1
MA-1020	Medical Terminology I	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Communications...	(See AAS Degree Requirements)	3
		<b>14-18</b>

## Diagnostic Medical Sonography

### Fourth Semester

DMS-2920	Directed Practice III	4
DMS-2990	Quality Assurance & Quality Control in Sonography <u>C</u>	1
EMT-1310	Cardiopulmonary Resuscitation	1
MA-2010	Medical Terminology II	2
PHIL-2050	Bioethics II	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>13</b>
	<b>PROGRAM TOTAL</b>	<b>61-66</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*A minimum of 8 semester credits must include PHIL-2050.

\*\*\*Selection of elective Diagnostic Medical Sonography course must have written approval of the department.

Note: DMS courses as listed satisfy Competencies and Skills C&S

C= Capstone course.

Note: Numbers in parentheses in the semester sequence relate to Options 1, 2, 3 and 4 listed below.

Select one group of courses to complete.

(1) Abdominal Option (AAS degree total - 61 semester credits)

DMS-1400 - Abdominal Sonography I

DMS0-2400 - Abdominal Sonography II

(2) Echocardiography Option (AAS degree total - 66 semester credits)

DMS-1360 - Anatomy and Physiology for Cardiovascular Sonographers

DMS-1370 - Clinical Cardiovascular Assessment

DMS-1380 - Cardiac Diagnostic Procedures

DMS-1600 - Echocardiography I

DMS-2600 - Echocardiography II

(3) OB/Gyn Option (AAS degree total - 62 semester credits)

DMS-1500 - Gynecologic and Obstetrical Sonography

DMS-2500 - Obstetrical Sonography

(4) Vascular Option (AAS degree total - 64 semester credits)

DMS-1360 - Anatomy and Physiology for Cardiovascular Sonographers

DMS-1370 - Clinical Cardiovascular Assessment

DMS-1700 - Vascular Sonography I

DMS-2700 - Vascular Sonography II

DMS-2970 - Vascular Surgical Procedures and Clinical Correlation

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## Dietetic Technology

### Associate of Applied Science Degree in Dietetic Technology

Graduates in the Dietetic Technology Program are trained food and nutrition professionals. They function as members of the food service and nutrition care teams under the supervision of a registered dietitian. Dietetic technicians promote optimal health through proper nutrition by providing personalized services to meet client's needs and ensure balanced diets through the provision of wholesome, quality food. Employment exists in hospitals, nursing homes, long term care facilities, health departments, early childhood development centers, community nutrition programs, schools and other health care agencies that provide food and nutrition services. This program is fully accredited by the Commission on Accreditation of Dietetics Education.

Program Manager - Ms. Barbara Mikuszewski (216-987-4497). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
DIET-1300	Principles of Nutrition Care.....OR	4
DIET-1200	Basic Nutrition....AND	
DIET-1320	Nutrition Applications	
DIET-1310	Introduction to Dietetics	2
ENG-1010	College Composition I	3
MA-1020	Medical Terminology I	3
MATH-1141	Applied Algebra & Mathematical Reasoning or higher *	3
		<b>18</b>
<u>Second Semester</u>		
BIO-2330	Anatomy and Physiology I	4
DIET-1330	Fundamentals of Food Production	6
DIET-1580	Cost Control Procedures	1
DIET-1590	Purchasing Procedures	1
DIET-2301	Medical Nutrition Therapy I	3
HOSP-1020	Sanitation and Safety	2
IT-1010	Introduction to Microcomputer Applications	3
		<b>20</b>
<u>Summer Semester</u>		
DIET-1850	Food & Nutrition Systems Practicum	4
		<b>4</b>
<u>Third Semester</u>		
DIET-1600	Introduction to Supervision	3
DIET-2311	Medical Nutrition Therapy II	3
DIET-2850	Medical Nutrition Care Practicum	2
PSY-1010	General Psychology	3
SPCH-1010	Fundamentals of Speech Communication	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>16</b>
<u>Fourth Semester</u>		
DIET-2400	Community Nutrition.....OR	3
DIET-xxxx	DIET elective course***	
DIET-2500	Geriatric Nutrition	3
DIET-2861	Life Cycle Nutrition Practicum	4
DIET-2990	Dietetic Technology Professional Development Skills <u>C</u>	2
PSY-2xxx	Any 2000-level PSY elective course**	3
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>73</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits must include PSY-1010 & PSY-2000 level course.

\*\*\*Elective course in Dietetic Technology may be selected with written departmental approval.

Note: Courses as listed satisfy competencies C&S

Note: Courses as listed satisfy the minimum of 20 semester credits at the 2000 level.

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### EMERGENCY MEDICAL TECHNOLOGY

#### Associate of Applied Science Degree in Emergency Medical Technology

This program is designed for individuals providing Emergency Medical Service to the community. Four levels of training are available: EMT-B, EMT-I, EMT-P and Associate of Applied Science Degree in Emergency Medical Technology. Certification is provided by the Ohio Dept. of Public Safety, Division of EMS.

The graduate may function on the levels required by Ohio Law to provide basic and advanced life support under the direction of a physician, as well as to provide supervision of operations in an emergency service. Accreditation number: 2-3-002.

Program Manager - (216-987-3688). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
EMT-1301	Emergency Medical Technician-Basic	7
ENG-1010	College Composition I	3
MA-1020	Medical Terminology I	3
		<b>16</b>
<u>Second Semester</u>		
BIO-1050	Human Biology	3
EMT-1320	Heavy Rescue.....OR	2
EMT-xxxx	EMT elective course*	
EMT-1330	Defensive Driving- EMT	1
EMT-1340	Emergency Medical Service Communications	1
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Communications...	(See AAS Degree Requirements)	3
		<b>16</b>
<u>Third Semester</u>		
EMT-2000	Instructional Techniques- EMT	2
EMT-2310	Paramedic Theory I	10
MATH-1060	Survey of Mathematics*** or higher	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>17</b>
<u>Fourth Semester</u>		
EMT-2010	Emergency Medical Technology Management <u>C</u>	2
EMT-2320	Paramedic Theory II	10
		<b>12</b>
<u>Summer Semester</u>		
EMT-2740	Advanced Paramedic Techniques	4
		<b>4</b>
<b>PROGRAM TOTAL</b>		<b>65</b>

\*Elective course may be selected with written approval from the EMT department.

\*\*Minimum 8 semester credits.

\*\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C = Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## HEALTH INFORMATION MANAGEMENT

### Associate of Applied Science Degree in Health Information Management

The Health Information Management program prepares graduates who can identify and use a variety of health information resources and technologies to accomplish the objectives of diverse practice environments. In general, these individuals may perform tasks related to the use, analysis, validation, presentation, abstracting, coding, storage, security, retrieval, quality measurement and control of health care data. Their task responsibility may also include supervision of personnel.

The program is accredited by the Commission on Accreditation of Allied Health Education (CAAHEP) in collaboration with the American Health Information Management Association. The goal of the Health Information Management Program is to provide an educational experience within the framework of professional standards. Graduates of the program are eligible to take the national certification examination to become Registered Health Information Technician (RHIT). Upon passing the exam, an individual is permitted to use the credential RHIT behind his/her last name. Earning a credential validates your competence as an HIM professional to employers and the public.

Program Manager - Ms. Nancy Donahue (216-987-4456). This program has specific admission requirements

Course No.	Course Title	Credit Hrs.
<u>Summer Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
BIO-2330	Anatomy and Physiology I	4
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
		<b>13</b>
<u>First Semester</u>		
BIO-2340	Anatomy and Physiology II	4
HIM-1300	Principles of Health Information Management	4
HIM-1310	Legal Aspects of Health Care	2
MA-1020	Medical Terminology I	3
MATH-xxxx	1000-level MATH course or higher *	3
		<b>16</b>
<u>Second Semester</u>		
BIO-2600	Pathophysiology	3
HIM-1400	Health Care Delivery Systems	3
HIM-1410	Health Care Statistical Applications.....OR	2
HIM-xxxx	HIM elective course**	
HIM-1420	Health Data Content and Structure	3
IT-2300	Database Use and Design	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)***	2
		<b>16</b>
<u>Third Semester</u>		
HIM-2300	Coding Systems Used in Health Care	4
HIM-2310	Data Assessment and Registries	3
HIM-2850	Practicum I	2
Communications...	(See AAS Degree Requirements)	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements) ***	3
		<b>15</b>
<u>Fourth Semester</u>		
HIM-2400	Advanced Coding and Reimbursement	2
HIM-2410	Management Practices in Health Information <u>C</u>	2
HIM-2420	Trends in Health Information Management <u>C</u>	2
HIM-2860	Practicum II <u>C</u>	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)***	3
		<b>11</b>
	<b>PROGRAM TOTAL</b>	<b>71</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Elective course may be selected with written approval from the HIM department.

\*\*\*Minimum of 8 semester credits required.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C = Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## HUMAN SERVICES

(formerly Community Mental Health Technology)

### Associate of Applied Science Degree in Human Services Alcohol/Chemical Dependency Option

The Alcohol/Chemical Dependency Option of the Human Services Program provides students the competencies that enable them to work with people who are chemically dependent. Career opportunities for graduates include employment in a variety of settings ranging from in-patient programs to community-based outpatient and prevention programs. Graduates of the program receive a significant number of board recognized hours toward the Certified Chemical Dependency Counselor I (CCDC I) requirements established by the Ohio Credentialing Board for Chemical Dependency Professionals, and are prepared for certification exams for CCDC I and CCDC II administered by the Ohio Credentialing Board.

Generalist Option: The Generalist Option of the Human Services Program provides students with the competencies which enable them to work with a variety of people with various needs. Career opportunities for graduates are in community-based programs which emphasize practical approaches to problem solving. All graduates of the Human Services Program are eligible to receive certification as a Social Work Assistant from the Ohio Counselor and Social Worker Board.

This program has application and/or progression requirements

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
HLTH-1300	Health and Medical Aspects of Chemical Dependency	3
HS-1300	Introduction to Human Services	3
PSY-1010	General Psychology	3
SPCH-1000	Fundamentals of Interpersonal Communication	3
		<b>15</b>
<u>Second Semester</u>		
ENG-1020	College Composition II	3
HS-1400	Group Work in the Human Services	2
HS-1410	Diagnostic Tools & Advocacy Strategies....OR	2
HS-1310	Issues in Chemical Dependency I	
HS-1420	Legal Issues.....OR	2
HS-1320	Issues in Chemical Dependency II	
HS-1850	Introduction to Human Services Principles and Practices	5
SPCH-1010	Fundamentals of Speech Communication	3
		<b>17</b>
<u>Third Semester</u>		
HS-2310	Issues in Chemical Dependency III.....OR	2
HS-2410	Family Systems	
HS-2320	Issues in Chemical Dependency IV.....OR	2
HS-2420	Intervention Strategies	
HS-2510	Human Services Systems	2
HS-2520	Case Management In Human Services	2
HS-2850	Human Services Principles & Practices I	5
PSY-2020	Life Span Development	4
		<b>17</b>
<u>Fourth Semester</u>		
BIO-1050	Human Biology	3
BIO-105L	Human Biology Lab	1
HS-2530	Proposal Writing & Program Development	2
HS-2860	Human Services Principles & Practices II	3
HS-2990	Human Services Capstone <u>C</u>	2
MATH-xxxx	1000-level MATH course or higher*	3
PSY-2070	Behavior Modification	3
		<b>17</b>
	<b>PROGRAM TOTAL</b>	<b>66</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course



## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### MASSOTHERAPY (General Massage Therapy)

#### Associate of Applied Science Degree in Massotherapy with a Concentration in General Massage Therapy

General Massage Therapy provides the students the competencies that enable them to learn not only the basic massage therapy skills but also the advanced techniques in a clinical setting. Students receive a significant number of board recognized hours towards the licensed Massage Therapist requirements established by the Ohio State Medical Board and are prepared for National Board Certification exams for massage therapists. This program has specific admission requirements

Course No.	Course Title	Credit Hrs.
<u>Summer Semester</u>		
BIO-1050	Human Biology	3
BIO-105L	Human Biology Laboratory	1
ENG-1010	College Composition I	3
MT-1100	Introduction to Massotherapy	3
MT-1240	Fundamentals of Somatic Studies for Massage Therapists I	4
		<b>14</b>
<u>First Semester</u>		
MT-1270	Fundamentals of Somatic Studies for Massage Therapists II	4
MT-1301	Massotherapy I	3
MT-1310	Applied Musculo-Skeletal Anatomy	3
PSY-1010	General Psychology*	3
		<b>13</b>
<u>Second Semester</u>		
EMT-1310	Cardiopulmonary Resuscitation	1
HTEC-1110	Ethics for Health Care Professionals	1
MT-1320	Functional Assessment in Massage Therapy	3
MT-1330	Massotherapy II	3
PSY-2100	Introduction to Aging*	3
SPCH-1000	Fundamentals of Interpersonal Communication.....OR	3
SPCH-1010	Fundamentals of Speech Communication	3
		<b>14</b>
<u>Third Semester</u>		
MATH-1060	Survey of Mathematics or higher**	3
MT-2301	Pathology for Massage Therapists	3
MT-2310	Advanced Massotherapy I	3
MT-2341	Massotherapy Practicum	3
Arts & Hum/Soc & Beh Sci....	(See AAS Degree Requirements)*	2
		<b>14</b>
<u>Fourth Semester</u>		
BADM-1300	Small Business Management	4
MT-2330	Advanced Massotherapy II	3
MT-2700	Comprehensive Somatic Studies for Massage Therapists	2
MT-2851	General Massage Practicum	3
MT-2990	Comprehensive Massotherapy <u>C</u>	1
		<b>13</b>
	<b>PROGRAM TOTAL</b>	<b>68</b>

\*Minimum 8 semester credits – must include PSY-1010 and 2100.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S.

C = Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### MASSOTHERAPY (Geriatric Massage Therapy)

#### Associate of Applied Science Degree in Massotherapy with a Concentration in Geriatric Massage Therapy

Geriatric Massage Therapy provides the students the competencies that enable them to learn not only the basic massage therapy skills but also the geriatric massage therapy techniques. Students are given the opportunity to work in a geriatric clinic for their clinical practicum under the supervision of geriatric specialists. This enables them to receive a significant number of board recognized hours towards the licensed Massage Therapist requirements established by the Ohio State Medical Board and are prepared for National Board Certification exams for massage therapists. This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>Summer Semester</u>		
BIO-1050	Human Biology	3
BIO-105L	Human Biology Lab	1
ENG-1010	College Composition I	3
MT-1100	Introduction to Massotherapy	3
MT-1240	Fundamentals of Somatic Studies for Massage Therapists I	4
		<b>14</b>
<u>First Semester</u>		
EMT-1310	Cardiopulmonary Resuscitation	1
MT-1270	Fundamentals of Somatic Studies for Massage Therapists II	4
MT-1301	Massotherapy I	3
MT-1310	Applied Musculo-Skeletal Anatomy	3
PSY-1010	General Psychology*	3
		<b>14</b>
<u>Second Semester</u>		
HTEC-1110	Ethics for Health Care Professionals	1
MT-1330	Massotherapy II	3
MT-1400	Overview and Assessment in Geriatric Massage Therapy	3
PSY-2100	Introduction to Aging*	3
SPCH-1000	Fundamentals of Interpersonal Communication.....OR	3
SPCH-1010	Fundamentals of Speech Communication	
		<b>13</b>
<u>Third Semester</u>		
MATH-1060	Survey of Mathematics or higher **	3
MT-2301	Pathology for Massage Therapist	3
MT-2341	Massotherapy Practicum	3
MT-2400	Geriatric Massage Techniques	3
MT-2410	Health and Aging	2
		<b>14</b>
<u>Fourth Semester</u>		
BADM-1300	Small Business Management	4
MT-2700	Comprehensive Somatic Studies for Massage Therapists	2
MT-2861	Geriatric Massage Practicum	3
MT-2990	Comprehensive Massotherapy <u>C</u>	1
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>12</b>
	<b>PROGRAM TOTAL</b>	<b>67</b>

\*Minimum 8 semester credits – must include PSY 1010 and 2100.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### MEDICAL ASSISTING

#### Associate of Applied Science Degree in Medical Assisting

The Medical Assistant is a multi-skilled professional who assists the physician with the administrative and clinical aspects of patient care. The program includes courses in administrative, clinical, and communication skills; ethical and legal standards of medical practice; and a "hands on" clinical practicum experience. Graduates are eligible to take the National Certifying Examination given by the American Association of Medical Assistants (AAMA). An AAMA accredited one-year Certificate of Proficiency program is also available at the College. Program Manager - Ms. Barbara Freeman (216-987-4438). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
HTEC-1110	Ethics for Health Care Professionals	1
HTEC-1610	Introduction to Pharmacology	2
MA-1020	Medical Terminology I	3
MA-1320	Office Laboratory Procedures	3
MA-1400	Basic Clinical Medical Assisting	2
MA-1420	Office Record Documentation and Management	1
MA-1500	Medical Office Communication	3
		<b>18</b>
<u>Second Semester</u>		
HIM-1010	Basic Medical Transcription	1
MA-1511	Medical Office Procedures	3
MA-2010	Medical Terminology II	2
MA-2410	Advanced Clinical Medical Assisting	3
MA-2520	Medical Billing	3
MA-2860	Medical Assisting Practicum <u>C</u>	2
MA-2980	Medical Assisting Seminar	1
MATH-1060	Survey of Mathematics or higher*	3
		<b>18</b>
<u>Third Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
DIET-1000	Consumer Nutrition	2
HIM-1050	Medical Transcription.....OR	2-3
IT-1010	Introduction to Microcomputer Applications	
IT-1060	Introduction to Windows.....OR	2-4
MA-xxxx	Any MA elective course	
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>12-15</b>
<u>Fourth Semester</u>		
BIO-2330	Anatomy and Physiology I	4
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
Communications...	(See AAS Degree Requirements)	3
		<b>12</b>
	<b>PROGRAM TOTAL</b>	<b>60-63</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits--PHIL-2050 highly recommended.

Note: Courses as listed satisfy competencies C&S.

Note: Additional five semester credits at the 2000 level required.

C = Capstone Course

# Program Course Requirements

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## MEDICAL LABORATORY TECHNOLOGY

### Associate of Applied Science Degree in Medical Laboratory Technology

The Medical Laboratory Technician works in a hospital, clinic, private, or research laboratory performing a variety diagnostic of tests. The course of study includes mathematics, chemistry, anatomy and physiology, medical laboratory procedures, general education courses and two academic semesters of clinical practicum experience. Graduates are eligible to take the National Certification Examination given by the American Society of Clinical Pathologists (ASCP).

Program Manager - Ms. Barbara Freeman (216-987-4438). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
ENG-1010	College Composition I	3
MATH-1141	Applied Algebra & Mathematical Reasoning or higher *	3
MLT-1300	Introduction to Blood Collection	3
MLT-1350	Problem Solving Techniques for the Medical Laboratory	1
MLT-1490	Urinalysis	3
		<b>16</b>
<u>Second Semester</u>		
BIO-2330	Anatomy and Physiology I	4
CHEM-1300	General Chemistry I	4
MLT-1470	Blood Bank and Serology I	3
MLT-1480	Clinical Microbiology I	3
Communications...	(See AAS Degree Requirements)	3
		<b>17</b>
<u>Summer Semester</u>		
MLT-1460	Hematology I	3
MLT-1500	Clinical Chemistry I	3
		<b>6</b>
<u>Third Semester</u>		
MLT-2460	Hematology II	2
MLT-2481	Clinical Microbiology II	2
MLT-286A	Medical Laboratory Practicum <u>C</u>	2
MLT-286B	Medical Laboratory Practicum <u>C</u>	2
MLT-2980	Professional Development & Life Skills Seminar <u>C</u> .....OR	1
MLT-xxxx	MLT elective course***	
PHIL-2050	Bioethics**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>15</b>
<u>Fourth Semester</u>		
IT-1010	Introduction to Microcomputer Applications	3
MLT-2470	Blood Bank and Serology II	2
MLT-2500	Clinical Chemistry II	3
MLT-286C	Medical Laboratory Practicum <u>C</u>	2
MLT-286D	Medical Laboratory Practicum <u>C</u>	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>14</b>
	<b>PROGRAM TOTAL</b>	<b>68</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – must include PHIL-2050.

\*\*\*Selection of elective Medical Laboratory Technology course must have written approval of the MLT department.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### NUCLEAR MEDICINE

#### Associate of Applied Science Degree in Nuclear Medicine

The Nuclear Medicine technologist is the health professional responsible for performing nuclear medicine examinations that aid the physician in the diagnosis and treatment of disease. The trained nuclear medicine technologist prepares and administers radiopharmaceuticals and performs patient imaging procedures using radiation detection devices. Technologists provide data analysis and patient information to the physician for diagnostic interpretation. The nuclear medicine technologist is employed in hospitals, clinics and doctors' offices. Graduates of the program are eligible for the American Registry of Radiologic Technologist examination for Nuclear Medicine and/or the Nuclear Medicine Technology Certification Board Examination.

Program Manager - Ms. Marilyn A. Rep (216-987-5264). This program has specific admission requirements

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1221	Anatomy and Physiology for Diagnostic Medical Imaging	4
DMS-1350	Patient Care and Basic Medical Techniques	1
MATH-1141	Applied Algebra and Mathematical Reasoning or higher *	3
NMED-1300	Nuclear Medicine Procedures I	4
NMED-1600	Radiopharmacy and Chemistry for Nuclear Medicine	4
PHYS-1500	Nuclear Medicine Physics	3
		<b>19</b>
<u>Second Semester</u>		
CHEM-1010	Introduction to Inorganic Chemistry	4
ENG-1010	College Composition I	3
NMED-1700	Nuclear Medicine Instrumentation	4
NMED-2300	Nuclear Medicine Procedures II	4
NMED-2400	Radiation Protection and Safety	3
		<b>18</b>
<u>Summer Semester</u>		
MA-1020	Medical Terminology I	3
NMED-2910	Nuclear Medicine Directed Practice I	5
PSY-1010	General Psychology	3
		<b>11</b>
<u>Third Semester</u>		
NMED-2920	Nuclear Medicine Directed Practice II	7
PHIL-2050	Bioethics	3
Communications	(See AAS Degree Requirements)	3
		<b>13</b>
<u>Fourth Semester</u>		
BIO-2200	Radiobiology	2
NMED-2930	Nuclear Medicine Directed Practice III <u>C</u>	7
PSY-xxxx	Any 2000 level Psychology course (see degree requirements)	3
		<b>12</b>
	<b>PROGRAM TOTAL</b>	<b>73</b>

\*MATH-1800/2800 and 1820/2820 may not be used to meet this requirement.

Note: Courses as listed meet C&S requirements.

Note: Courses as listed satisfy the minimum of 20 semester credits at the 2000 level.

C = Capstone course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## NURSING

### Associate of Applied Science Degree in Nursing.

The Associate Degree Nursing program provides students with the opportunity to become registered nurses. The curriculum is divided among nursing courses and non-nursing courses. The nursing courses consist of classroom activities and hospital experience caring for clients of all ages with a variety of health deviations. Upon successful completion of the program requirements, graduates are eligible to take the National Council Licensing Examination for registered nursing.

Misdemeanors and/or Felonies: The Ohio Board of Nursing frequently receives calls from prospective students, school officials, and the Bureau of Vocational Rehabilitation Services regarding whether the Board will permit a person who has a prior record of misdemeanors and/or felonies to sit for the licensure examination or become licensed. The Board of Nursing has no statutory authority to advise as to whether an individual will be permitted to take the licensure examination or be able to become licensed until the individual actually applies to the Board for licensure by examination (Ohio Board of Nursing [9/23/98]. Requirements for Section 5 of the application for Licensure as a Nurse).

Dean and Director - Dr. Barbara A. Pennell (216-987-4106). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>Summer Semester</u>		
BIO-1100	Introduction to Biological Chemistry*	3
ENG-1010	College Composition I	3
MATH-1141	Applied Algebra & Mathematical Reasoning or higher **	3
PSY-1010	General Psychology ***	3
		<b>12</b>
<u>First Semester</u>		
BIO-2330	Anatomy and Physiology I	4
NURS-1300	Health Assessment	2
NURS-1401	Self-Care Needs	4
NURS-1500	Self-Care Elderly	4
PSY-2020	Life Span Development ***	4
		<b>18</b>
<u>Second Semester</u>		
BIO-2340	Anatomy and Physiology II	4
BIO-2500	Microbiology	4
NURS-1600	Health Deviations I.....OR	7-8
NURS-160A	Access to Registered Nursing****.....AND	
NURS-160B	Health Deviations I for LPNs *****	
NURS-1701	Community/Home Nursing	1
		<b>16-17</b>
<u>Third Semester</u>		
NURS-2300	Specialized Health Care Needs	9
Communications	(See AAS Degree Requirements)	3
		<b>12</b>
<u>Fourth Semester</u>		
NURS-2400	Health Management <u>C</u>	1
NURS-2500	Health Deviations II	9
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)	1
		<b>11</b>
	<b>PROGRAM TOTAL</b>	<b>69-70</b>

\*CHEM-1010 and CHEM-1020 replace BIO-1100 for students planning to transfer to a BSN program.

\*\*MATH-1160, 1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*\*Minimum 8 semester credits – must include PSY-1010 and PSY-2020.

\*\*\*\*NURS-160A, Access to Registered Nursing, is a bridge course that replaces NURS-1300, NURS-1401, NURS-1500 and NURS-1600.

\*\*\*\*\*LPN's accepted into the Cuyahoga Community College Nursing program are required to take NURS-160B, Health Deviations I for LPNs.

Note: Courses as listed satisfy competencies C&S

Note: Courses as listed satisfy the minimum of 20 semester credits at the 2000 level.

C = Capstone Course.

Fully Accredited by:

National League for Nursing Accrediting Commission

61 Broadway - 33rd Floor

New York, New York 10006

800-669-1656, Ext. 153

# Program Course Requirements

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## OCCUPATIONAL THERAPY ASSISTANT TECHNOLOGY

### Associate of Applied Science Degree in Occupational Therapy Assistant Technology

Occupational therapy uses everyday activities in the areas of work, self-care and play as the means of helping people of all ages prevent, lessen or overcome physical and mental disabilities so they may be as independent as possible in all activities of daily living. The Occupational Therapy Assistant works under the supervision of a registered occupational therapist in a variety of health care institutions such as rehabilitation centers, skilled nursing homes and intermediate care, mental health agencies and institutions, home health care agencies, pediatric centers, general hospitals and private practices.

Upon successful completion of this program, graduates are eligible to sit for a national certification examination administered by the National Board for Certification in Occupational Therapy, Inc. (NBCOT). Successful completion of this exam is required to apply for licensure by the Ohio Occupational Therapy, Physical Therapy and Athletic Trainers Board.

The Occupational Therapy Assistant Technology Program leads to an Associate of Applied Science degree in Occupational Therapy Assistant. The OTAT program is fully accredited by The Accreditation Council for Occupational Therapy Education and The American Occupational Therapy Association: 4720 Montgomery Lane, PO Box 31220, Bethesda, MD, 20824-1220. Telephone (301-652-2682). Program Manager - Mr. Hector Merced (216-987-4498). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
BIO-2330	Anatomy and Physiology I	4
ENG-1010	College Composition I	3
MATH-xxxx	1000-level MATH course or higher *	3
OTAT-1300	Occupational Therapy Principles	2
OTAT-1310	Task Analysis	2
		<b>17</b>
<u>Second Semester</u>		
MA-1020	Medical Terminology I	3
OTAT-1320	Fundamentals of Developmental Disabilities	2
OTAT-1330	Techniques in Developmental Disabilities	3
OTAT-1850	Practicum I	2
PSY-1010	General Psychology **	3
PTAT-1300	Functional Anatomy	4
		<b>17</b>
<u>Third Semester</u>		
BIO-2340	Anatomy and Physiology II	4
MA-1980	Practitioner/Patient Interaction Seminar	2
OTAT-1420	Fundamentals of Psychosocial Dysfunction	2
OTAT-1430	Techniques in Psychosocial Dysfunction	3
OTAT-1860	Practicum II	2
PSY-2020	Life Span Development**	4
		<b>17</b>
<u>Fourth Semester</u>		
OTAT-2320	Fundamentals of Physical Dysfunction	4
OTAT-2330	Techniques in Physical Dysfunction	4
OTAT-2340	Occupational Therapy Issues <u>C</u>	3
OTAT-2860	Practicum III	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	1
		<b>14</b>
<u>Summer Semester</u>		
ENG-1020	College Composition II	3
OTAT-2940	Field Experience	3
		<b>6</b>
	<b>PROGRAM TOTAL</b>	<b>71</b>

MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits required – must include PSY-1010 and 2020.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

**OPTICAL TECHNOLOGY**

**Associate of Applied Science Degree in Optical Technology**

A licensed optician can work in a retail outlet, optical laboratory or a doctor's office. Opticians with the appropriate educational background can move into management positions in a doctor's office, as well as retail outlets, or they can even establish their own business or purchase a franchise.

Other career paths can lead to related work as a sales representative for optical products. For the person enthusiastic about the health care aspects of the field, advanced education can be pursued to become an Optometrist or Ophthalmologist.

Program Manager - Mr. Frank Corsello (216-987-4454). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
OPT-1310	Theoretical Optics I	2
OPT-1410	Mechanical Optics I	2
OPT-1510	Optical Dispensing I	3
OPT-1610	Contact Lens I	2
PSY-1010	General Psychology*	3
		<b>15</b>
<u>Second Semester</u>		
MATH-1060	Survey of Mathematics or higher**	3
OPT-1320	Theoretical Optics II	2
OPT-1420	Mechanical Optics II	2
OPT-1520	Optical Dispensing II	3
OPT-1620	Contact Lens II	3
Communications...	(See AAS Degree Requirement)	3
		<b>16</b>
<u>Summer Semester</u>		
IT-1010	Introduction to Microcomputer Applications	3
OPT-2500	Optical Business <u>C</u>	2
PHYS-1300	Physics of Optical Material	4
		<b>9</b>
<u>Third Semester</u>		
BIO-1230	Anatomy and Physiology of the Eye	4
OPT-2861	Optical Practicum I	3
OPT-2970	Optical Practicum Seminar I	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>13</b>
<u>Fourth Semester</u>		
OPT-2650	License Review Spectacle	1
OPT-2660	License Review Contact Lens	1
OPT-xxxx	OPT elective course ***	2
OPT-2870	Optical Practicum II	3
OPT-2980	Optical Practicum Seminar II	3
Arts & Hum/Soc & Beh Sci...	(See AAS degree Requirements)*	2
		<b>12</b>
	<b>PROGRAM TOTAL</b>	<b>65</b>

\*Minimum 8 semester credits – must include PSY-1010.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*\*Elective course may be selected with written OPT departmental approval.

Note: Courses as listed satisfy competencies C&S. Choose one course from C&S (Cultural Diversity).

Note: Additional four semester credits at the 2000 level required.

C = Capstone Course



## Program Course Requirements

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### PHARMACY TECHNOLOGY

#### Associate of Applied Science Degree in Pharmacy Technology

A pharmacy technician assists in the various activities of the pharmacy department not requiring the professional judgment of the pharmacist. Such duties include, but need not be limited to: maintaining patient records; setting up packaging and labeling of medication dosages; filling and dispensing routine orders for stock supplies and patient care areas; maintaining inventory of drug supplies and mixing parenteral fluids. The program is designed to train the pharmacy technician to function in a hospital based program and also in community, retail or other institutional pharmacies. Qualified pharmacy technicians will find employment after graduation in community and hospital pharmacies, clinics or other institutions.

Program Manager - (216-987-2381). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>Summer Semester</u>		
ENG-1010	College Composition I	3
BIO-1100	Introduction to Biological Chemistry	3
		<b>6</b>
<u>First Semester</u>		
BIO-1050	Human Biology	3
BIO-105L	Human Biology Lab	1
MATH-1141	Applied Algebra & Mathematical Reasoning or higher*	3
PHM-1300	Introduction to Pharmacy Practice	3
PHM-1350	Pharmacy Practice I	3
PHM-1450	Pharmacology & Therapeutic Principles I	3
		<b>16</b>
<u>Second Semester</u>		
IT-1010	Introduction to Microcomputer Applications	3
PHM-1360	Pharmacy Practice II	3
PHM-1460	Pharmacology & Therapeutic Principles II	3
PHM-1860	Pharmacy Technology Practicum I	3
Communications...	(See AAS Degree Requirements)	3
		<b>15</b>
<u>Third Semester</u>		
BIO-2500	Microbiology	4
MA-1020	Medical Terminology I	3
PHM-2860	Pharmacy Technology Practicum II	3
PHM-2701	Current Topics in Pharmacy Practice <u>C</u>	4
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>17</b>
<u>Fourth Semester</u>		
HLTH-1100	Personal Health Education	3
PHIL-2050	Bioethics**	3
PHM-2870	Pharmacy Technology Practicum III	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>11</b>
	<b>PROGRAM TOTAL</b>	<b>65</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum of 8 semester credits required – must include

PHIL-2050 and must include 3 semester credits at the 2000-level.

Note: Courses as listed satisfy competencies C&S

C= Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### PHYSICAL THERAPIST ASSISTING TECHNOLOGY

#### Associate of Applied Science Degree in Physical Therapist Assisting Technology

Physical therapy provides services to patients and clients of all ages who have impairments, functional limitations, disabilities or changes in physical function and health status resulting from injury, disease, or other causes. The physical therapist assistant works under the supervision of the licensed physical therapist to provide treatments in a variety of health care settings such as hospitals, extended care centers, school systems, ambulatory care centers, private practice and other centers where physical therapists are employed. Upon successful completion of the program, the student is eligible to take an exam to qualify for licensure in the state in which the graduate chooses to practice. Program Manager - Ms. Toby Sternheimer (216-987-4502). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>Summer Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
BIO-2330	Anatomy and Physiology I	4
ENG-1010	College Composition I	3
MATH-1200	Intermediate Algebra or higher*	4
MA-1020	Medical Terminology I	3
		<b>17</b>
<u>First Semester</u>		
BIO-2340	Anatomy and Physiology II	4
PHYS-1210	College Physics I	4
PTAT-1100	Introduction to Physical Therapy Assisting	2
PTAT-1300	Functional Anatomy	4
PTAT-1310	Fundamentals of Physical Therapy	3
		<b>17</b>
<u>Second Semester</u>		
ENG-1020	College Composition II	3
HTEC-1610	Introduction to Pharmacology	2
PSY-1010	General Psychology **	3
PTAT-1400	Clinical Pathophysiology	3
PTAT-1410	Physical Therapy Procedures	5
PTAT-1420	Therapeutic Exercise	3
		<b>19</b>
<u>Third Semester</u>		
PSY-2010	Child Growth and Development **	3
PTAT-2300	Physical Therapy Rehabilitation Procedures	3
PTAT-2310	Pediatric Physical Therapy	2
PTAT-2320	Functional Anatomy of the Nervous System	3
PTAT-2940	Field Experience I	1
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>14</b>
<u>Fourth Semester</u>		
PTAT-2330	Geriatric Physical Therapy	2
PTAT-2340	Psychosocial Issues in Physical Therapy	1
PTAT-2950	Field Experience II <u>C</u>	3
		<b>6</b>
	<b>PROGRAM TOTAL</b>	<b>73</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – must include PSY-1010 & 2010.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

**PHYSICIAN ASSISTANT**

**Associate of Applied Science Degree in Physician Assistant**

The physician assistant works with the supervision of a licensed doctor of medicine or osteopathy and carries out many of the tasks previously performed only by physicians. These tasks include performing physical examinations, requesting and carrying out various laboratory and diagnostic tests, performing certain therapeutic procedures and providing patient education/ counseling.

The physician assistant, as part of the physician's team, will be able to provide patient care services in any health care setting, hospital, nursing home, office or clinic in which the physician functions professionally.

Program Manager - Ms. Joyce Janicek (216-987-5123). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
BIO-2330	Anatomy & Physiology I	4
ENG-1010	College Composition I	3
PA-1300	History & Physical Exam Techniques I	2
PA-1450	The Physician Assistant Profession and Health Care Issues	2
PA-1500	Clinical Medicine I	1
SPA-1340	Clinical Anatomy	2
		<b>17</b>
<u>Second Semester</u>		
BIO-2340	Anatomy and Physiology II	4
PA-1310	History and Physical Exam Techniques II	2
PA-1400	Clinical Pharmacology	3
PA-1510	Clinical Medicine II	4
SPA-1310	Adjuncts to Diagnosis	3
SPA-1320	Basic Surgical and Technical Skills	2
		<b>18</b>
<u>Summer Semester</u>		
BIO-2500	Microbiology	4
HTEC-1110	Ethics for Health Care Professionals	1
PA-1520	Clinical Medicine III	2
PA-2300	Primary Care Patient Management <u>C</u>	1
SPA-1300	Electrocardiography	1
SPA-2500	Emergency Medicine	2
MATH-1141	Applied Algebra and Mathematical Reasoning or higher*	3
Communications...	(See AAS Degree Requirement)	3
		<b>17</b>
<u>Third Semester</u>		
BIO-2600	Pathophysiology	3
PA-2941	Field Experience I	2
PA-2946	Field Experience II	2
PA-2971	Field Experience Seminar I	1
PA-2976	Field Experience Seminar II	1
PSY-1010	General Psychology **	3
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)**	1-2
		<b>13-14</b>

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### PHYSICIAN ASSISTANT

#### Associate of Applied Science Degree in Physician Assistant (cont.)

##### Fourth Semester

PA-2951	Field Experience III	2
PA-2956	Field Experience IV	2
PA-2981	Field Experience Seminar III	1
PA-2986	Field Experience Seminar IV <u>C</u>	1
PSY-2010	Child Growth and Development.....OR	3-4
PSY-2020	Life Span Development.....OR	
PSY-2100	Introduction to Aging **	

9-10

#### PROGRAM TOTAL

74-76

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – must include PSY-1010 and PSY-2010 or 2020 or 2100. PHIL-2050 highly recommended.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### RADIOGRAPHY

#### Associate of Applied Science Degree in Radiography

The radiographer performs radiographic examinations that aid the physician in diagnosis and treatment of injury and disease. The trained radiographer understands radiation and knows how to produce high quality diagnostic examinations safely. The radiographer is employed in hospitals, clinics, doctors' office and industry, providing patient services around the clock. Graduates of the program are eligible for the American Registry of Radiologic Technologist Examination for Registered Radiographers. The Radiography program is accredited by the commission on Accreditation of Allied Health Education Programs (CAAHEP).  
Program Manager - Ms. Marilyn A. Rep (216-987-5264). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1221	Anatomy and Physiology for Diagnostic Medical Imaging	4
ENG-1010	College Composition I	3
MA-1020	Medical Terminology I	3
RADT-1300	fundamental of Radiography	4
RADT-1400	Radiographic Positioning	3
		<b>17</b>
<u>Second Semester</u>		
MATH-1141	Applied Algebra and Mathematical Reasoning or higher*	3
PSY-1010	General Psychology	3
RADT-1910	Clinical Radiography I.....OR	5-7
RADT-191S	Clinical Radiography I**	
		<b>11-13</b>
<u>Summer Semester</u>		
BIO-2200	Radiobiology	2
RADT-1350	Radiographic Technique	3
RADT-1410	Intermediate Radiographic Positioning	3
Communication...	(See AAS Degree Requirements)	3
		<b>11</b>
<u>Third Semester</u>		
PHIL-2050	Bioethics	3
RADT-2910	Clinical Radiography II.....OR	7
RADT-291S	Clinical Radiography II**	
		<b>10</b>
<u>Fourth Semester</u>		
PHYS-2250	Radiographic Physics and Quality Control	4
RADT-2350	Radiographic Pathology	3
RADT-2400	Imaging Systems	3
RADT-2360	Special Imaging Procedures .....OR	2
RADT-xxx	RADT elective course III	
		<b>12</b>
<u>Summer Semester</u>		
PSY-2xxx	Any 2000-level PSY elective course	3
RADT-2920	clinical Radiography III ....OR <u>C</u>	5-7
RADT-292S	Clinical Radiography III <u>C</u> **	
		<b>8-10</b>
<b>PROGRAM TOTAL</b>		<b>69-73</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Student beginning program in Fall semester must take RADT-1910, 2910, 2920. Students beginning in Spring semester must take RADT-191S, 291S, 292S.

\*\*\*Elective course may be selected with written approval from the RADT department.

Note: Courses as listed satisfy competencies C&S

C =Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### RESPIRATORY CARE

#### Associate of Applied Science Degree in Respiratory Care

Respiratory Care is a health career in which professionals assess the cardiopulmonary system, assist in the treatment of cardiopulmonary impairment, evaluate treatment effectiveness, and actively care for patients of all ages with deficiencies or abnormalities associated with the cardiopulmonary system. Opportunities exist for specialization within the profession in the areas of critical care, homecare, neonatal/pediatrics, education, pulmonary function testing and management as a licensed professional in Respiratory Care. The individual will, under the supervision of a physician, actively participate in the development of patient care plans, diagnostic testing and in the decision-making process regarding the care and treatment of patients. Employment is primarily in hospitals but extends to home care, skilled nursing facilities, education and management.

Program Manager - Mr. David Lucas (216-987-5267). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1100	Introduction to Biological Chemistry*	3
BIO-2330	Anatomy and Physiology I	4
ENG-1010	College Composition I	3
MATH-1141	Applied Algebra and Mathematical Reasoning or higher **	3
PSY-1010	General Psychology	3
RESP-1300	Respiratory Care Equipment	4
RESP-1310	Cardiopulmonary Physiology	3
		<b>23</b>
<u>Second Semester</u>		
BIO-2340	Anatomy and Physiology II	4
ENG-1020	College Composition II	3
RESP-1320	Acid-Base and Hemodynamics	2
RESP-1330	Cardiopulmonary Assessment and Pulmonary Diseases	5
RESP-1340	Pharmacology for Respiratory Care	2
		<b>16</b>
<u>Summer Semester</u>		
PHIL-2050	Bioethics	3
RESP-2300	Basic Therapeutic Procedures	3
RESP-2910	Respiratory Care Directed Practice I	3
		<b>9</b>
<u>Third Semester</u>		
BIO-2500	Microbiology	4
RESP-2310	Mechanical Ventilation	4
RESP-2320	Pediatric/Neonatal Respiratory Care	2
RESP-2920	Respiratory Care Directed Practice II	5
		<b>15</b>
<u>Fourth Semester</u>		
RESP-2330	Respiratory Home Care/Rehabilitation	1
RESP-2340	Patient Management Problems & Research ..OR	2
RESP-xxxx	RESP elective course ***	
RESP-2930	Respiratory Care Directed Practice III <u>C</u>	5
PSY-2xxx	Any 2000-level PSY elective course	2
		<b>10</b>
	<b>PROGRAM TOTAL</b>	<b>73</b>

\*CHEM-1010 and 1020 may be taken in place of BIO-1100.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*\*Elective course may be selected with written approval from the RESP department.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## SURGICAL PHYSICIAN ASSISTANT

### Associate of Applied Science Degree in Surgical Physician Assistant

Graduates of the Surgical Physician Assistant program are eligible to sit for the NCCPA (National Commission on Certification for Physician Assistants) Exam and to apply for registration with the Ohio State Medical Board as a "Physician Assistant."

The surgical physician assistant is a health care professional who first assists in operative procedures and performs other clinical duties with the supervision of a licensed physician/surgeon or osteopath, and carries out many of the tasks previously performed only by physicians. These tasks include obtaining patient histories, performing physical examinations, requesting and carrying out various laboratory and diagnostic tests for pre-operative and post-operative assessments; performing certain therapeutic procedures; assisting in surgery; and providing patient education/counseling. The surgical physician assistant, as part of the physician's team, will be able to provide patient care services in any setting, hospital, office or clinic in which the physician functions professionally. Program Manager - Ms. Joyce Janicek (216-987-5123). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
BIO-2330	Anatomy and Physiology I	4
ENG-1010	College Composition I	3
PA-1300	History & Physical Examination Techniques I	2
PA-1450	The PA Profession/Health Care Issues	2
PA-1500	Clinical Medicine I	1
SPA-1320	Basic Surgical and Technical Skills	2
SPA-1340	Clinical Anatomy	2
		<b>19</b>
<u>Second Semester</u>		
BIO-2340	Anatomy and Physiology II	4
PA-1310	History & Physical Examination Techniques II	2
PA-1400	Clinical Pharmacology	3
PA-1510	Clinical Medicine II	4
SPA-1310	Adjuncts to Diagnosis	3
SPA-1330	Advanced Surgical Skills	2
		<b>18</b>
<u>Summer Semester</u>		
BIO-2500	Microbiology	4
BIO-2600	Pathophysiology	3
MATH-1141	Applied Algebra and Mathematical Reasoning or higher*	3
PA-1520	Clinical Medicine III	2
SPA-1300	Electrocardiography	1
SPA-2300	Surgical Patient Management <u>C</u>	1
SPA-2500	Emergency Medicine	2
		<b>16</b>
<u>Third Semester</u>		
PSY-1010	General Psychology **	3
SPA-2510	Fundamentals of Clinical Surgery	3
SPA-2941	Field Experience I	2
SPA-2946	Field Experience II	2
SPA-2971	Field Experience Seminar I	1
SPA-2976	Field Experience Seminar II	1
Communications...	(See AAS Degree Requirements)	3
		<b>15</b>

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### SURGICAL PHYSICIAN ASSISTANT

#### Associate of Applied Science Degree in Surgical Physician Assistant (cont.)

##### Fourth Semester

HTEC-1110	Ethics for Health Care Professionals	1
PSY-2010	Child Growth and Development.....OR	3-4
PSY-2020	Life Span Development.....OR	
PSY-2100	Introduction to Aging **	
SPA-2951	Field Experience III	2
SPA-2956	Field Experience IV	2
SPA-2981	Field Experience Seminar III	1
SPA-2986	Field Experience Seminar IV <u>C</u>	1
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	1-2
		<b>11-13</b>
	<b>PROGRAM TOTAL</b>	<b>79-81</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*Minimum 8 semester credits – must include PSY-1010 and PSY-2010 or 2020 or 2100. Philosophy 2050 highly recommended.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course



## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### SURGICAL TECHNOLOGY

#### Associate of Applied Science Degree in Surgical Technology

The Surgical Technologist is an allied health professional who assists the surgeon and surgeon assistants with surgical procedures in the operating room. As a surgical team member, Surgical Technologists work with other surgical personnel to prepare the operating room for the surgical procedure. The curriculum is designed to provide students with communication skills, basic sciences, introduction of surgical skills, and hands-on-simulation of current technology in the form of mock surgical procedures. The program provides three semesters of clinical practicums to prepare students to function in the operating room. Students are prepared to take the National Certification Examination for Surgical Technologists. The preferred education for the Surgical Technologist is an Associate Degree. Graduates will be eligible to work in hospitals, surgery clinics and other surgery specialty areas. Program sequence meets new degree requirements, that become effective in Fall 2001. Courses listed in Summer Semester may be taken before beginning the Surgical Technology degree program. Program Manager – Ms. Teresa Washington (216-987-6146). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>Summer Semester</u>		
BIO-1100	Introduction to Biological Chemistry	3
ENG-1010	College Composition I	3
MATH-1141	Applied Algebra and Mathematical Reasoning *	3
		<b>9</b>
<u>First Semester</u>		
BIO-2330	Anatomy and Physiology I	4
HTEC-1610	Introduction to Pharmacology	2
MA-1020	Medical Terminology I	3
SURT-1300	Introduction to Surgery	5
SURT-130L	Surgery Lab	2
		<b>16</b>
<u>Second Semester</u>		
BIO-2340	Anatomy and Physiology II	4
SURT-1330	General Surgery	5
SURT-1910	Clinical Experience	4
Communication...	(See AAS Degree Requirements)	3
		<b>16</b>
<u>Third Semester</u>		
BIO-2500	Microbiology	4
SURT-2300	Surgical Specialties	5
SURT-2850	Clinical Practice I	3
SURT-xxxx	SURT elective course II	1
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)***	3
		<b>16</b>
<u>Fourth Semester</u>		
MA-1980	Practitioner/Patient Interaction Seminar	2
SURT-2860	Clinical Practice II <u>C</u>	5
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)***	2
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)***	3
		<b>12</b>
	<b>PROGRAM TOTAL</b>	<b>69</b>

\*MATH-1800/2800 and 1820/2820 may not be used to meet this requirement.

\*\*Elective course requires written approval from the SURT department.

\*\*\*Minimum 8 semester credits.

Note: Courses as listed satisfy Competencies and Skills C&S

C = Capstone course.

**VETERINARY TECHNOLOGY**

**Associate of Applied Science Degree in Veterinary Technology**

Veterinary Technicians assist with the care and treatment of animals under the supervision of a veterinarian. Career options for graduate technicians include private practice, emergency clinics, specialty clinics, teaching facilities, research facilities and the USDA Animal and Plant Health Inspection Service. Students work with companion animals, food animals, horses, laboratory animals and exotic species. In addition to lecture classes, the curriculum includes hands-on laboratory and clinical experience. During the final semester of study students participate in two different internships at Cleveland area clinical settings. Students are expected to provide their own transportation to all off-campus clinical experiences and large animal laboratories.

Program Manager - Dr. Kathy Corcoran (216-987-5450). This program has specific admission requirements.

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<u>First Semester</u>		
ENG-1010	College Composition I	3
BIO-1100	Introduction to Biological Chemistry	3
BIO-1410	Anatomy & Physiology of Domestic Animals I	4
VT-1300	Veterinary Terminology and Law	2
VT-1320	Veterinary Office Applications	3
VT-1401	Veterinary Science I	4
		<b>19</b>
<u>Second Semester</u>		
BIO-1420	Anatomy & Physiology of Domestic Animals II	3
MATH-1141	Applied Algebra & Mathematical Reasoning or higher *	3
VT-1450	Veterinary Radiography	2
VT-1500	Veterinary Science II	4
VT-1520	Veterinary Parasitology	2
VT-1600	Veterinary Surgical Nursing and Assisting	3
		<b>17</b>
<u>Summer Semester</u>		
BIO-2500	Microbiology	4
VT-2300	Pharmacology for Veterinary Technicians	2
VT-2401	Veterinary Pathology I	2
VT-2851	Veterinary Practicum and Seminar I	1
		<b>9</b>
<u>Third Semester</u>		
VT-2411	Veterinary Pathology II	2
VT-2500	Small Animal Health and Disease	2
VT-2510	Large Animal Health and Disease	2
VT-2600	Anesthesiology, Emergency Techniques & Dentistry	3
VT-2860	Veterinary Practicum and Seminar II <u>C</u>	2
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)***	3
Communication...	(See AAS Degree Requirements)**	3
		<b>17</b>
<u>Fourth Semester</u>		
VT-2700	Avian and Exotic Animal Medicine	2
VT-2940	Veterinary Field Experience <u>C</u>	2
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)***	3
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)***	2
		<b>9</b>
	<b>PROGRAM TOTAL</b>	<b>71</b>

MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*ENG-1020 or SPCH-1000 or SPCH-1010 highly recommended.

\*\*\*Minimum 8 semester credits – PSY-1010 highly recommended.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

**Public Service Technologies**

- Deaf Interpretive Services
- Early Childhood Education
- Environmental Health and Safety Technology
- Fire Technology
- Law Enforcement - Basic Program
- Law Enforcement - Basic Police Academy
- Law Enforcement - Corrections
- Law Enforcement - Security Administration

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### DEAF INTERPRETIVE SERVICES

(formerly Interpreter Training Program)

#### Associate of Applied Science Degree in Deaf Interpretive Services

The Associate of Applied Science Degree in Deaf Interpretive Services provides students with knowledge in the area of deafness and Deaf Culture as well as skills in American Sign Language (ASL) and other sign language methods of interpreting.

The curriculum is divided into two areas of study – ASL and Interpreter training courses (ITP). ASL courses will provide the knowledge of ASL as a foreign language, and ITP courses provide skills necessary for students to pursue national certification after gaining experience working as an interpreter in the field for three to five years. An interpreter may work in the fields of medicine, business, as a freelance provider or various other settings. This program has application and/or progression requirements.

Course No	Course Title	Credit Hrs.
<u>First Semester</u>		
ASL-1000	Fingerspelling	1
ASL-1010	Beginning American Sign Language I	4
DIS-1300	Interpreting Fundamentals	3
ENG-1010	College Composition I	3
PSY-1010	General Psychology	3
SPCH-1000	Fundamentals of Interpersonal Communication...OR	3
SPCH-1010	Fundamentals of Speech Communication	
		<b>17</b>
<u>Second Semester</u>		
ASL-1020	Beginning American Sign Language II	4
ASL-1100	Deaf Culture	3
DIS-1310	Interpreting I	2
DIS-1400	American Sign Language Structure	2
MATH-1060	Survey of Mathematics * or higher	3
PSY-2xxx	Any 2000-level PSY elective course	3
		<b>17</b>
<u>Third Semester</u>		
ASL-2010	Intermediate American Sign Language I	4
BADM-1300	Small Business Management	4
DIS-1850	Practicum I	2
DIS-1970	Practicum Seminar I	1
DIS-2310	Interpreting II	2
		<b>13</b>
<u>Fourth Semester</u>		
ASL-2020	Intermediate American Sign Language II	4
DIS-2300	Transliterating	2
DIS-2410	Voicing	2
DIS-2800	Special Advanced Topics in Deaf Interpretive Services... OR	1
DIS-xxxx	DIS elective course**	
DIS-2850	Practicum II	2
DIS-2970	Practicum Seminar II <u>C</u>	1
		<b>12</b>
<u>Summer Semester</u>		
ASL-2410	Advanced American Sign Language	3
		<b>3</b>
	<b>PROGRAM TOTAL</b>	<b>62</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### Early Childhood Education

#### Associate of Applied Science Degree in Early Childhood Education

The Early Childhood Education program prepares students to teach young children in a variety of inclusive early childhood settings, including preschools, prekindergartens, Head Start, child care centers and infant/toddler programs. Students will receive a basic understanding of principles of early childhood education, child growth and development, and will develop specific skills in planning and implementing the curriculum in centers for young children. Upon completion of the program, students will be qualified to assume lead teacher positions, working with groups of young children under the supervision of educational directors. This program is accredited by the Ohio Department of Education to prepare students for state teacher certification/licensure as Pre-Kindergarten Associate teachers. Graduates of this program are not qualified for kindergarten/primary, kindergarten/elementary or elementary state teachers' certification. These certificates/ licenses require a baccalaureate degree.

The Pre-Kindergarten (Pre-K) Associate Certification/ Licensure preparation program, which is offered on all campuses, parallels the Associate Degree program and requires a formal application.

Program Manager - Dr. Sandra Redmond (216-987-2380). This program has application and/or progression requirements.

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<u>First Semester</u>		
ECED-1010	Introduction to Early Childhood Education: Children's Development & Programs	4
ENG-1010	College Composition I	3
MATH-1060	Survey of Mathematics or higher*	3
PSY-1010	General Psychology	3
SPCH-1000	Fundamentals of Interpersonal Communication	3
		<b>16</b>
<u>Second Semester</u>		
BIO-1050	Human Biology	3
BIO-105L	Human Biology Laboratory	1
ECED-1300	Early Language & Literacy Development: Integrated Curriculum	3
ECED-1310	Art in Early Childhood: Integrated Curriculum	2
ECED-1320	Cognition & Problem Solving in Early Childhood: Integrated Curriculum	2
ENG-1020	College Composition II	3
PSY-2010	Child Growth and Development	3
		<b>17</b>
<u>Third Semester</u>		
ECED-1330	Music, Movement and Outdoor Environment in Early Childhood Education: Integrated Curriculum	4
ECED-1860	Experience with Young Children in Early Childhood Settings	3
ECED-2500	Infant/Toddler Development, Relationships, & Programs	3
ECED-2700	Including Children with Special Needs	3
ECED-2800	Special Advanced Topics in Early Childhood Education	1
		<b>14</b>
<u>Fourth Semester</u>		
ECED-2300	Child Behavior and Guidance	3
ECED-2400	Center-Family Relationships	2
ECED-2870	Early Childhood Education Student Teaching Practicum <u>C</u>	2
ECED-2990	Early Childhood Education Student Teaching Seminar <u>C</u>	3
HLTH-1400	Childhood Health, Safety & Nutrition	3
		<b>13</b>
	<b>PROGRAM TOTAL</b>	<b>60</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### ENVIRONMENTAL HEALTH AND SAFETY TECHNOLOGY

**Associate of Applied Science Degree in Environmental, Health and Safety Technology** [formerly Environmental, Health and Safety Technology (Environmental Field Technology ) and (Safety Compliance Management)]

This program prepares students for a variety of careers in the environmental, health and safety technology (EHST) field. Students who enjoy working outdoors can choose the Environmental Field Technology option, which emphasizes skills in air monitoring; water, ground water and soil sampling; chemical emergency response actions, and generally evaluating and cleaning up environmental contamination. The EHST Management option focuses on skills for compliance with Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) regulations, whether in private industry, government or the consulting field. Program Manager – Mr. Herb Mausser (216-987-2236).

Course No	Course Title	Credit Hrs.
<u>First Semester</u>		
EHST-1301	Introduction to Environmental Technology	3
EHST-1320	International Standards Organization (ISO) 14,000*..... OR	2
EHST-1330	Hazardous Waste Operations & Emergency Response	
ENG-1010	College Composition I	3
MATH-1060	Survey of Mathematics or higher**	3
HLTH-1230	Standard First Aid and Personal Safety	1
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)***	3
		<b>15</b>
<u>Second Semester</u>		
BIO-1060	Environment, Ecology and Evolution	3
BIO-106L	Environmental, Ecology and Evolution Laboratory	1
CHEM-1010	Introduction to Inorganic Chemistry	4
EHST-1310	Introduction to Environmental Law	4
EHST-1350	Health and Safety in the Workplace	3
		<b>15</b>
<u>Third Semester</u>		
EHST-2340	Department of Transportation Regulations	2
EHST-2350	Emergency Planning and Response*...AND	4
EHST-2380	Risk Assessment.....OR	
ESCI-1410/141L	Physical Geology and Laboratory	
EHST-2361	Environmental Sampling and Analysis	4
SPCH-1010	Fundamentals of Speech Communication	3
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)***	3
		<b>16</b>
<u>Fourth Semester</u>		
BADM-1020	Introduction to Business* .....OR	2-3
EHST-2xxx	EHST Elective****	
BIO-1050/105L	Human Biology and Lab .....OR	3-4
CHEM-1020	Introduction to Organic Chemistry and Biochemistry ....OR	
ENG-2150	Technical Writing ..... OR	
ESCI-2300	Introduction to the Science of Ecosystems	
EHST-2390	Solid and Hazardous Waste Management	3
EHST-2400	Advanced Environmental Technology	3
EHST-2940	Field Experience	1
EHST-2990	Professional Standards <u>C</u>	1
Arts & Hum/Soc & Beh Sci..	(See AAS Degree Requirements)***	2
		<b>15-17</b>
	<b>PROGRAM TOTAL</b>	<b>61-63</b>

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### ENVIRONMENTAL HEALTH AND SAFETY TECHNOLOGY

#### Associate of Applied Science Degree in Environmental, Health and Safety Technology (cont.)

\*Select one option from below and complete the group of courses in that option:

##### Option 1 (Environmental, Health and Safety Management)

EHST-1320	International Standards Organization (ISO) 14000
EHST-2350	Emergency Planning and Response
EHST-2380	Risk Assessment
BADM-1020	Introduction to Business
CHEM-1020	Introduction to Organic Chemistry and Biochemistry.....OR
ENG-2150	Technical Writing

Note: Requires 2 more credits at the 2000-level. ENG-2150 recommended to meet this requirement.

##### Option 2 (Environmental Field Technology)

EHST-1330	Hazardous Waste Operations & Emergency Response
ESCI-1410/141L	Physical Geology, and Lab
EHST-2xxx	EHST Elective
BIO-1050/105L	Human Biology and Lab .....OR
CHEM-1020	Introduction to Organic Chemistry and Biochemistry.....OR
ESCI-2300	Introduction to the Science of Ecosystems

Note: Requires 4 more credits at the 2000 level. ESCI-2300 may be elected to meet 3 credits of this requirement.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*\*Minimum of 8 semester credits

\*\*\*\*EHST elective course must have written departmental approval before registering for course.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### FIRE TECHNOLOGY

#### Associate of Applied Science Degree in Fire Technology

This curriculum offers a balanced and broad education to students who plan to enter fire service as a career. It also helps active firefighters upgrade themselves for advancement within the service. Included are such specialized areas of instruction as fire prevention, investigation, protection systems, and municipal public relations.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
FIRE-1000	Introduction to Fire Science	3
MATH-1200	Intermediate Algebra* or higher	4
POL-1010	American National Government	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>16</b>
<u>Second Semester</u>		
ENG-1020	College Composition II	3
EMT-1310	Cardiopulmonary Resuscitation	1
FIRE-1300	Fire Tactics and Strategy	3
FIRE-1400	Chemistry of Hazardous Materials	2
SPCH-1000	Fundamentals of Interpersonal Communication .....OR	3
SPCH-1010	Fundamentals of Speech Communication **	
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>14</b>
<u>Third Semester</u>		
BADM-2200	Human Relations in Business	3
EMT-1320	Heavy Rescue	2
EMT-1330	Defensive Driving - EMT	1
FIRE-2320	Fire Prevention and Protection Systems	3
FIRE-2350	Building Construction for Fire Prevention	2
FIRE-2400	Fire Hydraulics	2
PHYS-1210	College Physics I	4
		<b>17</b>
<u>Fourth Semester</u>		
EMT-1340	Emergency Medical Services Communications	1
FIRE-2600	Fire Investigation Methods	3
FIRE-2720	Fire Service Training and Public Relations	2
FIRE-2730	Managing Fire Services <u>C</u>	3
FIRE-2830	Cooperative Field Experience.....OR	1-3
IT-1010	Introduction to Microcomputer Applications	
POL-1020	State and Local Government	3
		<b>13-15</b>
	<b>PROGRAM TOTAL</b>	<b>60-62</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*8 semester credits minimum—must include SPCH-1000 or 1010 and a minimum of 2 semester credits at the 2000-level.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course



## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### LAW ENFORCEMENT

#### Associate of Applied Science Degree in Law Enforcement

Various aspects of police work are covered, from administrative and investigative to industrial security and juvenile delinquency. The course sequence offers a balanced and broad education to students who plan to enter law enforcement as a career. It helps in-service police officers upgrade themselves for advancement within the ranks. Most students join a municipal force but career opportunities also are available in county, state and federal governments.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
LAWE-1000	Introduction to Criminal Justice	3
LAWE-1120	Criminal Court Procedure	2
LAWE-1130	Criminal Evidence	2
LAWE-1320	Ethics in Criminal Justice	2
PSY-1010	General Psychology	3
		<b>18</b>
<u>Second Semester</u>		
ENG-1020	College Composition II	3
LAWE-1010	Computers in Criminal Justice	2
LAWE-1110	Constitutional Law for Police	3
LAWE-1330	Criminal Law	3
MATH-xxxx	1000-level MATH course or higher*	3
SOC-1010	Introductory Sociology.....OR	3
UST-1010	Introduction to Urban Studies	
		<b>17</b>
<u>Third Semester</u>		
LAWE-2300	Juvenile Delinquency	2
LAWE-2390	The Investigative Process	4
LAWE-xxxx	Any LAWE elective course	3
POL-1010	American National Government	3
SPCH-xxxx	Any SPCH elective course**	3
		<b>15</b>
<u>Fourth Semester</u>		
LAWE-2360	Community Oriented Policing	3
LAWE-2440	Protection Services	2
LAWE-2990	Issues in Supervision <u>C</u>	4
PSY-2xxx	Any 2000-level PSY elective course	3
SOC-2xxx	Any 2000-level SOC elective course.....OR	3
UST-2xxx	Any 2000-level UST elective course	
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>65</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*SPCH-1010 highly recommended.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### LAW ENFORCEMENT (Basic Police Academy)

#### Associate of Applied Science Degree in Law Enforcement with a Concentration in Basic Police Academy

This program is designed for students who have made the career decision to be peace officers and are enrolled in the Basic Peace Officer Academy affiliated with Cuyahoga Community College. The program provides opportunities for specific police training as well as the educational base to prepare for career promotions. This program has application and/or progression requirements

#### PENDING BOARD APPROVAL

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
LAWE-1000	Introduction to Criminal Justice	3
LAWE-1120	Criminal Court Procedure	2
LAWE-1130	Criminal Evidence	2
PSY-1010	General Psychology	3
SOC-1010	Introductory Sociology.....OR	3
UST-1010	Introduction to Urban Studies	
		<b>19</b>
<u>Second Semester</u>		
ENG-1020	College Composition II	3
HLTH-1230	Standard First Aid & Personal Safety	1
LAWE-1110	Constitutional Law for Police	3
LAWE-1300	Patrol Operations	4
LAWE-1310	Traffic Enforcement & Investigation	3
LAWE-1330	Criminal Law	3
PE-1000	Personal Fitness	2
		<b>19</b>
<u>Third Semester</u>		
LAWE-1320	Ethics in Criminal Justice	2
LAWE-2300	Juvenile Delinquency	2
LAWE-2370	Fire Arm Techniques	3
LAWE-2380	Defensive Driving	2
LAWE-2390	The Investigative Process	4
POL-1010	American National Government	3
SPCH-xxxx	Any SPCH elective course*	3
		<b>19</b>
<u>Fourth Semester</u>		
LAWE-2360	Community Oriented Policing	3
LAWE-2990	Issues in Supervision <u>C</u>	4
MATH-xxxx	1000-level MATH course or higher**	3
PSY-2xxx	Any 2000-level PSY elective course	3
SOC-2xxx	Any 2000-level SOC elective course.....OR	3
UST-2xxx	Any 2000-level UST elective course	
		<b>16</b>
	<b>PROGRAM TOTAL</b>	<b>73</b>

\*SPCH-1010 highly recommended.

\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### LAW ENFORCEMENT (Corrections)

#### Associate of Applied Science Degree in Law Enforcement with a Concentration in Corrections

This program provides a broad overview of corrections, probation and parole in both concepts and procedures. There are opportunities for employment in this growing field in local, state and federal agencies working in corrections at both community and institutional levels. This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
LAWE-1000	Introduction to Criminal Justice	3
LAWE-1070	Introduction to Corrections	2
LAWE-1120	Criminal Court Procedure	2
LAWE-1130	Criminal Evidence	2
LAWE-1320	Ethics in Criminal Justice	2
		<b>17</b>
<u>Second Semester</u>		
ENG-1020	College Composition II	3
LAWE-1010	Computers in Criminal Justice	2
LAWE-1500	Community Intervention Resources	4
MATH-xxxx	1000-level MATH course or higher*	3
PSY-1010	General Psychology	3
SOC-1010	Introductory Sociology.....OR	3
UST-1010	Introduction to Urban Studies	
		<b>18</b>
<u>Third Semester</u>		
LAWE-2300	Juvenile Delinquency	2
LAWE-2510	Community Supervision and Aftercare	4
LAWE-xxxx	Any LAWE elective course	3
POL-1010	American National Government	3
SPCH-xxxx	Any SPCH elective course**	3
		<b>15</b>
<u>Fourth Semester</u>		
LAWE-2530	Correctional Case Management	3
LAWE-2540	Corrections: Principles and Practices	3
LAWE-2990	Issues in Supervision <u>C</u>	4
PSY-2xxx	Any 2000 level PSY elective course	3
SOC-2xxx	Any 2000 level SOC elective course.....OR	3
UST-2xxx	Any 2000 level UST elective course	
		<b>16</b>
	<b>PROGRAM TOTAL</b>	<b>66</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*SPCH-1010 highly recommended.

Note: Courses as listed satisfy competencies C&S

C = Capstone Course

# Program Course Requirements

# Fall 2001-Summer 2003 Catalog

## LAW ENFORCEMENT (Security Administration)

### Associate of Applied Science Degree in Law Enforcement with a Concentration in Security Administration

This program is designed to prepare individuals working in various aspects of private or contract security service to assume administrative roles, as well as to broaden the knowledge of those employed in limited functional activities within the industry to assume more responsible positions in areas of loss prevention and detection, protection of life and property or investigative work.

This program has application and/or progression requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ENG-1010	College Composition I	3
IT-1010	Introduction to Microcomputer Applications	3
LAWE-1000	Introduction to Criminal Justice	3
LAWE-1050	Introduction to Security	2
LAWE-1120	Criminal Court Procedure	2
LAWE-1320	Ethics in Criminal Justice	2
SOC-1010	Introductory Sociology.....OR	3
UST-1010	Introduction to Urban Studies	3
		<b>18</b>
<u>Second Semester</u>		
ENG-1020	College Composition II	3
LAWE-1400	Assets Protection	4
LAWE-xxxx	Any LAWE elective course	3
MATH-xxxx	1000-level MATH course or higher*	3
PSY-1010	General Psychology	3
		<b>16</b>
<u>Third Semester</u>		
LAWE-2400	Security Management	4
LAWE-2410	Security Investigation	3
LAWE-2420	Legal Aspects of Private Security	3
POL-1010	American National Government	3
SPCH-xxxx	Any SPCH elective course**	3
		<b>16</b>
<u>Fourth Semester</u>		
FIRE-2320	Fire Prevention and Protection Systems	3
LAWE-2440	Protection Services	2
LAWE-2990	Issues in Supervision <u>C</u>	4
PSY-2xxx	Any 2000-level PSY elective course	3
SOC-2xxx	Any 2000-level SOC elective course.....OR	3
UST-2xxx	Any 2000-level UST elective course	3
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>65</b>

\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

\*\*SPCH-1010 highly recommended.

Note: Courses as listed satisfy competencies C&S

C= Capstone Courses

### Apprenticeship Programs

- Applied Industrial Technology - Bricklaying
- Applied Industrial Technology - Carpentry
- Applied Industrial Technology - Cement Masonry
- Applied Industrial Technology - Drywall Finishing
- Applied Industrial Technology - Electrical Construction
- Applied Industrial Technology - Floorlaying
- Applied Industrial Technology - Glazing
- Applied Industrial Technology - Ironworking
- Applied Industrial Technology - Manufacturing Technology
- Applied Industrial Technology - Operating Engineers
- Applied Industrial Technology - Painting
- Applied Industrial Technology - Sign and Display

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### Applied Industrial Technology (Bricklaying)

#### APPRENTICESHIP PROGRAM

#### Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Bricklaying.

This program prepares the student to earn a journey-level status in Bricklaying, as well as earn an Associate of Applied Science Degree in Applied Industrial Technology. A three year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. Bricklaying is the art and craft of building and fabricating in stone, and brick. Bricklayers work in a variety of construction settings, building chimneys, partitions, and walls, working with stone, cinder and gypsum block, and brick. The work requires physical stamina, a solid mathematical sense, and an artistic eye.

Apprenticeship Coordinator – Leo Russo (216-987-3039). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ATBL-1300	Basic Bricklaying Trade Skills	2
ATBL-1310	Bricklaying Materials, Tools & Equipment	2
ATBL-1320	Basic Construction Drawings	1
ATBL-1330	Wall Construction I	2
ATBL-1340	Arch Construction I	2
ATCM-1310	Applied Technical Communications & Economics	2
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
		<b>18</b>
<u>Second Semester</u>		
ATBL-1950	Construction Trades Field Experience	2
ATBL-1530	Wall Construction II	2
ATBL-1540	Arch Construction II	2
MATH-1360	Technical Mathematics II	5
Communication...	(See AAS Degree Requirements)*	3
		<b>14</b>
<u>Third Semester</u>		
ATBL-1370	Construction Trades Safety	1
ATBL-2510	Advanced Brick/Block Construction	2
ATBL-2520	Step & Paving Assembly Construction	2
ATBL 2530	Door & Window Construction	2
IT-1010	Introduction to Microcomputer Applications	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>16</b>
<u>Fourth Semester</u>		
ATBL-2710	Advanced Bricklaying Skills	3
ATBL-1950	Construction Trades Field Experience	2
ATCM-1390	Basic Welding Skills	2
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
ATXX-2xxx	ATXX 2000-level elective course***	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>14</b>
	<b>PROGRAM TOTAL</b>	<b>62</b>

\*ENG-2150 Technical Writing highly recommended.

\*\*Minimum 8 semester credits – must include a minimum 6 semester credits at the 2000-level.

\*\*\*Any 2000-level Applied Industrial Technology course may be used with written approval of the department.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C = Capstone Course

**Applied Industrial Technology (Carpentry)**

**APPRENTICESHIP PROGRAM**

**Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Carpentry.**

This program prepares the student to earn a journey-level status in Carpentry, as well as earn an Associate of Applied Science Degree in Applied Industrial Technology. A four year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. Carpentry is the art and trade of cutting, working, and joining timber. Carpenters work with both structural materials in framing, as well as items such as doors, windows and staircases. Carpenters are found on virtually every construction site, enjoying consistent demand for their services. Many contractors and job superintendents began as carpenters. Apprenticeship Coordinator - Leo Russo (216-987-3039). This program has specific admission requirements.

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<u>First Semester</u>		
ATCT-1300	Carpentry I	2
ATCT-1310	Carpentry Safety	2
ATCT-1350	Interior Systems I	2
ATCT-1370	Layout	2
ATCT-1380	Framing	2
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
		<b>17</b>
<u>Second Semester</u>		
ATCT-1330	Concrete Form Work I	2
ATCT-1610	Interior Finish	2
ATCT-2320	Carpentry II	2
ATCT-2360	Interior Systems II	2
IT-1010	Introduction to Microcomputer Applications	3
Communication...	(See AAS Degree Requirements)*	3
		<b>14</b>
<u>Third Semester</u>		
ATCT-1550	Roof Framing I	2
ATCT-2340	Concrete Form Work II	2
ATCT-2500	Exterior Finish	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>12</b>
<u>Fourth Semester</u>		
ATCT-1490	Heavy Gauge Steel	2
ATCT-2220	Roof Framing II	2
ATCT-2520	Stairs Installation	2
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
ATCT-xxxx	Any ATCT elective course	2
ATCT-2xxx	Any 2000-level ATCT elective course***	2
MATH-xxxx	1000-level MATH course or higher****	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>17</b>
	<b>PROGRAM TOTAL</b>	<b>60</b>

\*ENG-2150 Technical Writing highly recommended.

\*\*Minimum 8 semester credits – must include a minimum 3 semester credits at the 2000-level.

\*\*\*ATCT open elective must be at the 2000-level.

\*\*\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S j (Cultural Diversity) – see Section VI.

C = Capstone Course

**Applied Industrial Technology (Cement Masonry)**

**APPRENTICESHIP PROGRAM**

**Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Cement Masonry.**

This program prepares the student to earn a journey-level status in Cement Masonry, as well as an Associate of Applied Science Degree. A three year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. Cement Masonry is the art and craft of building with concrete. Masonry is one of the oldest construction trades. Masons apply their skills in building airport runways, bridges, commercial buildings and highways. The modern mason works closely with other craftsmen in construction projects. Much of the work is outdoors, requiring physical stamina, as well as strong organizational and mathematical skills. The Cleveland Cement Mason apprenticeship is one of the premier programs in the country, taught in a new facility with classroom and a simulated job site laboratory.

Apprenticeship Coordinator - Leo Russo (216-987-3039). This program has specific admission requirements.

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<u>First Semester</u>		
ATCM-1300	Fundamentals of Concrete Construction	2
ATCM-1310	Applied Technical Communications and Economics	2
ATCM-1320	Basic Plan Reading	2
ATCM-1330	Concrete Construction Equipment	2
ENG-1010	College Composition I	3
MATH-1160	Technical Math I	4
		<b>15</b>
<u>Second Semester</u>		
ATCM-1340	OSHA Standards for the Construction Industry	3
ATCM-140	Concrete/Cement Forming & Finishing	3
ATCM-1410	Commercial/Residential Form & Finish Work	4
IT-1010	Introduction to Microcomputer Applications	3
Communication...	(See AAS Degree Requirements)*	3
		<b>16</b>
<u>Third Semester</u>		
ATCM-2320	Blueprint Fundamentals-Construction	2
ATCM-2500	Fundamentals of Concrete Curing	1
ATCM 2510	Fundamentals of Concrete Joints	1
ATCM-2520	Basic Cement Patching	2
ATCM-2530	Concrete Restoration	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>12</b>
<u>Fourth Semester</u>		
ATCM-2700	Advanced Concrete Finishing	3
ATCM-2710	Concrete Specialty Products	1
ATCM-xxxx	Any ATCM elective course	2
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
MATH-xxxx	1000-level MATH course or higher***	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>17</b>
	<b>PROGRAM TOTAL</b>	<b>60</b>

\*ENG-2150 Technical Writing highly recommended.

\*\*Minimum 8 semester credits – must include a minimum 4 semester credits at the 2000-level.

\*\*\*MATH-1800/2800 & 1820/2820 may not be used to meet this requirement.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity)—see Section VI.

C = Capstone Course



## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### Applied Industrial Technology (Drywall Finishing)

#### APPRENTICESHIP PROGRAM

#### Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Drywall Finishing.

This program prepares the student to work as a journey-level Drywall Finisher, as well as earn an Associate of Applied Science Degree. A four-year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. The Drywall Finisher finishes drywall surfaces by applying materials and sanding in preparation for final painting or treatment.

Apprenticeship Coordinator - Leo Russo (216-987-3039). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ATDW-1310	Tools and Methods of Drywall Finishing	2
ATDW-1330	Materials and Methods of Drywall Finishing	2
ATPT-1300	Introduction to Painting, Drywall Finishing and Glazing	2
ATPT-1320	Safety Standards for Construction (OSHA-10)	3
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
		<b>16</b>
<u>Second Semester</u>		
ATDW-1620	Taping Tools and Procedures	2
ATPT-1340	Wall Preparation and Repair	2
ATPT-1650	Blueprints I: Construction Fundamentals	2
ATPT-1660	Labor in American Society	2
IT-1010	Introduction to Microcomputer Applications	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
Communication...	(See AAS Degree Requirements)*	3
		<b>17</b>
<u>Third Semester</u>		
ATDW-2310	Automatic Taping Tools	2
ATDW-2330	Finishing Boxes	2
ATDW-2350	Filling Compounds and Procedures	2
ATPT-2320	Safe Work Practices	3
ATPT-xxxx	ATPT elective course**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>15</b>
<u>Fourth Semester</u>		
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
ATDW-2340	Texturing**	2
ATPT-2340	Blueprints II: Advanced Reading and Estimating	2
ATPT-2360	Foreman Training	2
ATPT-xxxx	ATPT elective course**	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>13</b>
<b>PROGRAM TOTAL</b>		<b>61</b>

\*Minimum 8 semester credits – must include 2 semester credits at the 2000-level (Technical Elective may fulfill this, as well).

\*\*Technical Electives

- ATPT-1330 Filling Compounds and Procedures
- ATPT-1620 Wood Finishing
- ATPT-1630 Color Mixing and Matching
- ATPT-2310 Wall Covering and Paperhanging
- ATPT-2380 Special Coatings and Decorative Finishes

Note: Courses as listed satisfy competencies C&S. Choose one course from C&S (Cultural Diversity) – see Section VI.

C = Capstone Course

**Applied Industrial Technology (Electrical Construction)**

**APPRENTICESHIP PROGRAM**

**Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Electrical Construction.**

This program prepares the student to earn a journey-level status in Electrical Construction, as well as earn an Associate of Applied Science Degree. A five year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. The Electrician installs, maintains, operates, or repairs electrical equipment. The work of the electrical construction worker can be divided into broad categories such as new construction, remodeling, maintenance, and repair. While the jobs differ, the mental and physical skills acquired in this well-designed and administered apprenticeship training program prepare the electrical worker for the entire range of work. Much of the work involves installation, assembling, testing, repairing, layout and design of electrical wiring, fixtures, and apparatus used for power, light, heating, air conditioning and many types of control systems. Many jobs now incorporate computers and fiber optics. Over 90% of Cleveland electrical apprentices complete the program and have meaningful careers as highly paid journey-level Electrical Workers, a success rate virtually unmatched by other programs in the electrical industry.

Apprenticeship Coordinator - Leo Russo (216-987-3039). **This program has specific admission requirements**

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<u>First Semester</u>		
ATEL-1300	Direct Current Fundamentals	3
ATEL-1330	National Electric Code	2
ATEL-1350	Industrial Safety	1
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
		<b>13</b>
<u>Second Semester</u>		
ATEL-1310	Alternating Current Fundamentals	3
ATEL-1360	Blueprint Fundamentals-Electrical	2
IT-1010	Introduction to Microcomputer Applications	3
MATH-1360	Technical Mathematics II	5
Communication...	(See AAS Degree Requirements)*	3
		<b>16</b>
<u>Third Semester</u>		
ATEL-2300	Industrial Electronics Fundamentals I	3
ATEL-2350	Programmable Logic Controllers	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>12</b>
<u>Fourth Semester</u>		
ATEL-2310	Industrial Electronics Fundamentals II	3
ATEL-2500	AC/DC Motors and Generators	4
ATEL-2510	Motor Controls	3
ATEL-2700	Electrical Instrumentation	4
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>19</b>
	<b>PROGRAM TOTAL</b>	<b>60</b>

\*ENG-2150- Technical Writing highly recommended.

\*\*Minimum 8 semester credits required.

Note: Courses as listed satisfy competencies C&S. Choose one course from C&S (Cultural Diversity)—see Section VI.

C = Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### Applied Industrial Technology (Floorlaying)

#### APPRENTICESHIP PROGRAM

#### Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Floorlaying

This program prepares the student to work as a journey-level Floorlayer, as well as earn an Associate of Applied Science Degree. A four-year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. The Floorlayer cuts, fits and installs hardwood flooring and various types of underlayment to insure smooth, level surfaces for a finished floor, scribes, cuts, fits, layout and seam tile and sheet goods; and is a expert at cutting, binding, sewing and installing carpet.

Apprenticeship Coordinator - Leo Russo (216-987-3039). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ATCT-1300	Carpentry I	2
ATCT-1310	Carpentry Safety	2
ATCT-1450	Floorlaying Concepts	2
ATFL-1600	Modular Tile	2
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
		<b>15</b>
<u>Second Semester</u>		
ATFL-1610	Jute and Action Back Carpentry	2
ATFL-1620	Ceramics I	2
ATFL-1630	Wood Flooring I	2
ATFL-1640	Sheet Goods Concepts	2
BADM-2200	Human Relations in Business	3
IT-1010	Introduction to Microcomputer Applications	3
Communication...	(See AAS Degree Requirements)*	3
		<b>17</b>
<u>Third Semester</u>		
ATCT-2320	Carpentry II	2
ATFL-1650	Sheet Goods Flash Coving	2
ATFL-1730	Unitary Back and Enhancer Back Carpentry	2
ATFL-2300	Ceramics II	2
ATFL-2320	Wood Flooring II	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>15</b>
<u>Fourth Semester</u>		
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
ATFL-1710	Velcro and Modular Carpentry	2
ATFL-1720	Sheet Goods-Geometric Layout and Inlay	2
ATFL-2400	Sheet Goods-Specialty Products	2
ATFL-2430	Woven and Axminster Carpentry	2
IT-1020	Information Technology Concepts	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>16</b>
	<b>PROGRAM TOTAL</b>	<b>63</b>

\*ENG 2150 Technical Writing highly recommended.

\*\*Minimum 8 semester credits (ART-1300 and ART-2100 recommended) required – must include 4 semester credits at the 2000-level.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C = Capstone Course

**Applied Industrial Technology (Glazing)**

**APPRENTICESHIP PROGRAM**

**Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Glazing**

This program prepares the student to work as a journey-level Glazier, as well as earn an Associate of Applied Science Degree in Applied Industrial Technology. A four-year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. The Glazier cuts and installs all types of glass. Materials include clear and heat absorbing glass, obscure glass, mirrors, leaded glass panels and insulating glass. Glazier also fabricates aluminum entrances, sidelights and show windows, and work with plastic and porcelain panels in metal and wood frames.

Apprenticeship Coordinator - Leo Russo (216-987-3039). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ATGL-1330	Hand Tools for Glaziers	2
ATPT-1300	Introduction to Painting, Drywall Finishing, and Glazing	2
ATPT-1320	Safety Standards for Construction (OSHA-10)	3
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>16</b>
<u>Second Semester</u>		
ATGL-1620	Glass and Mirror Replacement and Installation	2
ATGL-1630	Basic Welding	2
ATGL-1640	Door Fabrication and Installation	2
ATGL-xxxx	ATGL elective course.....OR	2
ATPT-xxxx	ATPT elective course **	
ATPT-1650	Blueprints I: Construction Fundamentals	2
ATPT-1660	Labor in American Society	2
IT-1010	Introduction to Microcomputer Applications	3
Communication...	(See AAS Degree Requirements)	3
		<b>18</b>
<u>Third Semester</u>		
ATGL-2330	Transits, Leveling Instruments and Lasers	2
ATGL-2350	Curtainwall Fabrication and Installation	2
ATPT-2320	Safe Work Practices	3
ATDW-xxxx	ATDW elective course .....OR	2
ATGL-xxxx	ATGL elective course .....OR	
ATPT-xxxx	ATPT elective course **	
ATDW-xxxx	ATDW elective course .....OR	2
ATPT-xxxx	ATPT elective course **	
ATGL-xxxx	ATGL elective course .....OR	2
ATPT-xxxx	ATPT elective course **	
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>16</b>
<u>Fourth Semester</u>		
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
ATGL-2340	Advanced Welding	2
ATPT-1640	Rigging and Hoisting	2
ATPT-2360	Foreman Training	2
ATDW-xxxx	ATDW elective course .....OR	2
ATGL-xxxx	ATGL elective course .....OR	
ATPT-xxxx	ATPT elective course **	
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>14</b>
	<b>PROGRAM TOTAL</b>	<b>64</b>

\*Minimum 8 semester credits required – must include 6 semester credits at the 2000-level (Technical Electives may fulfill this, as well).

\*\*Technical Electives

ATDW-1310	Tools & Methods of Drywall Finishing	ATDW-2340	Texturing
ATDW-2350	Filling Compounds and Procedures	ATGL-2370	Sealants
ATPT-1620	Wood Finishing	ATPT-1630	Color Mixing and Matching
ATPT-2340	Blueprints II: Advanced Reading and Estimating	ATPT-2370	Abrasives Blasting Techniques

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C = Capstone Course

## Program Course Requirements

Fall 2001-Summer 2003 Catalog

### Applied Industrial Technology (Ironworking)

#### APPRENTICESHIP PROGRAM

#### Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Ironworking

This program prepares student to earn a journey-level status in Ironworking, as well as an Associate of Applied Science Degree. A three year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. The Ironworker erects, assembles, and installs fabricated structural metal products, usually large metal beams, in the erection of industrial, commercial, or large residential buildings. Structural Ironworkers erect the steel framework of bridges and buildings. Reinforcing Rod Ironworkers set steel bars or mesh in concrete forms to strengthen concrete in buildings and bridges. Ornamental Ironworkers install metal stairways, catwalks, gratings, grills, screens, fences, and decorative ironwork. The rigger is an ironworker whose job is to move heavy machinery, using rollers, forklifts, and other sources of power.

Apprenticeship Coordinator - Leo Russo (216-987-3039). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ATIW-1300	Structural Steel Concepts	2
ATIW-1310	Safety for Ironworkers	1
ATIW-1320	Steel Construction Procedures	1
ATIW-1330	Erection Concepts and Practices	3
ATIW-1400	Principles of Reinforcing Steel	2
ATIW-1410	Practical Applications of Reinforcing Steel	1
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
		<b>17</b>
<u>Second Semester</u>		
ATIW-1600	Welding Fundamentals for Ironworkers	3
ATIW-2300	Shielded Metal Arc Welding	3
ATIW-2310	Welding Specialties	3
ATIW-2320	Welding Blueprints and Design	3
Communication	(See AAS Degree Requirements)*	3
		<b>15</b>
<u>Third Semester</u>		
ATIW-2330	Pre-Construction Planning of Specialty Applications	2
ATIW-2340	Specialty Installation Equipment	2
ATIW-2350	Ornamental Systems and Railings	2
ATIW-2360	Ornamental Applications	2
ATIW-2400	History of the Iron Workers Union	3
IT-1020	Information Technology Concepts	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>17</b>
<u>Fourth Semester</u>		
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
ATIW-2500	Rigging and Hoisting	3
MATH-1360	Technical Mathematics II	5
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>16</b>
	<b>PROGRAM TOTAL</b>	<b>65</b>

\*ENG-2150 Technical Writing highly recommended

\*\*Minimum 8 semester credits required.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity).

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### Applied Industrial Technology (Manufacturing Technology)

#### APPRENTICESHIP PROGRAM

#### Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Manufacturing Technology

This program prepares the student to work as a skilled machinist, as well as earn an Associate of Applied Science Degree in Applied Industrial Technology. A four-year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. Machinists are involved in the production of components used by the aircraft, automotive, machinery, and many other industries, often with machine tools run by computer numerical control devices. The machinist of today relies on high tech to produce parts, and must possess a wide skill set of mathematical knowledge, technical disciplines, and the ability to work independently. Working from drawings or specifications, using precision measuring instruments, machinists shape metal into usable parts using a variety of precision metal cutting and grinding machines. Over sixty employers of metalworkers have participated to develop a strong, relevant, valuable, and exciting apprenticeship-training program, offered at the Unified Technologies Center of Cuyahoga Community College.

Program Manager – Mr. Ken McCreight (216-987-3195). This program has specific admission requirements.

<b>Course No.</b>	<b>Course Title</b>	<b>Credit Hrs.</b>
<b>First Semester</b>		
ATMT-1100	Manufacturing Skills I	3
ATMT-1110	Manufacturing Skills II	2
ATMT-1200	Machine Tool Theory	4
ATMT-1950	Field Experience	2
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
		<b>18</b>
<b>Second Semester</b>		
ATMT-1300	Manufacturing Procedures	2
ATMT-1500	Manufacturing Technology Skills I	4
ATMT-1600	Introduction to CAD	2
ATMT-1950	Field Experience	2
MATH-1360	Technical Mathematics II	5
Communication...	See AAS Degree Requirements*	3
		<b>18</b>
<b>Third Semester</b>		
ATMT-1950	Field Experience	2
ATMT-2300	Advanced Manufacturing Procedures	2
ATMT-2500	Manufacturing Technology Skills II	4
ATMT-2600	CNC Programming/Operations	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>16</b>
<b>Fourth Semester</b>		
ATMT-1950	Field Experience	2
ATMT-2620	CAM Principles	2
ATMT-2700	Manufacturing Technology Skills III	4
ATMT-2990	Manufacturing Operation Principles <u>C</u>	3
ATMT-2xxx	Any 2000-level ATMT elective course	2
ATMT-2xxx	Any 2000-level ATMT elective course	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>17</b>
	<b>PROGRAM TOTAL</b>	<b>69</b>

\*ENG-2150 Technical Writing highly recommended.

\*\*Minimum 8 semester credits.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### Applied Industrial Technology (Operating Engineers)

#### APPRENTICESHIP PROGRAM

#### Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Operating Engineers

This program prepares the student to earn a journey-level status in Operating Engineers, as well as earn an Associate of Applied Science Degree. A four-year apprenticeship emphasizes the skill set required to be a highly skilled craftsman and equipment mechanic. Operating engineers operate and maintain hoisting, grading, excavating and paving equipment consisting of cranes, bulldozers, scrapers, graders, endloaders, concrete and asphalt plants, rollers and pumps. The Operating Engineer is generally employed in the building of highways, airports, buildings, waterways, stadiums and sewers.

Apprenticeship Coordinator - Leo Russo (216-987-3039). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ATOE-1100	Operating Engineering Concepts	4
ATOE-1200	Basic Mechanical Concepts	3
ATOE-1650	Graders and Plans	2
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>18</b>
<u>Second Semester</u>		
ATCT-1310	Carpentry Safety	2
ATEL-1350	Industrial Safety	1
ATOE-1700	Paving, Tractor, Backhoe Operators	3
ATOE-2100	Mobile Crane	2
ATOE-2600	Bulldozer Practice	3
IT-1010	Introduction to Microcomputer Applications	3
Communication...	(See AAS Degree Requirements)**	3
		<b>17</b>
<u>Third Semester</u>		
ATOE-2200	Mechanical Repair	3
ATOE-2620	Backhoe Practice	3
ESCI-1310	Physical Geography	3
ESCI-131L	Physical Geography Lab	1
MATH-1360	Technical Mathematics II.....OR	3-5
ATOE-xxxx	Any ATOE elective course	
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>16-18</b>
<u>Fourth Semester</u>		
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
ATOE-2640	Advanced Grader Practice	3
ATOE-2660	Grader Safety	2
ATCM-xxxx	ATCM elective course.....OR ***	1-3
ATOE-xxxx	ATOE elective course.....OR ***	
ESCI-1410	Physical Geology***	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>12-14</b>
<b>PROGRAM TOTAL</b>		<b>63-67</b>

\*Minimum 8 semester credits required--must include one course at the 2000-level (Technical Electives may fulfill this, as well).

\*\*ENG-2150 Technical Writing highly recommended.

\*\*\*Technical Electives:

ATCM-1340	OSHA Standards for the Construction Industry
ATCM-2320	Blueprint Fundamentals/Construction
ATOE-2650	Safety Training Passport
ATOE-2670	Rough Terrain Forklift Operation
ATOE-2680	Hazardous Material Handling and Field Safety
ESCI-1410	Physical Geology

Note: Courses as listed satisfy competencies C&S. Choose one course from C&S (Cultural Diversity) --see Section VI.

C = Capstone Course

## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### Applied Industrial Technology (Painting)

#### APPRENTICESHIP PROGRAM

#### Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Painting

This program prepares the student to work as a journey-level Painter, as well as earn an Associate of Applied Science Degree in Applied Industrial Technology. A four-year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. Painters prepare surfaces of buildings and other structures and then apply paint and other compounds by means of brushes, rollers and sprayers. Painters apply a variety of substances including varnish, lacquers and enamels to interior surfaces and exterior structures. They may also work with wallpaper, vinyl and other materials, as well as mix paints, sandblast and waterblast. Apprenticeship Coordinator - Leo Russo (216-987-3039). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ATPT-1300	Introduction to Painting, Drywall Finishing and Glazing	2
ATPT-1320	Safety Standards for Construction (OSHA-10)	3
ATPT-1330	Filling Compounds and Procedures	2
ATPT-1340	Wall Preparation and Repair	2
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	2
		<b>18</b>
<u>Second Semester</u>		
ATPT-1620	Wood Finishing	2
ATPT-1630	Color Mixing and Matching	2
ATPT-1640	Rigging and Hoisting	2
ATPT-1650	Blueprints I: Construction Fundamentals	2
ATPT-1660	Labor in American Society	2
IT-1010	Introduction to Microcomputer Applications	3
Communication...	(See AAS Degree Requirements)	3
		<b>16</b>
<u>Third Semester</u>		
ATGL-2400	Advanced Rigging and Hoisting.....OR	2
ATPT-2370	Abrasives Blasting Techniques**.....OR	
ATPT-2380	Special Coatings and Decorative Finishes**	
ATPT-2310	Wall Covering and Paperhanging	3
ATPT-2320	Safe Work Practices	3
ATPT-2330	Spray and Industrial Painting	2
ATPT-2370	Abrasives Blasting Techniques**.....OR	2
ATPT-2380	Special Coatings and Decorative Finishes**	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>15</b>
<u>Fourth Semester</u>		
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
ATPT-2340	Blueprints II: Advanced Reading and Estimating	2
ATPT-2350	Advanced Spray and Industrial Painting	2
ATPT-2360	Foreman Training	2
MATH-1360	Technical Mathematics II	5
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>15</b>
	<b>PROGRAM TOTAL</b>	<b>66</b>

\*Minimum 8 semester credits.

\*\*ATPT-2370 and ATPT-2380 may each be used only once.

Note: Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity) – see Section VI.

C = Capstone Course



## Program Course Requirements

## Fall 2001-Summer 2003 Catalog

### Applied Industrial Technology (Sign and Display)

#### APPRENTICESHIP PROGRAM

#### Associate of Applied Science Degree in Applied Industrial Technology with a Concentration in Sign and Display

This program prepares the student to earn a journey-level status in Sign and Display, as well as an Associate of Applied Science Degree. A three year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. The apprentice learns to develop, fabricate, design, install, and maintain signage of all types. Their work includes welding, computer graphics, neon lighting, and installation techniques.

Apprenticeship Coordinator - Leo Russo (216-987-3039). This program has specific admission requirements.

Course No.	Course Title	Credit Hrs.
<u>First Semester</u>		
ATPT-1300	Introduction to Painting, Drywall Finishing, and Glazing	2
ATPT-1320	Safety Standards for Construction (OSHA-10)	3
ATSD-1300	Introduction to Sign and Display	2
ATSD-1330	Hand Tools for Sign and Display	2
ENG-1010	College Composition I	3
MATH-1160	Technical Mathematics I	4
		<b>16</b>
<u>Second Semester</u>		
ATGL-1630	Basic Welding	2
ATPT-1630	Color Mixing and Matching	2
ATPT-1650	Blueprints I: Construction Fundamentals	2
ATSD-1620	Plastic Face Fabrication and Techniques	2
IT-1010	Introduction to Microcomputer Applications	3
Communication	(See AAS Degree Requirements)*	3
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	2
		<b>16</b>
<u>Third Semester</u>		
ATPT-1640	Rigging and Hoisting	2
ATPT-1660	Labor in American Society	2
ATPT-2320	Safe Work Practices	3
ATSD-2330	Sign Lighting and Wiring	2
ATSD-2340	Advanced Welding	2
ATSD-2360	Computerized Manufacture of Signs	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)**	3
		<b>16</b>
<u>Fourth Semester</u>		
ATCT-2990	Contracting in a Diverse World <u>C</u>	3
ATPT-2360	Foreman Training	2
ATSD-2350	Structural Steel and Support Fabrication	2
ATSD-2370	Letter Fabrication	2
ATSD-2390	Advanced Blueprints for Sign and Display	2
ATSD-2460	Computerized Sign Design	2
Arts & Hum/Soc & Beh Sci...	(See AAS Degree Requirements)*	3
		<b>16</b>
	<b>PROGRAM TOTAL</b>	<b>64</b>

\*ENG-2150 Technical Writing highly recommended.

\*\*Minimum 8 semester credits required.

Courses as listed satisfy competencies C&S. Choose at least one course from C&S (Cultural Diversity).

Note: Course as listed satisfy the minimum of 20 semester credits at the 2000 level.

C = Capstone Course.