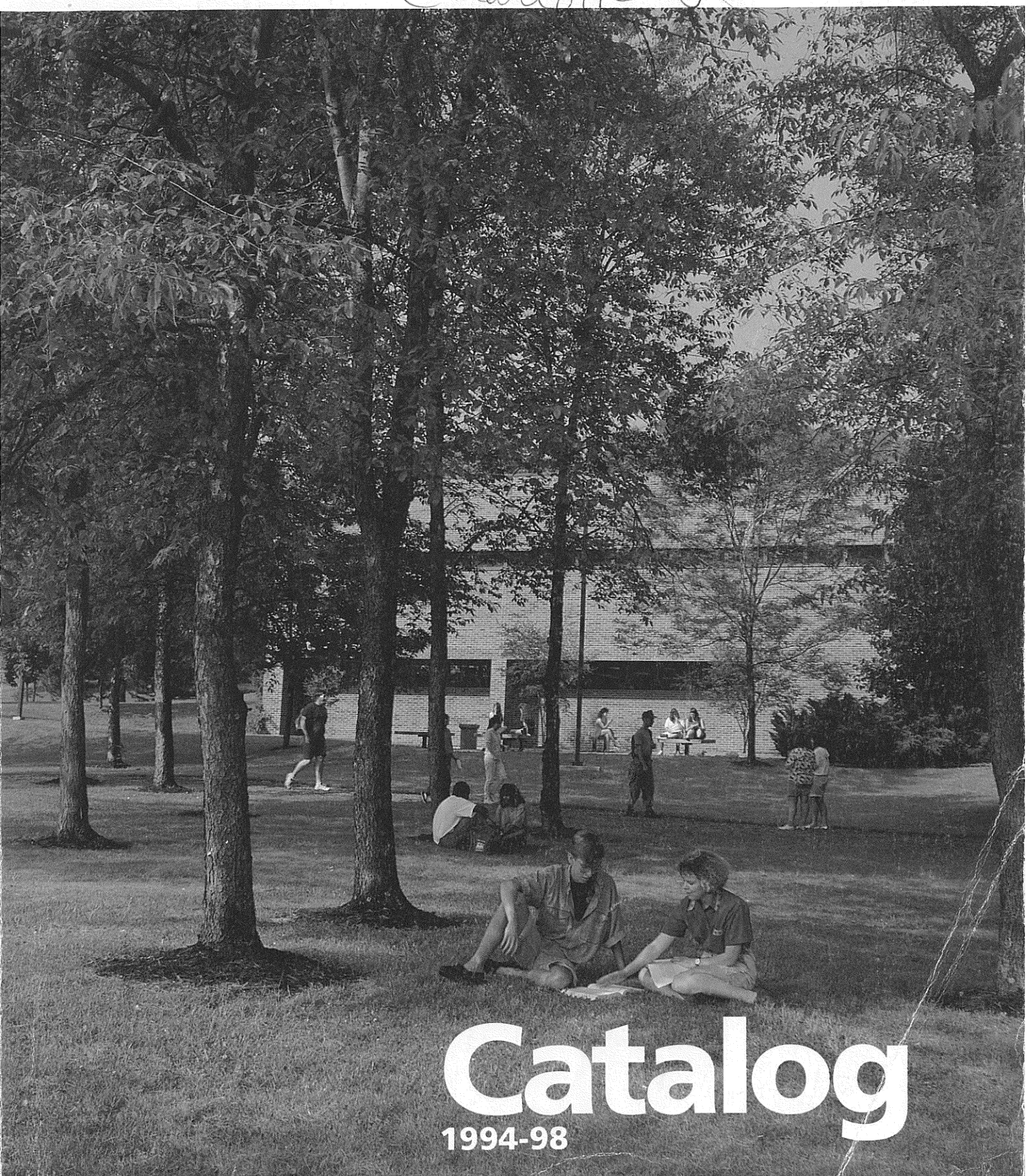
Return to Placement Office
Charlotte Lambert

Hocking College

Nelsonville, Ohio



# Catalog

1994-98

3301 Hocking Parkway
Nelsonville OH 45764-9704

614 753-3591

Admission and Financial Aid
1-800-282-4163

**Catalog 1994 - 1998**

Programs and curricula at Hocking College are reviewed periodically so that our students are prepared for the constantly changing challenges of business and industry. The college reserves the right to change any provision or requirement in this catalog including fees, at any time without prior notice. The information in this publication is not to be regarded as a contract between the student and the college. Students are subject to the requirements in effect at the time they enroll. Current technology curricula may be obtained from the Admission Office.

Hocking College offers equal educational and employment opportunities without regard to race, color, religion, marital status, national origin, sex, age or disability. Hocking College is an equal opportunity institution. Our services and facilities are available to all.

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Updated June 1995

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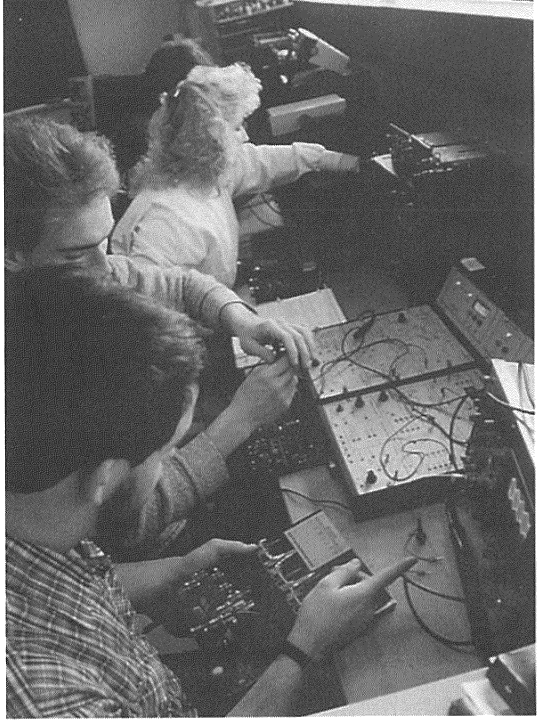
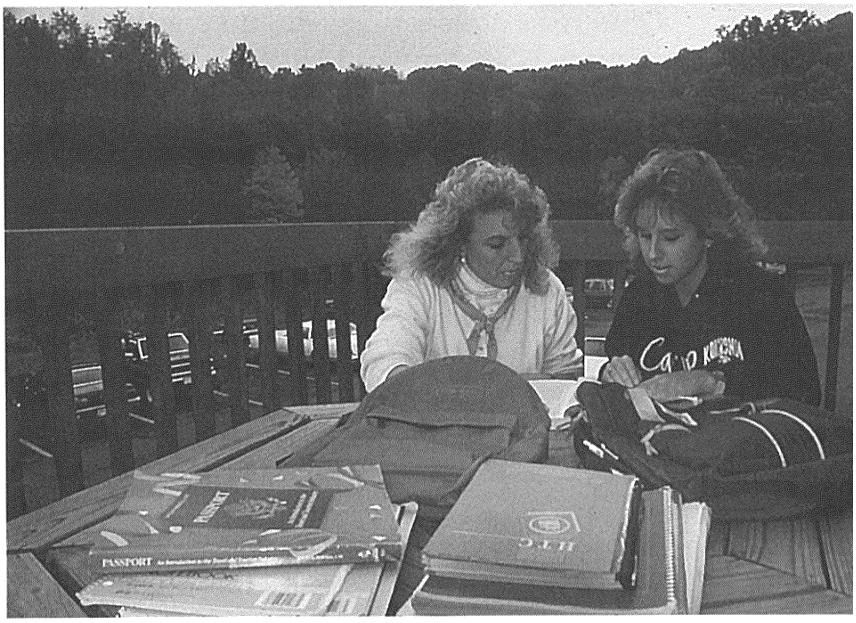
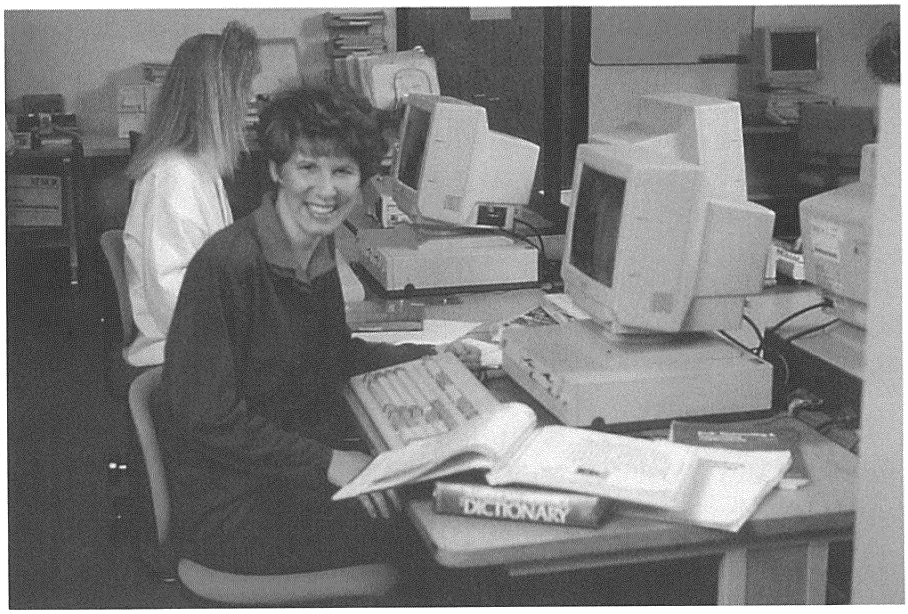
*Welcome to Hocking College! All of us at the College take special pride in the excellence of our technical programs and in the natural beauty of our Southeastern Ohio campus. Our greatest source of pride though, is our dedicated faculty and staff who strive to make each student's experience at the College the best possible. Technical education means hands-on learning. State-of-the-art labs and field experiences encourage our students to apply skills to real work situations. Unique facilities such as our Quality Inn Hocking Valley, Uniglobe Travel Agency, Telemarketing Center, Robbins Crossing Interpretive Center and Hocking Woods Nature Center go one step further by serving the public while our students learn. We also maintain close ties with business, industry and public agencies so that our graduates are prepared with the education and training needed by prospective employers. This is an exciting time to be a student at Hocking College. We're responding to today's changing world with innovations that will help you get the most out of your education. We offer you an action-packed, relevant experience in the technology of your choice, with a little fun along the way. We look forward to serving you at Hocking College. We'll show you why we're America's best two-year college.*

John J. Light, Ph.D.

President




PASSPORT


DICTIONARY

# The College

Hocking College is a two-year technical college where the accent is on "learning by doing" -- a great place to gain technical knowledge and personal skills for a successful career. Students learn in well-equipped labs and training facilities with an outstanding faculty and staff, whose emphasis is on personal interaction with students. The college is located in Southeastern Ohio near Nelsonville, about 60 miles from Columbus. Our 1400-acre campus is surrounded by the Wayne National Forest. Several state parks are within easy driving distance.

Hocking College offers associate degrees and certificates in more than 30 programs. In addition, it provides the state approved Transfer Module for students planning on transferring to a four year college without earning a degree. Several of the college's technologies were the first two-year programs of their kind either in Ohio or in the nation. HC is the only institution in the world offering a two-year degree in Materials Engineering Technology. The Ceramic Engineering Technology and Compressed Natural Gas programs were firsts in the United States, and the Forestry, Career Ladder Nursing, Human and Correctional Services, Juvenile Corrections, Emergency Medical and Travel and Tourism programs were firsts in Ohio. The Culinary Arts and Hotel/Restaurant Management programs took the lead in hospitality training at the Quality Inn Hocking Valley, a public facility owned and operated by the college.

Programs at Hocking keep up with the constantly changing needs of business and industry. High technology laboratories contain state-of-the-art engineering and computer science equipment and computer assisted drafting systems are part of the Drafting and Design program.

Because of the number of unique technical programs offered at Hocking College, our student body includes people of all ages, backgrounds, geographic origins and interests. Over 6,000 students represent all of Ohio's 88 counties, 20 states and 47 foreign countries.

HC's academic calendar follows a system of four quarters -- fall, winter, spring and summer. Students may enroll in day and evening classes and may choose between traditional classroom and self-paced methods of instruction.

Hocking College believes in itself and its students. Our mission has always been to provide the best and most current technical education not only to our students but also to the communities and industries we serve.

## Accreditation

Hocking College is accredited by the North Central Association of Colleges and Schools. In addition to the institutional accreditation, the programs listed below are individually accredited by the indicated agency.

| Program | Accrediting Agency |
|---|---|
| Accounting Technology | Association of Collegiate Business Schools and Programs |
| Activities Therapy | Approved by the National Certification Council for Activities Professionals |
| Business Management Technology | Association of Collegiate Business Schools and Programs |
| Ceramic Engineering Technology | Technology Accreditation Commission of the Accreditation Board of Engineering and Technology |
| Dietetic Technology | American Dietetic Association<br>Dietary Manager Association<br>Developmental Accreditation by the Council on Education Division of the Accreditation/Approval |
| Emergency Medical Technology | State Board of Education - EMT-A Ambulance and EMT-Paramedic (EMT-A 502407/EMT-P 5-3-002) |
| Forestry Technology | Recognized by the Society of American Foresters |
| Health Information Management Technology | Commission on Accreditation of Allied Health Education Programs on recommendation of the Committee on Allied Health Education on Accreditation |
| Medical Assistant Technology | Commission on Accreditation of Allied Health Education Programs on recommendation of the Committee on Accreditation for Medical Assistant Education |
| Nursing Technology Level I and II | Approved by the Ohio Board of Nursing<br>Accredited by the National League of Nursing |
| Office Administration Technology | Association of Collegiate Business Schools and Programs |
| Recreation and Wildlife Technology (Fish and Wildlife Major) | North American Wildlife Technology Association |

Hocking College is a member of the American Association of Community and Junior Colleges, The Ohio College Association and the National Alliance of Community and Technical Colleges.

## College Mission and Goals

Hocking College is dedicated to fulfilling the following mission as part of the Ohio system of technical education: to prepare individuals, in up to two years, for careers as technicians or technologists who will work with skilled craftsmen and professionals. The clear emphasis of technical education is the practical application of knowledge and skills toward the solution of problems in the world of work.

The Hocking College mission is implemented through the following goals:

To provide programs and instruction for the broadest possible range of high school graduates and adults which are relevant to the needs, desires and aspirations of students, industry and local citizens and which are aimed uncompromisingly at successful career employment and personal fulfillment for the individual.

To develop and offer Associate Degree programs in Applied Science and Applied Business which will prepare students for employment as technicians or para-professionals and which are compatible with the needs of industry and individuals of the area served.

To provide training at a level that will permit application and acceptance into a baccalaureate degree program in a technical field if desired.

To work and with other educational institutions to establish an open-ended technical education curriculum which allows students to enter employment or to continue education with a minimum disruption or loss of credit. The Hocking College Trustees urged universities to: recognize the potential of our graduates as students, encourage the development of two-plus-two programs and for the universities to formally adopt systems and procedures that would enable individuals to easily matriculate when they qualify.

To promote a positive attitude toward work, including high standards of personal behavior, character, integrity and self-improvement.

To develop in graduates the technical knowledge, skills and attitudes which will provide for successful job entry performance, continued employment and advancement.

To surround students with an environment of the kind within which they will be employed, encompassing a maximum exposure to other technically competent specialists and equipment closely approximating that in industry.

To provide adequate general education to enable students to intelligently assume the responsibilities of citizenship.

To develop and offer special continuing education programs for occupational advancement, refresher and retraining purposes.

To provide counseling and advisement services to students and citizens which will assist in choosing appropriate courses of study.

To provide a system of instruction which is directed toward meeting the learning requirements and needs of individual students when they need it.

To provide a source of skilled manpower upon which the area may draw for the successful continuation and expansion of technical enterprises.

To provide the faculty, facilities and consultant services for business, industry and the community.

To cooperate and coordinate with area public and private institutions in order to prevent duplication of effort, maximize the resources available to students and faculty and realize the fullest benefits from the tax dollar.

To accomplish all of the above goals in the most efficient and economical manner compatible with quality offerings.

## A History of Hocking College

| | |
|---|---|
| **1968** | Tri-County Technical Institute opens its doors on the grounds of Tri-County Joint Vocational School. |
| | Enrollment 234. |
| **1969** | Charter received from the Ohio Board of Regents. |
| **1970** | Southeastern Ohio School of Practical Nursing transferred to Tri-County Technical Institute. |
| **1971** | Board approves construction of a hotel and restaurant. |
| | 6.5 million dollar request for a technical school campus submitted. |
| **1972** | Official name changed to Hocking Technical College. |
| | 250 acres purchased for new building and future development. |
| | College receives first of many grants from the Helene Fuld Health Trust for the nursing programs. |
| **1973** | Enrollment 1,055. |
| **1974** | College designated as the permanent site of the Paul Bunyan Show. |
| **1975** | Hocking College Residence Hall opens on campus. |
| | PACE program of open-entry/open-exit curriculum adopted. |
| **1976** | Ohio-Hocking Forestry Museum established. |
| **1977** | Enrollment 2,250. |
| | Phase II building opens. |
| **1978** | $5,059,483 budget approved. |

**1980** Hotel/Restaurant students work at Lake Placid Olympics.

Sister College relationship established with Hsinpu Junior College of Technology, Taipei, Taiwan, Republic of China.

Sawmill begins operation.

$6,412,240 budget approved.

**1981** College awarded 10-year accreditation from North Central Association of Colleges and Schools; accreditation report to be used as national model.

Enrollment 3,240.

**1982** Sister College relationship established with Tokyo Metropolitan College of Technology.

College receives Congressional Recognition for tuition scholarship fund created by voluntary staff payroll deduction program.

Five-year, 5.8 million dollar grant under the Strengthening Developing Institutions program received from the U.S. Department of Education.

Satellite receiver downlink dish installed to provide satellite instructional programming and access to national teleconferences.

HTC Charitable Trust enacted.

**1983** College's Community Health Education Center designated as national model by Atlanta Center for Disease Control.

$10,200,000 budget approved.

**1984** Gittinger Assessment Center established.

Technical Laboratory Building opens.

Bahamas Hotel Training College and Hotel and Tourism Training Center of Rangoon, Burma send staff members for training in curriculum development.

**1985** Ceramic Engineering Technology, Forestry, Police Science and Recreation and Wildlife programs receive Program Excellence Awards totaling $523,350 from the Ohio Board of Regents.

Fiscal year-end scholarships and grants to individual students total $1,528,886.

Joint agreement established between HTC and College of Arts, Science and Technology in Kingston, Jamaica for student training.

Ceramic Engineering Technology receives regional U.S. Department of Education Secretary Award for Excellence.

**1986** HTC's Telemarketing Center begins serving HTC and businesses with telemarketing services.

Jamaican chefs receive specialized culinary training from HTC's executive chef instructors.

Hocking Woods Nature Center opens.

**1987** Over 35,000 tourists enjoy the weekend living history presentation of HTC Interpretive Service students at Robbins Crossing on campus.

The Day Care Connection childcare center opens on campus.

HTC receives $500,000 U.S. Department of Education Facilities Grant.

**1988** Enrollment over 4,000.

Nursing Department awarded $65,000 grant under the Academic Challenge program.

Quality International Reservation Center opens on campus.

Student Center opens on campus.

Vehicular Fuels Institute begins operation of national technical services database.

Groundbreaking for Southeastern Probation Treatment Alternative Facility to be built on HTC-donated land.

Ceramic Engineering Technology repeats as Program Excellence Award winner.

**1989** International Energy Center opens.

HTC heads state funded consortium to train human services personnel in Ohio's 88 counties.

Ceramic Engineering Technology named one of two outstanding programs in U.S. by National Council of Instructional Administrators.

**1990** Satellite campus in Perry County established with 61 students.

Communications program in the General Studies Department receives Program Excellence Grant of $148,800 from the Ohio Board of Regents.

**1991** Enrollment over 5,500.

Official name changed to Hocking College.

Hocking College established an External Degree program.

Nursing Department becomes the College's first "school" and is known as the School of Nursing.

**1992** Students travel to Europe for first Havering College Student Exchange program.

College acquires 290 additional acres of land adjoining campus bringing total to more than 1,400 acres.

Hocking College is the only college to take part in international horticulture exposition AmeriFlora '92, held in Columbus.

**1993** Work begins on $5.9 million Capital Projects including a new building and an addition to the Natural Resources building.

College receives 25 acres of land in Perry County to build permanent structure.

Natural Resources Department becomes School of Natural Resources and Ecological Sciences.

**1994** Enrollment over 6000 with a budget of nearly $40 million.

Groundbreaking for Nursing/Health/Learning Resource Center building and Natural Resources building addition.

Groundbreaking for Perry County Center.

Board of Trustees adopts Functional Mission, Hocking College to remain technical in mission.

**1995** College anticipates next 25 years and beyond.

# Automotive and Energy Technologies

**Technical Programs**

Programs leading to an Associate Degree:

Automotive Service Management
Compressor

**Certificate Programs**

Programs providing specific technical skills:

Automotive Service Management
Automotive HVAC and Drivetrain Specialist
Automotive Performance and Diagnostic Specialist
Automotive Service Management Skills
Compressed Natural Gas-Fill Station and Compressor Installation and Maintenance
Compressed Natural Gas-Vehicle Conversion and Safety
Compressor
NGV Compressor Fill Station Specialist
Rotating Compressor Specialist

# Automotive Service Management

The Automotive Service Management Technology prepares individuals for careers in the automotive service industry and provides a background sufficient for growth and advancement in the automotive service profession.

The associate degree program in Automotive Service Management addresses the latest trends and advancements in both management techniques and service procedures. Courses include servicing of fuel injection systems, automatic transmissions, antipollution devices, and diagnosis and repair for electronic accessories.

Technical management courses concentrate on the latest market strategies for parts inventory, electronic data storage and retrieval and fleet and dealership activities.

The program also includes training in natural gas fuel technology, the alternative vehicle fuel of the future. Students learn theory, component teardown and installation of natural gas conversion equipment.

**Job Opportunities**
Graduates are employed as automotive technicians, service managers, shop foremen, sales representatives, parts managers and service station managers.

| No. | | Course | Credit |
|---|---|---|---|
| AU | 101 | Automotive Technical Skills | 3 |
| AU | 110 | Automotive Engine Measurement and Skills | 5 |
| AU | 111 | Service Management Orientation | 4 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 122 | Communications II | 3 |
| AU | 112 | Automotive Electrical Systems | 4 |
| AU | 113 | Automotive Fuel Delivery Systems | 4 |
| ACC | 100 | Accounting I | 3 |
| MATH | 203 | College Algebra II | 3 |
| COMM | 123 | Communications III | 3 |
| AU | 114 | Steering, Suspension and Brake Systems | 5 |
| AU | 115 | Automotive Heating, Ventilation and Air Conditioning | 4 |
| DD | 101 | Engineering Drawing I | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| COMM | 124 | Communications IV | 3 |
| AU | 206 | Auto Powertrain Component | 5 |
| AU | 216 | Alternative Fuels Conversion Systems | 5 |
| AU | 217 | Automotive Electrical Schematics | 2 |
| BUS | 100 | Small Business Management I | 3 |
| PSYC | 154 | Interpersonal Communications | 3 |
| AU | 201 | Automotive On-Board Electronics | 4 |
| AU | 218 | Advanced Automatic Transmissions | 5 |
| BUS | 101 | Small Business Management II | 3 |
| COMM | 225 | Technical Writing | 3 |
| SOCI | 169 | Human Relations In Organizations | 3 |
| AU | 207 | Fleet Management and Supervision | 3 |
| AU | 215 | Automotive Diagnostics and Performance Testing | 5 |
| AU | 296 | Automotive Practicum | 3 |
| BUS | 200 | Business Law | 3 |
| EGR | 212 | Industrial Supervision | 3 |
| COMM | 104 | Job Search Techniques | 1 |

# Compressor

The Compressor Technology prepares individuals for careers in the compressor industry and allows for training that provides students with a background sufficient for growth and advancement in the compressor service and repair industry.

The Compressor Technology was developed at Hocking College at the request of industry. Hands-on training with small compressors as well as large industrial compressors weighing up to 25,000 pounds is provided. The program stresses electrical and mechanical concepts so that students thoroughly understand the operation and maintenance techniques necessary for the different kinds of compressors used in industry.

Course work includes technical classroom, laboratory and field work as well as the development of leadership and supervisory skills. The goal of the program is to train students to become competent compressor technicians. Students also have opportunities for summer employment through industrial cooperative programs and college internships.

**Job Opportunities**
Graduates of the Compressor Technology find employment worldwide. Member companies of the advisory board have global operations and can place graduates in any geographical location. Job opportunities exist as compressor mechanics, salespersons, technicians, field service supervisors and junior engineers.

| No. | | Course | Credit |
|---|---|---|---|
| CAGS | 100 | Precision Instruments | 3 |
| CAGS | 102 | Compressed Air Applications | 3 |
| CAGS | 101 | Introduction to Compressed Air Systems | 3 |
| HC | 114 | Standard First Aid | 1 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 122 | Communications II | 3 |
| CAGS | 110 | Reciprocating Compressors I | 4 |
| CAGS | 111 | Compressor Lubricants | 2 |
| CAGS | 112 | Air and Gas Condition | 3 |
| MATH | 203 | College Algebra II | 3 |
| MICS | 101 | Computer Literacy | 1 |
| COMM | 123 | Communications III | 3 |
| CAGS | 116 | Reciprocating Compressors II | 4 |
| CAGS | 118 | Processor Gas Compressors/ Booster | 3 |
| BUS | 120 | Personal Finance | 3 |
| CAGS | 117 | Hydraulics and Pneumatics | 3 |
| COMM | 124 | Communications IV | 3 |
| CAGS | 200 | Rotary Screw Compressors | 4 |
| CAGS | 201 | Compressor Installations | 3 |
| CAGS | 208 | Basic Refrigeration | 3 |
| EGR | 201 | Occupational Safety | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| PSYC | 154 | Interpersonal Communications | 3 |
| CAGS | 202 | Compressor Controls I | 3 |
| CAGS | 203 | Rotary Lube Compressors | 4 |
| CAGS | 204 | Compressed Air System Troubleshooting | 3 |
| COMM | 225 | Technical Writing | 3 |
| SOCI | 169 | Human Relations in Organizations | 3 |
| CAGS | 205 | Compressor Controls II | 3 |
| CAGS | 206 | Centrifugal Compressors | 4 |
| CAGS | 207 | Air System Design | 3 |
| EGR | 212 | Industrial Supervision | 3 |
| COMM | 130 | Speech | 3 |

# Business Technologies

**Technical Programs**

Programs leading to an Associate Degree:

Accounting
Business
  Marketing and Customer Service Major
Culinary Arts
Ecotourism
Hotel/Restaurant Management
Office Administration
  Executive Major
  General Major
Travel and Tourism

**Certificate Programs**

Programs providing specific technical skills:

Accounting
Accounting and Financial Management Specialization
Accounting Clerk/Payroll Clerk
Accounts Payable/Accounts Receivable
Administrative Transcriptionist
Baking
Bar Management
Business Microcomputer Specialist
Clerk/Basic Typist
Cost Clerk
Culinary Arts
Customer Service Representative
Engineering and Facility Management Specialization
Entrepreneurial Specialist
Executive Housekeeping Management
Federal Taxation
File Clerk
Food and Beverage Management Specialization
General Office Administration
Income Tax Preparation
Individual Taxation
Industrial Salesperson
Institutional Food Preparation
Legal Office Administration

Management Specialist
Marketing and Sales Management
Medical Office Administration
Microcomputer Accounting
Non-Profit Accounting
Personnel Specialist I
Personnel Specialist II
Purchasing Agent
Real Estate
Receptionist/Clerk
Restaurant, Lounge and Banquet Management
Retail Management Specialist
Rooms Division Management
Salesperson
Small Business Accounting Technician
Small Business Specialist
Tourism Assistant
Travel and Tourism
Travel Industry Reservationist
Word Processing

# Accounting

The Accounting Technology prepares students for entry-level positions as junior accountants and provides programming to upgrade the skills of persons already employed in the field of accounting.

The Accounting Technology emphasizes practical experience and prepares graduates for entry-level employment in private practice, governmental accounting and private business. Students receive an excellent background not only in bookkeeping but also in payroll, tax, cost and funds accounting plus valuable experience on the college's IBM, Apple and Macintosh microcomputers. Accounting students complete a one-quarter on-the-job practicum as part of their degree.

Second year students experience first-hand learning in area agencies and business.

**Job Opportunities**
Since accounting is a part of every business, the demand for trained personnel remains high. Graduates are employed in certified professional accounting firms, small business, manufacturing firms and non-profit organizations such as colleges, hospitals and government agencies.

| No. | | Course | Credit |
|---|---|---|---|
| ACC | 120 | Payroll Accounting | 3 |
| ACC | 100 | Accounting I | 3 |
| ACC | 130 | Business and Accounting Machines | 2 |
| BUS | 170 | Fundamentals of Business I | 3 |
| OAT | 180 | Keyboarding | 1 |
| SOCI | 169 | Human Relations in Organizations | 3 |
| COMM | 122 | Communications II | 3 |
| ACC | 101 | Accounting II | 3 |
| ACC | 110 | Accounting I Simulation | 1 |
| ACC | 140 | Individual Taxation | 3 |
| BUS | 171 | Fundamentals of Business II | 3 |
| BUS | 175 | Business Word Processing | 2 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 123 | Communications III | 3 |
| ACC | 102 | Accounting III | 4 |
| ACC | 111 | Accounting II Simulation | 1 |
| ACC | 150 | Business Taxation | 4 |
| ACC | 162 | Microcomputer Accounting | 2 |
| COMM | 130 | Speech | 3 |
| MATH | 203 | College Algebra II | 3 |
| ACC | 200 | Basic Cost Accounting | 3 |
| ACC | 210 | Basic Cost Accounting Simulation | 1 |
| ACC | 220 | Non-Profit Accounting I | 4 |
| ACC | 230 | Intermediate Accounting I | 3 |
| BUS | 245 | Lotus 1-2-3 for Business | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| PSYC | 150 | Introduction to Psychology | 3 |
| ACC | 201 | Advanced Cost Accounting | 4 |
| ACC | 221 | Non-Profit Accounting II | 4 |
| ACC | 231 | Intermediate Accounting II | 4 |
| BUS | 246 | Advanced Lotus 1-2-3 for Business | 3 |
| ACC | 250 | Auditing | 3 |
| ACC | 296 | Accounting Practicum | 3 |
| BUS | 200 | Business Law | 3 |
| FMGT | 140 | Principles of Finance | 3 |
| COMM | 124 | Communications IV | 3 |

# Business Management

The Business Management Technology prepares students for entry-level career positions as managers and manager-trainees and to own and operate a small business. The Business curriculum offers flexibility to the student who may complete courses in an area of concentration or opt to meet Transfer Module requirements while completing a degree in Business Management. In addition, the Business Management Technology provides programming to upgrade the skills of persons already in the field by offering training packages to meet specific needs.

Graduates in Business Management are prepared to build careers in any phase of business-retailing, wholesaling and manufacturing. Studies range from the basic theories of management and finance through specific applications in labor relations and managerial accounting. Other courses focus on merchandising, economics, marketing and microcomputer software packages.

Second year students experience first-hand learning in area industry, business and agencies.

**Job Opportunities**
Employment varies from managerial positions in small business to management trainee programs with larger companies. Trainee programs may lead to management positions in sales, merchandising, operations, personnel credit, security and marketing.

| No. | | Course | Credit |
|---|---|---|---|
| BUS | 102 | Principles and Practices of Business Management I | 3 |
| BUS | 110 | Marketing | 3 |
| ACC | 100 | Accounting I | 3 |
| BUS | 105 | History of American Business | 3 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 122 | Communications II | 3 |
| BUS | 100 | Small Business Management I | 3 |
| BUS | 103 | Principles and Practices of Business Management II | 3 |
| ACC | 101 | Accounting II | 3 |
| BUS | 200 | Business Law | 3 |
| MATH | 203 | College Algebra II | 3 |
| COMM | 123 | Communications III | 3 |
| BUS | 101 | Small Business Management II | 3 |
| BUS | 180 | Business Ethics | 3 |
| ACC | 162 | Microcomputer Accounting | 2 |
| BUS | 175 | Business Word Processing | 2 |
| BUS | 201 | Advanced Business Law | 4 |
| COMM | 124 | Communications IV | 3 |
| BUS | 210 | Human Resource Management | 3 |
| ECON | 140 | Principles of Microeconomics | 4 |
| SOCI | 169 | Human Relations in Organizations | 3 |
| | •• | Psychology Elective (Required) | 3 |
| | •• | Business Elective (Required) | 3 |
| BUS | 243 | Business Systems Control | 3 |
| BUS | 245 | Lotus 1-2-3 for Business | 3 |
| BUS | 260 | Business Planning | 2 |
| | •• | Business Elective (Required) | 9 |
| BUS | 246 | Advanced Lotus 1-2-3 for Business | 3 |
| BUS | 296 | Business Practicum | 2 |
| COMM | 104 | Job Search Techniques | 1 |
| COMM | 130 | Speech | 3 |
| | | or | |
| COMM | 135 | Verbal Career Skills | 3 |
| | •• | Business Elective (Required) | 9 |

# Business Management
## Marketing and Customer Service Major

The Marketing and Customer Service major prepares students for entry-level positions as customer service representatives and administrative assistants in marketing departments and provides students with a background sufficient for growth and advancement in the tele-marketing and customer service profession.

Marketing and Customer Service is a major under the associate degree Business Management Technology. The program emphasizes skills in telephone sales, customer service, telemarketing script writing and information management.

The telemarketing industry is one of the most rapidly growing fields with an enormous demand for qualified professionals.

**Job Opportunities**
Graduates are employed in a wide variety of business and industrial organizations. Job classifications include entry level and managerial positions in customer service, telephone sales, lead generation and qualification, order processing, promotion management and full account management.

| No. | | Course | Credit |
|---|---|---|---|
| MCS | 120 | Customer Service Lab | 3 |
| MCS | 130 | Principles of Customer Service | 3 |
| ACC | 100 | Accounting I | 3 |
| BUS | 105 | History of American Business | 3 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 122 | Communications II | 3 |
| BUS | 130 | Sales I | 3 |
| MCS | 140 | Marketing and Sales Support | 3 |
| ACC | 101 | Accounting II | 3 |
| BUS | 200 | Business Law | 3 |
| MATH | 203 | College Algebra II | 3 |
| COMM | 123 | Communications III | 3 |
| BUS | 102 | Principles and Practices of Business Management I | 3 |
| BUS | 180 | Business Ethics | 3 |
| MCS | 160 | Direct Mail Marketing | 3 |
| BUS | 175 | Business Word Processing | 2 |
| BUS | 201 | Advanced Business Law | 4 |
| ACC | 102 | Accounting III | 4 |
| | | or | |
| ACC | 162 | Microcomputer Accounting | 2 |
| COMM | 130 | Speech | 3 |
| BUS | 110 | Marketing | 3 |
| BUS | 210 | Human Resource Management | 3 |
| BUS | 245 | Lotus 1-2-3 for Business | 3 |
| MCS | 210 | Successful Marketing Campaigns | 3 |
| BUS | 120 | Personal Finance | 3 |
| SOCI | 169 | Human Relations in Organizations | 3 |
| BUS | 100 | Small Business Management I | 3 |
| BUS | 230 | Labor-Management Relations | 3 |
| MCS | 150 | Distribution Management | 3 |
| MCS | 220 | Marketing Management | 3 |
| RET | 220 | Advertising | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |
| BUS | 246 | Advanced Lotus 1-2-3 for Business | 3 |
| BUS | 285 | Human Resource Policy | 3 |
| BUS | 296 | Business Practicum | 2 |
| MCS | 240 | Managing Customer Service Representatives | 3 |
| RET | 210 | Retail Buying | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| COMM | 124A | Communications IV: Job Communications | 3 |

# Culinary Arts

The Culinary Arts Technology prepares individuals for the many entry level positions in the food service industry and provides the student with a foundation for advancement and professional development.

Finding success in the world of fine cuisine is the goal of graduates of the Culinary Arts Technology. By watching, tasting, cooking, studying, and learning from experienced chefs/instructors, students grow in confidence and repertoire. From writing the menu to icing cakes, from selecting fresh seafood to costing the daily special, the student chef does it all. In addition to studying in the classroom, student chefs train in the kitchen of the Quality Inn Hocking Valley. National and international practical experiences are available. It is this blend of hands-on and traditional training which makes Hocking College's professional Culinary Arts Technology unique.

Hocking College's Culinary Arts Technology is a member of the American Culinary Federation Educational Institute.

**Job Opportunities**
Culinary Arts graduates are prepared for employment in the kitchen of hotels, restaurants, country clubs and resorts around the world.

| No. | | Course | Credit |
|---|---|---|---|
| CULA | 101 | Introduction to Culinary Arts | 2 |
| CULA | 270 | Catering | 2 |
| HRCA | 111 | Stocks, Sauces and Soups | 3 |
| HRCA | 115 | Breads and Baking Basics | 3 |
| CULA | 150 | Nutrition in Community Food Service Operations | 3 |
| HC | 114 | Standard First Aid | 1 |
| HRCA | 110 | Safety and Sanitation | 2 |
| CULA | 105 | Pastries and Desserts | 3 |
| CULA | 201 | Culinary Arts Lab I | 7 |
| HRCA | 112 | Salads, Sandwiches and Eggs | 3 |
| HRCA | 145 | Food Product Identification and Purchasing | 3 |
| MICS | 121 | MicroSoft Works (DOS) | 3 |
| CULA | 106 | Meat, Poultry and Seafood Procedures | 3 |
| CULA | 107 | Basic Garde Manger | 3 |
| HRCA | 113 | A La Carte Cookery | 3 |
| HRCA | 125 | Basic Table Service | 3 |
| ACC | 100 | Accounting I | 3 |
| COMM | 122 | Communications II | 3 |
| CULA | 108 | Advanced Garde Manger | 3 |
| CULA | 212 | Culinary Arts Lab II | 7 |
| HRCA | 116 | Hospitality Menu Planning | 2 |
| HRCA | 241 | Festival Catering Management | 1 |
| COMM | 123 | Communications III | 3 |
| PSYC | 154 | Interpersonal Communications | 3 |
| CULA | 217 | Classical and International Cuisine | 3 |
| HRCA | 117 | Hospitality Supervision | 3 |
| HRCA | 223 | Food, Beverages, Labor Cost Control | 3 |
| HRCA | 231 | Serving Alcohol With Care | 1 |
| BUS | 120 | Personal Finance | 3 |
| COMM | 124A | Communications IV: Job Communications | 3 |
| COMM | 130 | Speech | 3 |
| CULA | 213 | Culinary Arts Lab III | 7 |
| CULA | 218 | American Regional Cuisine | 3 |
| HOTR | 243 | Hotel and Restaurant Law | 2 |
| HOTR | 263 | Facilities Management | 2 |
| HRCA | 121 | Hospitality Ethics | 2 |
| COMM | 104 | Job Search Techniques | 1 |

# Ecotourism

The Ecotourism Technology prepares students for entry-level careers in the ecotourism industry and provides a background sufficient for growth and advancement in the profession.

Introduced in the 1980's as a creative strategy for conservation, ecotourism has evolved over the last decade into a massive, global commercial enterprise. "Ecotourism is environmentally responsible travel and visitation to enjoy and appreciate nature that promotes conservation, has low visitor impact and provides for the beneficially active socioeconomic involvement of local populations" (Hector Ceballos-Lascurain, Head of the Ecotourism Consultancy Program for The World Conservation Union). Students in Hocking's Ecotourism Technology study natural and ecological sciences, interpretive/tour guide services, hospitality, tourism and business.

**Job Opportunities**
Graduates are employed in private and public ecotourism sites including positions in national parks, environmental and community education centers (zoos, museums, aquariums, nature centers), resort and lodge operations and the tourism industry.

| No. | | Course | Credit |
|---|---|---|---|
| GS | 120 | Orientation to American Life | 3 |
| REC | 150 | Introduction to Interpretation | 2 |
| NR | 121 | Zoology | 3 |
| REC | 134 | Environmental Issues | 3 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 122 | Communications II | 3 |
| | •• | Elective (Required) | 3 |
| REC | 115 | Interpretive Methods | 3 |
| TRAV | 152 | Introduction to Ecotourism | 2 |
| NR | 120 | Botany | 3 |
| COMM | 123 | Communications III | 3 |
| | •• | Elective (Required) | 3 |
| TRAV | 160 | Tour Development | 3 |
| BUS | 170 | Fundamentals of Business I | 3 |
| MCS | 130 | Principles of Customer Service | 3 |
| REC | 132 | Geology | 3 |
| COMM | 124A | Communications IV: Job Communications | 3 |
| COMM | 225 | Technical Writing | 3 |
| | •• | Elective (Required) | 3 |
| NR | 171 | Natural Areas Management | 2 |
| NR | 185 | Resource Area Planning | 3 |
| REC | 123 | Cartography | 2 |
| ACC | 100 | Accounting I | 3 |
| | •• | Elective (Required) | 3 |
| REC | 217 | Aquatic Ecology | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |
| | •• | Natural Resources Elective (Required) | 3 |
| | •• | Hospitality Elective (Required) | 3 |
| HOTR | 275 | Resort Management and Development | 3 |
| REC | 209 | Terrestrial Ecology | 3 |
| REC | 237 | Self Guided Interpretive Activities | 2 |
| | •• | Elective (Required) | 6 |
| HOTR | 170 | Marketing Small Properties | 3 |
| HRCA | 114 | Food Management | 3 |
| HUM | 203 | Ethics, Values and Morality | 3 |
| REC | 234 | Archaeology | 3 |
| | •• | Elective (Required) | 3 |
| | •• | Interpretive Elective (Required) | 3 |
| NR | 298 | Natural Resources Internship | 6 |

# Hotel/Restaurant Management

The Hotel/Restaurant Management Technology prepares students for careers in the hospitality field and provides students with a foundation for advancement and professional development.

Hotel/Restaurant Management students begin the program learning basic hotel and restaurant skills and progress to management training. Students gain practical experience while serving the public at the Quality Inn Hocking Valley. This College owned training facility includes an indoor pool, guest rooms, a 160 seat dining room, bar and banquet rooms for up to 800 guests.

Supervised co-op programs are available at various hotels and restaurants in the U.S. and abroad.

Hocking College's Hotel/Restaurant Management Technology is a member of the American Hotel and Motel Association Educational Institute.

**Job Opportunities**
Graduates of this two-year program are employed in entry level positions and beginning management positions with nationally recognized and independent hotels, restaurants and private clubs.

| No. | | Course | Credit |
|---|---|---|---|
| HOTR | 223 | Hotel Restaurant Lab 5A | 5 |
| HRCA | 120 | Hospitality Security | 1 |
| HRCA | 230 | Food and Beverage Services | 3 |
| HRCA | 240 | Festival Catering Production | 1 |
| HOTR | 120 | Introduction to Hospitality Industry | 2 |
| HRCA | 111 | Stocks, Sauces and Soups | 3 |
| MICS | 121 | MicroSoft Works (DOS) | 3 |
| HOTR | 224 | Hotel Restaurant Lab 5B | 5 |
| HRCA | 231 | Serving Alcohol With Care | 1 |
| ACC | 100 | Accounting I | 3 |
| HRCA | 110 | Safety and Sanitation | 2 |
| HRCA | 121 | Hospitality Ethics | 2 |
| HC | 114 | Standard First Aid | 1 |
| COMM | 122 | Communications II | 3 |
| | •• | Hotel/Restaurant Elective | 3 |
| HOTR | 225 | Hotel Restaurant Lab 5C | 5 |
| HOTR | 241 | Front Office Operations | 3 |
| HOTR | 243 | Hotel and Restaurant Law | 2 |
| PSYC | 154 | Interpersonal Communications | 3 |
| COMM | 123 | Communications III | 3 |
| | •• | Hotel/Restaurant Elective | |
| HOTR | 170 | Marketing Small Properties | 3 |
| HOTR | 226 | Hotel Restaurant Lab 5D | 5 |
| HOTR | 260 | Merchandising and Sales | 3 |
| HRCA | 108 | Hospitality Human Resources | 2 |
| HRCA | 223 | Food, Beverages, Labor Cost Control | 3 |
| HRCA | 112 | Salads, Sandwiches and Eggs | 3 |
| HOTR | 227 | Hotel Restaurant Lab 5E | 5 |
| HOTR | 140 | Accounting for Hospitality Services | 3 |
| HOTR | 242 | Supervisory Housekeeping | 2 |
| HRCA | 117 | Hospitality Supervision | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| COMM | 124A | Communications IV: Job Communications | 3 |
| HOTR | 228 | Hotel Restaurant Lab 5F | 5 |
| HOTR | 263 | Facilities Management | 2 |
| HRCA | 224 | Lounge and Beverage Management | 2 |
| HRCA | 264 | Budgeting for Hospitality | 3 |
| COMM | 130 | Speech | 3 |
| | •• | Social Science Elective (Required) | 3 |

# Office Administration Executive Major

The Office Administration Technology prepares students for entry-level career positions as office administrative assistants who are capable of supervising other clerical employees. The Executive Major prepares students for entry-level career positions as office administrative assistants. It features Gregg shorthand courses. In addition, it provides programming to upgrade the skills of persons already employed in the office field.

The Office Administration Technology offers an extensive background in office management techniques, word processing, Apple and IBM microcomputer applications, electronic telephone techniques and shorthand. Students may choose one of two options, each leading to an associate of applied Business degree.

During the sixth quarter, students complete a practicum where they are placed in an office two days each week for hands-on experience.

**Job Opportunities**
Graduates are employed as administrative assistants, word processing specialists, transcriptionists, typists, stenographers and executive, legal and medical secretaries.

| No. | | Course | Credit |
|---|---|---|---|
| OAT | 100 | Beginning Typing | 3 |
| OAT | 103 | Collegiate Secretarial International I | 0.5 |
| OAT | 107 | Telephone Skills | 1 |
| OAT | 110 | Office Administration I | 3 |
| OAT | 130 | Beginning Shorthand | 3 |
| MATH | 201 | College Algebra I | 3 |
| OAT | 190 | Pretranscription Skills | 2 |
| COMM | 122 | Communications II | 3 |
| OAT | 101 | Intermediate Typing | 3 |
| OAT | 111 | Office Administration II | 3 |
| OAT | 114 | Office Administration Machines | 1 |
| OAT | 131 | Intermediate Shorthand | 3 |
| OAT | 135 | DisplayWrite IV | 3 |
| COMM | 101 | Spelling Skills | 1 |
| COMM | 123 | Communications III | 3 |
| OAT | 102 | Advanced Typing | 3 |
| OAT | 113 | Office Administration Computer System | 1 |
| OAT | 132 | Advanced Shorthand | 3 |
| ACC | 100 | Accounting I | 3 |
| MICS | 122 | MicroSoft Works on the MAC | 3 |
| COMM | 102 | Vocabulary Skills | 1 |
| COMM | 124 | Communications IV | 3 |
| OAT | 104 | Collegiate Secretarial International II | 0.5 |
| OAT | 200 | Introduction to Transcription | 3 |
| OAT | 210 | WordPerfect | 3 |
| OAT | 220 | Office Administration III | 3 |
| ACC | 120 | Payroll Accounting | 3 |
| BUS | 170 | Fundamentals of Business I | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| OAT | 230 | Administrative Transcription | 3 |
| BUS | 120 | Personal Finance | 3 |
| BUS | 200 | Business Law | 3 |
| BUS | 245 | Lotus 1-2-3 for Business | 3 |
| MICS | 201 | Desktop Publishing: IBM | 2 |
| COMM | 104 | Job Search Techniques | 1 |
| OAT | 260 | Administrative Typing | 3 |
| OAT | 296 | Office Administration Practicum | 3 |
| COMM | 130 | Speech | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |

# Office Administration General Major

The Office Administration Technology prepares students for entry-level career positions as office administrative assistants who are capable of supervising other clerical employees. The General Major prepares students for entry-level career positions as office administrative assistants. It features computer courses and personal shorthand. In addition, it provides programming to upgrade the skills of persons already employed in the office field.

The Office Administration Technology offers an extensive background in office management techniques, word processing, Apple and IBM microcomputer applications, electronic telephone techniques and shorthand. Students may choose one of two options, each leading to an associate of applied Business degree.

During the sixth quarter, students complete a practicum where they are placed in an office two days each week for hands-on experience.

**Job Opportunities**
Graduates are employed as administrative assistants, word processing specialists, transcriptionists, typists, stenographers and executive, legal and medical secretaries.

| No. | | Course | Credit |
|---|---|---|---|
| OAT | 100 | Beginning Typing | 3 |
| OAT | 103 | Collegiate Secretarial International I | 0.5 |
| OAT | 107 | Telephone Skills | 1 |
| OAT | 110 | Office Administration I | 3 |
| BUS | 170 | Fundamentals of Business I | 3 |
| MATH | 201 | College Algebra I | 3 |
| OAT | 190 | Pretranscription Skills | 2 |
| COMM | 122 | Communications II | 3 |
| OAT | 101 | Intermediate Typing | 3 |
| OAT | 105 | Introduction to Personal Shorthand | 3 |
| OAT | 111 | Office Administration II | 3 |
| OAT | 114 | Office Administration Machines | 1 |
| OAT | 135 | DisplayWrite IV | 3 |
| COMM | 101 | Spelling Skills | 1 |
| COMM | 123 | Communications III | 3 |
| OAT | 102 | Advanced Typing | 3 |
| OAT | 113 | Office Administration Computer Systems | 1 |
| OAT | 106 | Advanced Personal Shorthand | 3 |
| | | or | |
| BUS | 171 | Fundamentals of Business II | 3 |
| ACC | 100 | Accounting I | 3 |
| MICS | 122 | MicroSoft Works on the MAC | 3 |
| COMM | 102 | Vocabulary Skills | 1 |
| COMM | 124 | Communications IV | 3 |
| ACC | 162 | Microcomputer Accounting | 2 |
| OAT | 104 | Collegiate Secretarial International II | 0.5 |
| OAT | 200 | Introduction to Transcription | 3 |
| OAT | 210 | WordPerfect | 3 |
| OAT | 220 | Office Administration III | 3 |
| ACC | 120 | Payroll Accounting | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| OAT | 230 | Administrative Transcription | 3 |
| BUS | 120 | Personal Finance | 3 |
| BUS | 200 | Business Law | 3 |
| BUS | 245 | Lotus 1-2-3 for Business | 3 |
| MICS | 201 | Desktop Publishing: IBM | 2 |
| COMM | 104 | Job Search Techniques | 1 |
| OAT | 260 | Administrative Typing | 3 |
| OAT | 296 | Office Administration Practicum | 3 |
| COMM | 130 | Speech | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |

# Travel and Tourism

The Travel and Tourism Technology prepares students for entry-level careers in the travel industry and provides students with a background sufficient for growth and advancement in the profession.

People are constantly on the move in today's busy world. With increased business and leisure travel and the growing importance of tourism to the economy, professionals in the field of travel and tourism are in demand. Students study computerized airline reservations, destination geography, tour planning and directing, and sales and marketing. They may also participate in hands-on experiences at the college owned Uniglobe Hocking Hills Travel Agency, conventions and visitors bureaus, and throughout the state of Ohio assisting the Ohio Division of Travel and Tourism.

Hocking College's Travel and Tourism Technology is a member of the American Society of Travel Agents.

**Job Opportunities**
Graduates are employed with travel agencies, bus tour companies, airlines, hotels and car rental agencies.

| No. | | Course | Credit |
|---|---|---|---|
| TRAV | 101 | Festival Operations | 1 |
| TRAV | 150 | Introduction to Travel Industry | 3 |
| TRAV | 154 | Travelogue Central U.S.A. | 3 |
| TRAV | 190 | Exploring Ohio | 2 |
| BUS | 175 | Business Word Processing | 2 |
| COMM | 130 | Speech | 3 |
| PSYC | 154 | Interpersonal Communications | 3 |
| COMM | 122 | Communications II | 3 |
| TRAV | 155 | Travelogue Eastern U.S.A. | 3 |
| TRAV | 160 | Tour Development | 3 |
| MATH | 201 | College Algebra I | 3 |
| MCS | 130 | Principles of Customer Service | 3 |
| LANG | 120 | Beginning Spanish | 3 |
| COMM | 123 | Communications III | 3 |
| TRAV | 156 | Travelogue Western U.S.A. | 3 |
| TRAV | 191 | Promoting Ohio | 2 |
| HC | 105 | Defensive Driving | 1 |
| MICS | 200 | Apple Software Packages | 3 |
| COMM | 124 | Communications IV | 3 |
| TRAV | 131 | Airline Reservations | 3 |
| TRAV | 201 | Festival Management | 1 |
| TRAV | 264 | Hawaii, Alaska and Canadian Provinces | 3 |
| TRAV | 265 | Mexico, Caribbean, Central and South America | 3 |
| TRAV | 280 | Tour Directing | 3 |
| BUS | 100 | Small Business Management I | 3 |
| RET | 220 | Advertising | 3 |
| ACC | 100 | Accounting I | 3 |
| TRAV | 266 | European Travel | 3 |
| TRAV | 267 | Self Directed Learning in Travel | 2 |
| TRAV | 270 | Intermediate Reservations | 3 |
| TRAV | 110 | Travel Agency Office Procedures | 3 |
| | | or | |
| TRAV | 281 | Concierge | 3 |
| HC | 114 | Standard First Aid | 1 |
| PSYC | 150 | Introduction to Psychology | 3 |
| TRAV | 157 | Exploring Asia and the Pacific | 3 |
| TRAV | 177 | Advanced Reservations | 3 |
| TRAV | 250 | Sales for Travel | 3 |
| TRAV | 260 | Convention and Seminar Management | 2 |
| TRAV | 296 | Travel Industry Practicum | 2 |
| BUS | 200 | Business Law | 3 |

# Engineering and Science Technologies

**Technical Programs**

Programs leading to an Associate Degree:

Broadcast Engineering and Production Technology
Ceramic Engineering Technology
Computer Science
Drafting and Design
Electronic Engineering Technology
Industrial Engineering Technology
Materials Engineering Technology
    Industrial Plastics Major *

**Certificate Programs**

Programs providing specific technical skills:

Basic Drafter
Broadcast Production
Electronics Level I
Electronics Level II
Electronics Level III
Microcomputer Software Packages
Microcomputer Specialist

* New Program - Contact the Admission Office at 1 800-282-4163, extension 2162 for more information.

# Broadcast Engineering and Production Technology

The Broadcast Engineering and Production Technology prepares individuals for careers in the broadcast industry and related fields such as radio, television, audio and video production and engineering. It also provides students a background sufficient for growth and advancement.

The Broadcast Engineering and Production Technology provides training in all aspects of broadcast engineering and production. Students will develop skills necessary to design and install a broadcast production facility, operate equipment and perform routine preventative and minor corrective maintenance.

Students operate and maintain equipment in the College's broadcasting studio.

**Job Opportunities**
Students graduate with a broad range of skills that allows them employment possibilities in different industries and areas of specialization. Employment locations include radio stations, television stations, commercial production facilities, colleges, hospitals, law enforcement agencies, cable companies and satellite and broadcasting networks.

| No. | | Course | Credit |
|---|---|---|---|
| BC | 108 | Modern Electronic Media | 3 |
| EE | 119 | Electronic Communication I | 4 |
| EE | 118 | Electricity for Engineers | 4 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 122 | Communications II | 3 |
| BC | 109 | Media Techniques | 3 |
| EE | 120 | Electronic Communication II | 4 |
| EE | 109 | Electronics I | 4 |
| EGR | 209 | Digitial Logic I | 4 |
| COMM | 123 | Communications III | 3 |
| BC | 110 | Studio Production | 3 |
| EE | 122 | Electronic Communication III | 4 |
| EE | 115 | Electronics II | 4 |
| MATH | 202 | Geometry and Trigonometry | 3 |
| COMM | 124 | Communications IV | 3 |
| BC | 201 | Audio/Video Systems I | 4 |
| BC | 210 | Audio/Video Production I | 3 |
| EE | 215 | Fundamentals of Microprocessors | 4 |
| EGR | 103 | Physics II | 3 |
| MATH | 203 | College Algebra II | 3 |
| BC | 209 | Audio/Video Systems II | 4 |
| BC | 215 | Audio/Video Production II | 3 |
| BC | 216 | Transmission Systems | 4 |
| COMM | 225 | Technical Writing | 3 |
| MATH | 204 | College Algebra III | 3 |
| BC | 223 | Equipment Maintenance | 4 |
| BC | 230 | Advanced Post Production | 3 |
| BC | 280 | Current Topics and Technology | 3 |
| BC | 296 | Broadcasting Practicum | 3 |
| EGR | 212 | Industrial Supervision | 3 |
| COMM | 104 | Job Search Techniques | 1 |

# Ceramic Engineering Technology

*Two-time recipient of the Ohio Board of Regents Program Excellence Award and recipient of the U.S. Department of Education Secretary's Award.*

The Ceramic Engineering Technology prepares students for entry-level career positions as process technicians, development technicians, or production supervisors in ceramic and related industries and provides a background sufficient for growth and advancement within the chosen area of study.

Hocking College's Ceramic Engineering Technology is the only two-year technical program in the nation to offer associate degree level training for the ceramic industry. The program prepares students for work in an industry which manufactures a wide variety of products ranging from brick, tableware and glass to super-conductors and high tech ceramics. In well-equipped production and technical laboratories students receive hands-on training to process and test materials and products for the ceramic industry.

**Job Opportunities**
Ceramic Engineering Technology graduates find positions as assistant plant or lab managers, production and kiln supervisors, process and quality control technicians or supervisors, research and development technicians, and technical salespersons.

| No. | | Course | Credit |
|---|---|---|---|
| CER | 101 | Ceramic Mineral Systems: Development and Procurement Methods | 3 |
| CHEM | 100 | Introduction to Chemistry | 3 |
| MATH | 201 | College Algebra I | 3 |
| BUS | 120 | Personal Finance | 3 |
| COMM | 130 | Speech | 3 |
| COMM | 122 | Communications II | 3 |
| CER | 102 | Ceramic Materials and Processes I | 4 |
| DD | 101 | Engineering Drawing I | 3 |
| CHEM | 120 | Chemistry for Ceramics | 3 |
| MATH | 202 | Geometry and Trigonometry | 3 |
| COMM | 123 | Communications III | 3 |
| CER | 103 | Ceramic Materials and Processes II | 3 |
| CER | 104 | Combustion I | 3 |
| DD | 104 | Introduction to AutoCAD | 1 |
| DD | 105 | AutoCAD Applications | 2 |
| EGR | 103 | Physics II | 3 |
| MATH | 203 | College Algebra II | 3 |
| COMM | 124 | Communications IV | 3 |
| CER | 201 | Combustion II | 4 |
| CER | 210 | Glasses, Glazes and Enamels | 4 |
| EGR | 106 | Introduction to Electricity | 4 |
| MATH | 204 | College Algebra III | 3 |
| MICS | 110 | Micro Operation and BASIC Programming | 3 |
| CER | 206 | Ceramic Industry Practices | 3 |
| CER | 208 | Technical Laboratory | 3 |
| EGR | 210 | Control Systems I | 3 |
| MATH | 205 | Introduction to Calculus | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| COMM | 225 | Technical Writing | 3 |
| CER | 203 | Statistical Quality and Process Control | 4 |
| CER | 207 | Standard Procedures | 3 |
| CER | 209 | Industrial Projects | 2 |
| EGR | 212 | Industrial Supervision | 3 |
| EGR | 213 | Control Systems II | 3 |
| SOCI | 169 | Human Relations in Organizations | 3 |

# Computer Science

The Computer Science Technology prepares students for entry level career positions as information systems specialists and computer operators and provides a background sufficient for growth and advancement in the management information systems profession.

The Computer Science Technology offers students hands-on experience using state-of-the-art equipment including broad band and local area networks. Students write application programs in six programming languages: COBOL, RPG, Assembler, Basic, Microsoft C and Powerhouse, (a fourth generation language). Commercial software packages including spreadsheet, word processing and database for both DOS based and Apple microcomputers are part of the curriculum. Students also gain experience in uploading and down-loading information to mainframes.

**Job Opportunities**
Hocking College Computer Science graduates are employed as data entry operators, computer operators, entry level programmers, programmer analysts, systems analysts, team managers, microcomputer specialists and systems software trainers.

| No. | | Course | Credit |
|---|---|---|---|
| CS | 100 | Program Analysis I | 3 |
| CS | 120 | Introduction to Data Processing | 3 |
| MICS | 110 | Micro Operation and BASIC Programming | 3 |
| ACC | 100 | Accounting I | 3 |
| MATH | 201 | College Algebra I | 3 |
| OAT | 180 | Keyboarding | 1 |
| COMM | 122 | Communications II | 3 |
| CS | 101 | Program Analysis II | 3 |
| CS | 110 | Introduction to COBOL | 5 |
| MICS | 143 | WordStar | 1 |
| ACC | 101 | Accounting II | 3 |
| CS | 155 | Applied Statistical Packages | 3 |
| | | or | |
| MATH | 203 | College Algebra II | 3 |
| COMM | 123 | Communications III | 3 |
| CS | 111 | Advanced COBOL | 5 |
| CS | 140 | Job Control and Utilities | 3 |
| MICS | 141 | Lotus 1-2-3 | 1 |
| BUS | 170 | Fundamentals of Business I | 3 |
| COMM | 124 | Communications IV | 3 |
| COMM | 130 | Speech | 3 |
| | | or | |
| COMM | 135 | Verbal Career Skills | 3 |
| CS | 200 | Introduction to Networking | 2 |
| CS | 240 | Database Management | 3 |
| CS | 270 | Technical Manuals Usage | 2 |
| CS | 271 | Forms Management Systems | 2 |
| MICS | 121 | MicroSoft Works (DOS) | 3 |
| | | or | |
| MICS | 200 | Apple Software Packages | 3 |
| BUS | 171 | Fundamentals of Business II | 3 |
| | •• | Social Science Elective B (Required) | 3 |
| CS | 125 | Computer Numbering System | 1 |
| CS | 210 | Programming in C | 4 |
| CS | 213 | Applications in Structured COBOL | 4 |
| MICS | 142 | dBase IV | 1 |
| COMM | 104 | Job Search Techniques | 1 |
| | •• | Business/Accounting Elective (Required) | 3 |
| CS | 220 | Programming in RPG | 5 |
| CS | 250 | Basic Assembler Language | 3 |
| CS | 275 | Fourth Generation Language and Prototyping | 4 |
| SOCI | 169 | Human Relations in Organizations | 3 |
| | •• | Social Science Elective A (Required) | 3 |

# Drafting and Design

The Drafting and Design Technology prepares students for entry level positions in the drafting and design profession and provides a foundation for further development, advancement and education.

Drafting and Design offers a comprehensive program to prepare students for entry level positions as drafters and detailers. Students are exposed to many industrial-related areas through courses in materials, processes of manufacturing, architecture and surveying. Extensive practice in the drafting labs allows students to refine design techniques through classes in all aspects of drawing. Extensive computer assisted drafting (CAD) experience is included, representative of actual situations in the work place.

**Job Opportunities**
Graduates are employed at mechanical, electrical, electronic, aeronautical, structural and architectural drafting firms. Employers also include federal, state and local governments, colleges, universities and non-profit organizations.

| No. | | Course | Credit |
|---|---|---|---|
| DD | 101 | Engineering Drawing I | 3 |
| DD | 208 | Introduction to CAD | 1 |
| EGR | 108 | Manufacturing Process I | 3 |
| MATH | 201 | College Algebra I | 3 |
| SOCI | 169 | Human Relations in Organizations | 3 |
| COMM | 122 | Communications II | 3 |
| DD | 102 | Engineering Drawing II | 3 |
| EGR | 109 | Manufacturing Process II | 3 |
| EGR | 102 | Physics I | 3 |
| MATH | 202 | Geometry and Trigonometry | 3 |
| OAT | 180 | Keyboarding | 1 |
| COMM | 123 | Communications III | 3 |
| DD | 103 | Engineering Drawing III | 3 |
| EGR | 110 | Manufacturing Process III | 3 |
| EGR | 103 | Physics II | 3 |
| MATH | 203 | College Algebra II | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |
| COMM | 124 | Communications IV | 3 |
| DD | 200 | Architecture I | 4 |
| DD | 206 | Graphics | 4 |
| EGR | 106 | Introduction to Electricity | 4 |
| NR | 123 | Surveying and Mapping I | 3 |
| DD | 204 | Descriptive Geometry | 3 |
| DD | 201 | Architecture II | 3 |
| DD | 202 | Advanced Drafting/CAD | 4 |
| DD | 203 | Electrical Drawing | 3 |
| DD | 210 | Geometric Tolerancing and Dimensioning | 2 |
| MATH | 204 | College Algebra III | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| COMM | 225 | Technical Writing | 3 |
| DD | 205 | Die Design | 3 |
| EGR | 201 | Occupational Safety | 3 |
| EGR | 212 | Industrial Supervision | 3 |
| EGR | 213 | Control Systems II | 3 |
| EGR | 214 | Introduction to Robotics | 3 |
| BUS | 120 | Personal Finance | 3 |

# Electronic Engineering Technology

The Electronic Engineering Technology prepares individuals for entry-level careers in the electronics industry in areas such as manufacturing, industrial sales, field service, and electronic repair and provides students with a background sufficient for growth and advancement.

Electronic Engineering Technology offers a comprehensive program to prepare students for work as installation, repair, field service and maintenance technicians. Students are exposed to many industrial-related areas through courses in basic electronics, electronic communication, robotics and industrial control. Students learn to install, operate and troubleshoot computer systems and networks. Extensive hands-on laboratory and practical classroom applications prepare the student for an entry-level position in the field of electronics. Additionally, graduates are prepared to meet changes in the industry as the state of the art advances.

**Job Opportunities**
Graduates are employed in all areas of the electronic industry. Jobs are plentiful in industries that use electronics for control purposes, such as Goodyear, General Electric, ITT Automotive and others. Employment opportunities also exist in the computer networking field.

| No. | | Course | Credit |
|---|---|---|---|
| EE | 119 | Electronic Communication I | 4 |
| DD | 207 | Electronic Drawing | 3 |
| EE | 118 | Electricity for Engineers | 4 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 122 | Comunications II | 3 |
| EE | 120 | Electronic Communication II | 4 |
| EE | 109 | Electronics I | 4 |
| EGR | 209 | Digital Logic I | 4 |
| MATH | 202 | Geometry and Trigonometry | 3 |
| COMM | 123 | Communications III | 3 |
| EE | 122 | Electronic Communication III | 4 |
| EE | 123 | Electronic Applications | 2 |
| EE | 262 | Digital Logic II | 4 |
| EE | 115 | Electronics II | 4 |
| COMM | 124 | Communications IV | 3 |
| DD | 101 | Engineering Drawing I | 3 |
| EE | 215 | Fundamentals of Microprocessors | 4 |
| EE | 230 | Linear IC's | 4 |
| MICS | 110 | Micro Operation and BASIC Programming | 3 |
| MATH | 203 | College Algebra II | 3 |
| EE | 227 | Current Topics and Technologies | 5 |
| EE | 225 | Industrial Electronics I | 4 |
| EE | 226 | Electronic Certification | 3 |
| EE | 258 | Robotics and Computers | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| COMM | 225 | Technical Writing | 3 |
| MATH | 204 | College Algebra III | 3 |
| BC | 223 | Equipment Maintenance | 4 |
| DD | 208 | Introduction to CAD | 1 |
| EE | 228 | Industrial Electronics II | 4 |
| EE | 296 | Electronics Practicum | 3 |
| BUS | 120 | Personal Finance | 3 |
| EGR | 212 | Industrial Supervision | 3 |

# Industrial Engineering Technology

The Industrial Engineering Technology prepares technicians for entry-level positions in the manufacturing industries.

The Industrial Engineering Technology prepares students to become productive employees able to contribute to industry in areas of production, process planning, maintenance and quality control. Typically, industrial technicians are involved in the efficient use of people, materials and machines needed to produce goods and services.

This program is offered at the Hocking College Perry County Campus. Cooperative work experiences are available.

**Job Opportunities**
Graduate opportunities include line supervisor, production manager, cost analyst, production designer/analyst, process analyst, quality control analyst and work standards technician.

| No. | | Course | Credit |
|---|---|---|---|
| EGR | 108 | Manufacturing Process I | 3 |
| MATL | 100 | Materials Fundamentals | 2 |
| EGR | 115 | Environmental and Safety Fundamentals | 2 |
| MATH | 201 | College Algebra I | 3 |
| MICS | 110 | Micro Operation and BASIC Programming | 3 |
| COMM | 122 | Communications II | 3 |
| DD | 101 | Engineering Drawing I | 3 |
| EGR | 109 | Manufacturing Process II | 3 |
| EGR | 102 | Physics M | 3 |
| MATH | 202 | Geometry and Trigonometry | 3 |
| SOCI | 169 | Human Relations In Organ. | 3 |
| COMM | 123 | Communications III | 3 |
| CER | 203 | Statistical Quality and Process Control | 4 |
| DD | 104 | Introduction to AutoCAD | 1 |
| DD | 105 | AutoCAD Applications | 2 |
| EGR | 110 | Manufacturing Process III | 3 |
| EGR | 103 | Physics II | 3 |
| MATH | 203 | College Algebra II | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |
| DD | 102 | Engineering Drawing II | 3 |
| EGR | 106 | Introduction to Electricity | 4 |
| EGR | 220 | Work Measurements | 3 |
| EGR | 221 | Industrial Engineering Cost Analysis | 3 |
| EGR | 223 | Production Planning and Inventory Management | 4 |
| DD | 103 | Engineering Drawing III | 3 |
| EGR | 210 | Control Systems I | 3 |
| EGR | 214 | Introduction to Robotics | 3 |
| EGR | 222 | Plant Layout and Materials Handling | 3 |
| MATH | 204 | College Algebra III | 3 |
| COMM | 124 | Communications IV | 3 |
| EGR | 213 | Control Systems II | 3 |
| EGR | 224 | Tool and Die Design | 3 |
| EGR | 225 | Engineering Industrial Projects | 2 |
| EGR | 212 | Industrial Supervision | 3 |
| COMM | 225 | Technical Writing | 4 |
| ECON | 140 | Principles of Microeconomics | 4 |

# Materials Engineering Technology

The Materials Engineering Technology prepares students for entry-level career positions as development or process technicians in metals, advanced ceramics, polymers, or related industries and provides a background sufficient for growth and advancement.

Materials Engineering Technology at Hocking College offers associate degree level training for high technology industries producing advanced materials. The program combines training in metals, ceramics, polymers, and composites. It prepares students for work ranging from manufacturing automotive parts to developing fiber optic systems to testing materials for aerospace applications. Students learn to process materials under simulated production conditions and use modern analytical equipment to evaluate material properties to meet specific requirements or conditions.

**Job Opportunities**
Materials Engineering Technology graduates are in demand for entry-level career positions as specialists to perform materials research and testing, to develop products and manufacturing processes, and to control production processes and quality.

| No. | | Course | Credit |
|---|---|---|---|
| DD | 101 | Engineering Drawing I | 3 |
| EGR | 115 | Environmental and Safety Fundamentals | 2 |
| MATL | 100 | Materials Fundamentals | 2 |
| CHEM | 100 | Introduction to Chemistry | 3 |
| MATH | 201 | College Algebra I | 3 |
| MICS | 143 | WordStar | 1 |
| COMM | 122 | Communications II | 3 |
| CER | 102 | Ceramic Materials and Processes I | 4 |
| DD | 104 | Introduction to AutoCAD | 1 |
| MATL | 103 | Polymers I | 3 |
| CHEM | 140 | Chemistry for Materials | 3 |
| MATH | 202 | Geometry and Trigonometry | 3 |
| MICS | 141 | Lotus 1-2-3 | 1 |
| COMM | 123 | Communications III | 3 |
| CER | 103 | Ceramic Materials and Processes II | 3 |
| CER | 104 | Combustion I | 3 |
| MATL | 102 | Metals I | 3 |
| MATL | 111 | Polymers II | 3 |
| MATH | 203 | College Algebra II | 3 |
| COMM | 124 | Communications IV | 3 |
| EGR | 106 | Intoduction to Electricity | 4 |
| MATL | 110 | Metals II | 3 |
| EGR | 103 | Physics II | 3 |
| MATH | 204 | College Algebra III | 3 |
| COMM | 225 | Technical Writing | 3 |
| MICS | 110 | Micro Operation and BASIC Programming | 3 |
| CER | 203 | Statistical Quality and Process Control | 4 |
| EGR | 210 | Control Systems I | 3 |
| MATL | 200 | Microscopy Analysis of Materials | 3 |
| MATL | 205 | Composite Compositions | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| COMM | 130 | Speech | 3 |
| CER | 207 | Standard Procedures | 3 |
| CER | 209 | Industrial Projects | 2 |
| EGR | 213 | Control Systems II | 3 |
| MATL | 210 | Material Processing Systems | 3 |
| EGR | 226 | Industrial Environmental Issues | 3 |
| | | or | |
| EGR | 227 | Statistical Applications in Industry | 3 |
| BUS | 170 | Fundamentals of Business I | 3 |
| SOCI | 169 | Human Relations in Organizations | 3 |

# General Studies

## Communications

*Recipient of the Ohio Board of Regents Program Excellence Award.*
The Communications area of the General Studies department prepares students to be competent readers, writers, speakers and thinkers. It strives to impart those qualities which will enable students to adapt to changes in their work environments to keep up with technological changes, and/or to further their educational qualifications by pursuing a four-year degree.

The Communications area offers a full selection of classes which focus on reading, writing and speaking skills. These classes range from fundamental and developmental classes to advanced classes. The area presents classes in both traditional and PACE modes, including courses offered in departmental computer labs.

## English Support Program

The English Support Programs prepares international students to speak, read, write and listen at a language level which is sufficient for successful achievement in all technical and general classes. Students receive intensive English courses on levels appropriate for their language needs. Language instruction and experiences occur not only in classrooms but also in the Learning Resources Center and Transition Center.

## Social Sciences

This area, reflecting the changing needs of society and the technologies, prepares students with skills that increase human and societal understanding and awareness, promote civic responsibility and strengthen intercultural understanding. The Social Sciences area provides courses that allow for individual differences in learning styles and interests. Courses include psychology, sociology, economics, humanities and other related areas.

# Transfer Module

Hocking College recognizes the value of providing a program for students who want to pursue a bachelor degree at a four-year college or university. The Transfer Module is designed to provide a guaranteed transition for students transferring to other public Ohio colleges and universities.

The Hocking College Transfer Module meets requirements of the Ohio Board of Regents; it will be accepted at Ohio state subsidized colleges and universities.

Hocking's Transfer Module program includes 54 to 60 quarter hour credits of introductory courses in the areas of English composition, mathematics, arts and humanities, social and behavioral sciences and natural and physical sciences.

## English Composition

(minimum of 9 credit hours)

Required:

| | | | |
|---|---|---|---|
| COMM | 122 | Communications II | 3 |
| COMM | 123 | Communications III | 3 |

Choose the remaining 3 credit hours from the following:

| | | | |
|---|---|---|---|
| COMM | 124 | Commuications IV | 3 |
| COMM | 225 | Technical Writing | 3 |
| COMM | 250 | Business Correspondence | 3 |

## Mathematics

(minimum of 3 credit hours)

| | | | |
|---|---|---|---|
| MATH | 205 | Introduction to Calculus | 3 |

## Arts/Humanities

(minimum of 9 credit hours)

| | | | |
|---|---|---|---|
| HUM | 200 | Introduction to World Literature | 3 |
| HUM | 201 | Western Civilization and Culture | 3 |
| HUM | 202 | Understanding and Appreciating Theater Art | 3 |
| HUM | 203 | Ethics, Values and Morality | 3 |

## Social and Behavioral Sciences

(minimum of 12 credit hours)

Required:

| | | | |
|---|---|---|---|
| PSYC | 150 | Introduction to Psychology | 3 |
| SOCI | 160 | Introduction to Sociology | 3 |

Choose the remaining 6 credit hours from at least two of the following areas:

**Sociology**

| | | | |
|---|---|---|---|
| SOCI | 161 | Sociology of Family | 3 |
| SOCI | 162 | Social Issues | 3 |
| SOCI | 165 | Cross Cultural Studies | 3 |

**Psychology**

| | | | |
|---|---|---|---|
| PSYC | 151 | Developmental Psychology | 3 |
| PSYC | 152 | Abnormal Psychology | 3 |

**Government**

| | | | |
|---|---|---|---|
| GOVT | 142 | Interaction with Government and Politics | 3 |

**Economics**

| | | | |
|---|---|---|---|
| ECON | 140 | Principles of Microeconomics | 4 |
| ECON | 141 | Principles of Macroeconomics | 4 |

**Natural and Physical Sciences**

(minimum of 9 credit hours)

| | | | |
|---|---|---|---|
| CHEM | 100 | Introduction to Chemistry | 3 |
| CHEM | 130 | Fundamentals of Chemistry | 4 |
| EGR | 102 | Physics I | 3 |
| EGR | 103 | Physics II | 3 |
| HC | 100 | The Human Organism | 3 |
| HC | 110 | Anatomy and Physiology I | 3 |
| HC | 120 | Anatomy and Physiology II | 3 |
| HC | 247 | Microbiology | 4 |
| NR | 120 | Botany | 3 |
| NR | 121 | Zoology | 3 |
| REC | 132 | Geology | 3 |

# Health Careers Technologies

**Technical Programs**

Programs leading to an Associate Degree:

Dietetic
Health Information Management
Massage Therapy
Medical Assistant
Nanny
Nursing Level I - Practical Nursing
Nursing Level II - Associate Degree Nursing
Physical Therapist Assistant *

**Certificate Programs**

Programs providing specific technical skills:

Activities Therapy
Dietary Manager
Electrocardiograph Technician
Medical Assistant
Medical Transcriptionist
Practical Nursing

* New Program - Contact the Admission Office at 1 800-282-4163, extension 2162 for more information.

# Dietetic

The Dietetic Technology prepares individuals for entry-level careers as dietetic technicians and dietary managers and provides students and graduates with opportunities for advancement and professional development.

Dietetic Technology students complete a combination of academic preparation and supervised practice culminating in an associate degree. Students study a wide variety of topics focusing on food, nutrition, science and management. Students may complete a one year study plan and receive a Dietary Manager Certificate approved by the Dietary Manager Association. The associate degree program is approved by The American Dietetic Association and students completing this degree are eligible to take the registration examination for dietetic technicians.

**Job Opportunities**
Job opportunities are available in hospitals, nursing homes, medical and home health centers, school systems, retirement centers, correctional facilities, health care management companies and community nutrition programs.

| No. | | Course | Credit |
|---|---|---|---|
| DT | 100 | Survey of Dietetics | 1 |
| DT | 101 | Dietetic Directed Practice I | 2 |
| DT | 102 | Basic Nutrition | 4 |
| HRCA | 110 | Safety and Sanitation | 2 |
| OAT | 180 | Keyboarding | 1 |
| COMM | 122 | Communications II | 3 |
| MATH | 201 | College Algebra I | 3 |
| DT | 103 | Food Preparation Principles | 3 |
| DT | 106 | Food Production Management | 3 |
| DT | 111 | Dietetic Directed Practice II | 2 |
| DT | 120 | Normal and Modified Menu Planning | 3 |
| HC | 100 | The Human Organism | 3 |
| HC | 102 | Health Promotion Elective | 1 |
| | | or | |
| HC | 149 | Stress and Stress Management | 1 |
| DT | 110 | Applied Nutrition | 3 |
| DT | 119 | Food Purchasing for Health Care Institutions | 3 |
| DT | 121 | Dietetic Directed Practice III | 2 |
| DT | 122 | Supervision in Dietetics | 3 |
| HC | 101 | Medical Terminology I | 3 |
| COMM | 123 | Communications III | 3 |
| DT | 200 | Diet Therapy I | 3 |
| DT | 202 | Nutrition Care Process | 1 |
| DT | 205 | Dietetic Directed Practice IV | 2 |
| HRCA | 223 | Food, Beverages, Labor Cost Control | 3 |
| HC | 110 | Anatomy and Physiology I | 3 |
| MICS | 121 | MicroSoft Works (DOS) | 3 |
| | | or | |
| MICS | 200 | Apple Software Packages | 3 |
| COMM | 130 | Speech | 3 |
| DT | 210 | Diet Therapy II | 3 |
| DT | 212 | Nutrition Education Methods | 3 |
| DT | 215 | Dietetic Directed Practice V | 2 |
| DT | 230 | Management of Quantity Food Systems | 3 |
| HC | 120 | Anatomy and Physiology II | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| SOCI | 160 | Introduction to Sociology | 3 |
| SOCI | 169 | Human Relations in Organizations | 3 |
| DT | 220 | Current Topics in Dietetics | 2 |
| DT | 225 | Dietetic Directed Practice VI | 3 |
| HC | 106 | Cardiopulmonary Resuscitation for the Professional Rescuer | 1 |
| HC | 202 | Community Health | 3 |
| COMM | 225 | Technical Writing | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |

# Health Information Management

The Health Information Management Technology prepares individuals for entry level careers as health information management technicians in health care facilities and provides graduates with opportunities for advancement and professional development.

The Health Information Management Technology prepares students to manage paper or compute databases; review, retrieve and retain medical records; code diseases and operations; prepare records to be microfilmed; abstract information; complete statistics; assist health care professionals; tabulate data from records for research; supervise the day-to-day operation of the health information department; respond to subpoenas and take records to court; and transcribe various medical reports.

**Job Opportunities**
Graduates are employed in a variety of health care facilities. Employment opportunities include acute care hospitals, nursing facilities, home health, hospice, ambulatory health care, chemical dependency facilities, industrial clinics, state and federal health agencies, long-term rehabilitation facilities, insurance companies, health research organizations and law firms.

| No. | | Course | Credit |
|---|---|---|---|
| HC | 101 | Medical Terminology I | 3 |
| HIM | 100 | Health Information and Health Agency Orientation | 3 |
| HC | 100 | The Human Organism | 3 |
| OAT | 180 | Keyboarding | 1 |
| COMM | 150 | Punctuation and Grammar | 2 |
| PSYC | 154 | Interpersonal Communications | 3 |
| COMM | 122 | Communications II | 3 |
| HC | 111 | Medical Terminology II | 3 |
| HIM | 110 | Health Records and Procedures I | 3 |
| HIM | 112 | Health Information and the Law | 3 |
| HC | 110 | Anatomy and Physiology I | 3 |
| MICS | 121 | MicroSoft Works (DOS) | 3 |
| OAT | 100 | Beginning Typing | 3 |
| HIM | 121 | Health Records and Procedures II | 3 |
| HIM | 202 | Computer Applications in HIM | 1 |
| HC | 114 | Standard First Aid | 1 |
| HC | 120 | Anatomy and Physiology II | 3 |
| MICS | 112 | Introduction to DOS | 1 |
| MICS | 142 | dBase IV | 1 |
| OAT | 210 | WordPerfect | 3 |
| HC | 102 | Health Promotion Elective | 1 |
| PSYC | 150 | Introduction to Psychology | 3 |
| HIM | 120 | Basic Coding Elements | 3 |
| HIM | 201 | HIM Directed Practice I | 4 |
| HC | 130 | Basic Pathology | 2 |
| PSYC | 152 | Abnormal Psychology | 3 |
| SOCI | 169 | Human Relations in Organizations | 3 |
| COMM | 123 | Communications III | 3 |
| HC | 121 | Medical Transcription | 3 |
| HIM | 200 | Health Statistics | 3 |
| HIM | 203 | Applied Concepts of Coding | 3 |
| HIM | 211 | HIM Directed Practice II | 4 |
| HIM | 215 | Interpreting Diagnostic Data | 2 |
| COMM | 124 | Communications IV | 3 |
| HC | 220 | Personnel Supervision | 3 |
| HIM | 212 | HIM Quality Control | 2 |
| HIM | 220 | Planning for Health Information Services | 3 |
| HIM | 221 | HIM Directed Practice III | 4 |
| HIM | 222 | CPT Coding | 3 |
| COMM | 104 | Job Search Techniques | 1 |

# Massage Therapy

The Massage Therapy program prepares students for licensure as a massage therapist through the Ohio Medical Board.

This program is a two-year part-time program in which classes meet two evenings per week. Students complete courses in human anatomy and physiology and in the theory and practice of massage methodology. Completion of business and general courses leads to an Associate of Technical Studies.

**Job Opportunities**
The profession of massage therapy is one of the fastest growing careers in the nation. Graduates of the Massage Therapy program are often self employed and many massage therapists work from the home. Some work in offices with other health care professionals or in clinics with other massage therapists.

| No. | | Course | Credit |
|---|---|---|---|
| HC | 122 | Swedish Massage | 2 |
| HC | 100 | The Human Organism | 3 |
| HC | 123 | Fascia and Joint Release | 2 |
| HC | 110 | Anatomy and Physiology I | 3 |
| HC | 124 | Healing Through the Human Energy Field | 2 |
| HC | 120 | Anatomy and Physiology II | 3 |
| HC | 270 | Massage Techniques | 2 |
| HC | 271 | Anatomy and Physiology Principles | 5 |
| HC | 272 | Massage Theory | 3 |
| HC | 273 | Musculoskeletal System/ Massage Therapy | 2 |
| HC | 274 | Massage: Professionalism and Ethics | 3 |
| HC | 275 | Movement Analysis | 1 |
| HC | 276 | Craniosacral Release | 1 |
| HC | 277 | Massage Laboratory Practice | 1 |

# Medical Assistant

The Medical Assistant Technology prepares individuals for entry-level careers in ambulatory health care settings such as medical offices and clinics and provides students with a background sufficient for growth and advancement in the medical assisting profession.

Medical assistants are qualified to handle office management and clinical responsibilities under the direction of a physician. The curriculum combines general and specialized courses to provide multi-skilled health care training. Students learn office management skills such as computerized medical office management, coding and insurance as well as clinical skills such as vital signs measurement, assisting with patient examinations and laboratory testing.

**Job Opportunities**
Graduates are employed in medical offices and clinics. Multi-competent skills of the medical assistant allow some graduates to enter advanced fields of employment such as medical office management, health care supervision and specialized health care technology.

| No. | | Course | Credit |
|---|---|---|---|
| HC | 101 | Medical Terminology I | 3 |
| MA | 100 | Basic Clinical Assistant Procedures | 4 |
| MA | 102 | Medical Office Procedures I | 2 |
| HC | 100 | The Human Organism | 3 |
| OAT | 100 | Beginning Typing | 3 |
| OAT | 190 | Pretranscription Skills | 2 |
| HC | 102 | Health Promotion Elective | 1 |
| | | or | |
| HC | 149 | Stress and Stress Management | 1 |
| HC | 111 | Medical Terminology II | 3 |
| MA | 110 | Family Practice Clinical Assistant Procedures | 4 |
| MA | 112 | Medical Law, Confidentiality and Ethics | 3 |
| MA | 122 | Medical Office Procedures II | 2 |
| HC | 110 | Anatomy and Physiology I | 3 |
| MA | 113 | Nutrition for MA | 3 |
| MA | 120 | Obstetrics, Gynecological, Pediatric Clinical Assisting Procedures | 4 |
| MA | 121 | Medical Insurance and Coding | 1 |
| HC | 120 | Anatomy and Physiology II | 3 |
| OAT | 101 | Intermediate Typing | 3 |
| NT | 104 | Pharmacology Math | 1 |
| PSYC | 150 | Introduction to Psychology | 3 |
| COMM | 122 | Communications II | 3 |
| MA | 200 | Advanced Clinical Assisting Procedures | 5 |
| MA | 202 | Pharmacology for MA | 4 |
| MA | 203 | MA Externship I | 4 |
| HC | 106 | CPR for the Professional Rescuer | 1 |
| HC | 107 | First Aid for the Professional Rescuer | 1 |
| PSYC | 151 | Developmental Psychology | 3 |
| HC | 121 | Medical Transcription | 3 |
| MA | 204 | MA Externship II | 4 |
| MA | 222 | Financial Records and Reports | 3 |
| MA | 221 | Medical Management Computerization | 4 |
| COMM | 123 | Communications III | 3 |
| MA | 205 | MA Externship III | 4 |
| MA | 220 | Medical Laboratory Procedures | 5 |
| MA | 223 | Computer Applications in Medical Assisting | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| COMM | 124 | Communications IV | 3 |

# Nanny

The Nanny program prepares students for employment as nanny or child care providers in private homes or child care centers.

Hocking College offers a three quarter child care certificate program. This program has been reviewed and evaluated by faculty from the Nursery Program at Havering College, Essex, England. In addition, the Academy is a member of the International Nanny Association. Students receive clinical experience in approved child care centers, Head Start sites, preschool programs and in selected private residences. Students are introduced to several professional organizations which provide them with continued support through their careers.

Students may pursue an Associate of Technical Studies which includes business and/or dietetic and general courses.

**Job Opportunities**
Graduates of the Nanny Academy work as nannies in private residences or child care providers in child care centers and preschools. Responsibilities include planning and implementing care for children ages birth through eight. Demand for nannies and child care providers is expected to remain strong through the year 2000. Available positions exist most often in urban areas.

| No. | | Course | Credit |
|---|---|---|---|
| HC | 160 | Child Care Clinical I | 2 |
| HC | 250 | Creative Activity for Children | 3 |
| DT | 102 | Basic Nutrition | 4 |
| HC | 100 | The Human Organism | 3 |
| COMM | 122 | Communications II | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |
| HC | 161 | Fundamentals of Child Care | 3 |
| HC | 162 | Child Care Practicum II | 2 |
| HC | 163 | Pediatric Emergencies | 1 |
| HC | 105 | Defensive Driving | 1 |
| HC | 106 | CPR for the Professional Rescuer | 1 |
| HC | 114 | Standard First Aid | 1 |
| PSYC | 162 | Child and Adolescent Development | 4 |
| SOCI | 161 | Sociology of Family Living | 3 |
| HC | 164 | Dynamics of Child Care | 3 |
| HC | 165 | Child Care Practicum III | 2 |
| DT | 103 | Food Preparation Principles | 3 |
| COMM | 123 | Communications III | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| PSYC | 140 | Issues in Child Development | 4 |

# Nursing Level I
# Practical Nursing

The School of Nursing meets the educational needs of individuals who wish to enter the nursing profession or to advance their nursing skills to meet the health care needs of the extended community.

The Nursing program incorporates classroom, laboratory and clinical experiences. Hospitals and health care agencies within 75 miles of Nelsonville serve as clinical experience sites. The program is approved by the Ohio Board of Nursing and is accredited by the National League for Nursing.

The nursing program at Hocking College is a career ladder program. The first year is a Practical Nursing program which is also the first year of the Associate Degree Nursing program. Practical Nursing graduates are eligible to take the national council licensure examination to become licensed practical nurses, and they may apply for admission to the Associate Degree portion of the program.

**Job Opportunities**
Graduates are employed in hospitals, nursing homes, clinics, physicians' offices, public and community health agencies and as private duty nurses.

| No. | | Course | Credit |
|---|---|---|---|
| NT | 100 | Fundamentals and Gerontological Nursing | 3 |
| NT | 101 | Nursing Clinical Experience I | 4 |
| NT | 102 | Nursing Dynamics I | 1 |
| HC | 100 | The Human Organism | 3 |
| NT | 103 | Nutrients | 1 |
| PSYC | 150 | Introduction to Psychology | 3 |
| NT | 110 | Fundamentals/Maternal-Newborn Nursing | 3 |
| NT | 111 | Nursing Clinical Experience II | 4 |
| NT | 112 | Nursing Dynamics II | 1 |
| NT | 114 | Pharmacology for Nurses: Introduction and Drug Administration | 1 |
| HC | 110 | Anatomy and Physiology I | 3 |
| NT | 113 | Lifespan: Nutrition | 1 |
| NT | 120 | Nursing of the Adult | 3 |
| NT | 121 | Nursing Clinical Experience III | 4 |
| NT | 122 | Nursing Dynamics III | 1 |
| NT | 123 | Nutritional Care I | 1 |
| NT | 124 | Pharmacology for Nurses: Drug Classification I | 1 |
| HC | 120 | Anatomy and Physiology II | 3 |
| PSYC | 151 | Developmental Psychology | 3 |
| NT | 130 | Nursing of the Adult and Child | 3 |
| NT | 131 | Nursing Clinical Experience IV | 4 |
| NT | 132 | Nursing Dynamics IV | 1 |
| NT | 134 | Pharmacology for Nurses: Drug Classification II | 1 |
| HC | 130 | Basic Pathology | 2 |
| HC | 131 | Fluids and Electrolytes | 1 |
| NT | 133 | Nutrition Economics | 1 |
| PSYC | 152 | Abnormal Psychology | 3 |

# Nursing Level II
# Associate Degree Nursing

The School of Nursing meets the educational needs of individuals who wish to enter the nursing profession or to advance their nursing skills to meet the health care needs of the extended community.

The Nursing program incorporates classroom, laboratory and clinical experiences. Hospitals and health care agencies within 75 miles of Nelsonville serve as clinical experience sites. The program is approved by the Ohio Board of Nursing and is accredited by the National League for Nursing.

In Level II, graduates of the Hocking College Practical Nursing program are joined by licensed practical nurses from other schools who have met the admission requirements and have successfully completed an enrichment quarter. Together, these two groups complete the associate degree requirements. Graduates are eligible to take the national council licensure examination to become registered nurses.

**Job Opportunities**
Graduates of the associate degree program are employed in hospitals, nursing homes, clinics and community health agencies and as private duty nurses.

**Enrichment**

| No. | | Course | Credit |
|---|---|---|---|
| HC | 140 | Technical Aspects of Anatomy and Physiology | 3 |
| NT | 104 | Pharmacology Math | 1 |
| NT | 140 | Technical Aspects of Adult Health Nursing | 5 |
| NT | 142 | Technical Aspects of Nursing Dynamics | 1 |
| NT | 143 | Technical Aspects of Nutrition | 1 |
| NT | 144 | Technical Aspects of Pharmacology for Nurses | 2 |
| NT | 146 | Technical Aspects of Child Health Nursing | 2 |
| NT | 147 | Technical Aspects of Maternal-Newborn Nursing | 2 |

| No. | | Course | Credit |
|---|---|---|---|
| NT | 200 | Mental Health Nursing | 3 |
| NT | 201 | Nursing Clinical Experience V | 3 |
| HC | 200 | Pathophysiology for Nurses | 3 |
| NT | 202 | Role Transition LPN to RN | 1 |
| COMM | 122 | Communications II | 3 |
| SOCI | 161 | Sociology of Family Living | 3 |
| | | or | |
| SOCI | 165 | Cross Cultural Studies | 3 |
| NT | 210 | Advanced Nursing of the Adult I | 3 |
| NT | 211 | Nursing Clinical Experience VI | 5 |
| NT | 213 | Nutritional Care II | 1 |
| COMM | 123 | Communications III | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| | | or | |
| HC | 102 | Health Promotion Elective | 1 |
| NT | 220 | Advanced Nursing of the Adult II | 3 |
| NT | 221 | Nursing Clinical Experience VII | 5 |
| NT | 222 | Nursing Dynamics V | 1 |
| NT | 225 | Advanced Maternal Child Nursing | 1 |
| HC | 202 | Community Health | 3 |
| COMM | 130 | Speech | 3 |

# Natural Resources Technologies

**Technical Programs**

Programs leading to an Associate Degree:

- Ecotourism
- Forestry
- Geographics
- Recreation and Wildlife
  - Back Country Horsemanship Major
  - Fish and Wildlife Major
  - Interpretive Services Major
  - Ranger Services Major
- Timber Harvesting
- Tree Care

**Certificate Programs**

Programs providing specific technical skills:

- Back Country Horsemanship
- Backpacking and Survival
- Geographic Information Systems Trainee
- Geographic Information Systems Data Automator
- Lumber Grading
- Recreation Area Maintenance Program
- Timber Harvesting
- Tree Surgery
- Watercraft Skills I
- Watercraft Skills II
- Wilderness Skills
- Wildfire Control for Recreation Areas
- Wildlife Conservation Aide

# Ecotourism

The Ecotourism Technology prepares students for entry-level careers in the ecotourism industry and provides a background sufficient for growth and advancement in the profession.

Introduced in the 1980's as a creative strategy for conservation, ecotourism has evolved over the last decade into a massive, global commercial enterprise. "Ecotourism is environmentally responsible travel and visitation to enjoy and appreciate nature that promotes conservation, has low visitor impact and provides for the beneficially active socioeconomic involvement of local populations" (Hector Ceballos-Lascurain, Head of the Ecotourism Consultancy Program for The World Conservation Union). Students in Hocking's Ecotourism Technology study natural and ecological sciences, interpretive/tour guide services, hospitality, tourism and business.

**Job Opportunities**
Graduates are employed in private and public ecotourism sites including positions in national parks, environmental and community education centers (zoos, museums, aquariums, nature centers), resort and lodge operations and the tourism industry.

| No. | | Course | Credit |
|---|---|---|---|
| GS | 120 | Orientation to American Life | 3 |
| REC | 150 | Introduction to Interpretation | 2 |
| NR | 121 | Zoology | 3 |
| REC | 134 | Environmental Issues | 3 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 122 | Communications II | 3 |
| | •• | Elective (Required) | 3 |
| REC | 115 | Interpretive Methods | 3 |
| TRAV | 152 | Introduction to Ecotourism | 2 |
| NR | 120 | Botany | 3 |
| COMM | 123 | Communications III | 3 |
| | •• | Elective (Required) | 3 |
| TRAV | 160 | Tour Development | 3 |
| BUS | 170 | Fundamentals of Business I | 3 |
| MCS | 130 | Principles of Customer Service | 3 |
| REC | 132 | Geology | 3 |
| COMM | 124A | Communications IV: Job Communications | 3 |
| COMM | 225 | Technical Writing | 3 |
| | •• | Elective (Required) | 3 |
| NR | 171 | Natural Areas Management | 2 |
| NR | 185 | Resource Area Planning | 3 |
| REC | 123 | Cartography | 2 |
| ACC | 100 | Accounting I | 3 |
| | •• | Elective (Required) | 3 |
| REC | 217 | Aquatic Ecology | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |
| | •• | Natural Resources Elective (Required) | 3 |
| | •• | Hospitality Elective (Required) | 3 |
| HOTR | 275 | Resort Management and Development | 3 |
| REC | 209 | Terrestrial Ecology | 3 |
| REC | 237 | Self Guided Interpretive Activities | 2 |
| | •• | Elective (Required) | 6 |
| HOTR | 170 | Marketing Small Properties | 3 |
| HRCA | 114 | Food Management | 3 |
| HUM | 203 | Ethics, Values and Morality | 3 |
| REC | 234 | Archaeology | 3 |
| | •• | Elective (Required) | 3 |
| | •• | Interpretive Elective (Required) | 3 |
| NR | 298 | Natural Resources Internship | 6 |

# Forestry

*Recipient of the Ohio Board of Regents Program Excellence Award.*

The Forestry Technology prepares individuals for careers in applied forestry in such positions as nursery operator, timber cruiser, restoration and reforestation specialist, fire prevention and suppression worker, insect and disease control technician, silviculture worker, and log scaler and provides sufficient background for growth and advancement in the forestry profession.

This two-year program leads to an Associate of Applied Science and meets standards set by the Society of American Foresters.

Forestry students work with public and private forestry organizations and operate forestry equipment that ranges from a hand compass to the surveyor's transit to chainsaws and bulldozers. Classroom work is followed by extensive field training including forest inventory, forest management, reforestation and reclamation, and trips to professional meetings and forest industries throughout the hardwood forest region.

**Job Opportunities**
Forestry studies focus on careers found in both the public and private sector. Skilled forestry technicians are particularly attractive to industries engaged in the harvesting and marketing of wood products.

| No. | | Course | Credit |
|---|---|---|---|
| FOR | 111 | Forest Dendrology | 3 |
| NR | 110 | Introduction to Natural Resources | 3 |
| NR | 150 | Wildfire Control/Recreation Areas | 2 |
| NR | 169 | Natural Resources Expo I | 1 |
| HC | 114 | Standard First Aid | 1 |
| MATH | 201 | College Algebra I | 3 |
| MICS | 200A | Apple Software Packages: Word Processing | 1 |
| NR | 126 | Woods Safety | 1 |
| COMM | 122 | Communications II | 3 |
| FOR | 120 | Photo Interpretation | 3 |
| NR | 125 | Forest Soils | 3 |
| FOR | 124 | Forest Ecology | 3 |
| MATH | 202 | Geometry and Trigonometry | 3 |
| MICS | 200B | Apple Software Packages: Database | 1 |
| COMM | 123 | Commuications III | 3 |
| FOR | 110 | Reforestation | 3 |
| FOR | 123 | Forest Measurements | 4 |
| NR | 256 | Pesticide Use in Natural Resources | 2 |
| FOR | 131 | Forest Entomology and Pathology | 4 |
| MICS | 200C | Apple Software Packages: Spreadsheet | 1 |
| COMM | 124 | Communications IV | 3 |
| FOR | 211 | Timber Harvesting | 3 |
| FOR | 220 | Applied Silviculture | 4 |
| NR | 123 | Surveying and Mapping I | 3 |
| NR | 170 | Natural Resources Expo II | 1 |
| BUS | 100 | Small Business Management I | 3 |
| COMM | 225 | Technical Writing | 3 |
| FOR | 210 | Forest Mensuration | 4 |
| NR | 224 | Forestry Employment Seminar | 2 |
| REC | 215 | Wildlife Mangement I | 3 |
| BUS | 101 | Small Business Management II | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |
| | •• | Forestry Elective (Required) | 3 |
| FOR | 230 | Forest Management | 4 |
| FOR | 231 | Forest Products Utilization | 3 |
| FOR | 232 | Lumber Grading and Marketing | 4 |
| COMM | 135 | Verbal Career Skills | 3 |
| SOCI | 169 | Human Relations in Organizations | 3 |

# Geographics (GIS/GPS)

The Geographics Technology prepares individuals for careers in Geographic Information Systems (GIS) and Global Positioning by Satellite (GPS) technologies and provides students with a background sufficient for growth and advancement in the profession.

Geographics technology is "exploding" across business, industry and government. This timely new technology is sweeping land management professions. Students will experience the revolutionary manner in which GIS manages, manipulates, analyzes, and displays geographically referenced data. GIS offers unparalleled planning speed and versatility to land managers of all sorts whether in national forests, state emergency management teams or the local community.

**Job Opportunities**
A recent job prospectus indicates a need for 35,000 jobs annually in the land management field.

| No. | | Course | Credit |
|---|---|---|---|
| FOR | 222 | Introduction to Forestry | 3 |
| GEO | 100 | Introduction to GIS | 2 |
| NR | 123 | Surveying and Mapping I | 3 |
| COMM | 122 | Communications II | 3 |
| MATH | 201 | College Algebra I | 3 |
| MICS | 112 | Introduction to DOS | 1 |
| NR | 172 | Geography | 3 |
| FOR | 120 | Photo Interpretation | 3 |
| REC | 123 | Cartography | 2 |
| COMM | 123 | Communications III | 3 |
| MATH | 202 | Geometry and Trigonometry | 3 |
| MICS | 200 | Apple Software Packages | 3 |
| GEO | 101 | Intermediate GIS | 3 |
| GEO | 102 | Introduction to GPS | 3 |
| GEO | 130 | Applied Coordinate Geometry | 3 |
| REC | 131 | Field Biology | 3 |
| COMM | 124 | Communications IV | 3 |
| EM | 126 | Search and Rescue Introduction | 2 |
| GEO | 200 | Applications in GIS | 3 |
| GEO | 203 | GPS Data Acquisition | 3 |
| NR | 270 | Land Navigation | 1 |
| REC | 215 | Wildlife Management I | 3 |
| REC | 210 | Woodland Ecology | 3 |
| REC | 217 | Aquatic Ecology | 3 |
| GEO | 201 | Intermediate GIS Applications | 3 |
| MICS | 142 | dBase IV | 1 |
| NR | 173 | Surveying and Mapping II | 3 |
| NR | 222 | Reclamation | 3 |
| NR | 131 | Environmental Chemistry | 3 |
| GEO | 202 | Advanced GIS Applications | 3 |
| GEO | 204 | Remote Sensing | 3 |
| NR | 176 | Wetlands Management | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |
| REC | 244 | Land Mangement and Soils | 3 |

# Recreation and Wildlife Management

*Recipient of the Ohio Board of Regents Program Excellence Award.*

The Recreation and Wildlife Management Technology provides core courses to prepare students as recreational and wildlife management technicians. Students may declare one of four majors or select electives from several majors. Majors include Back Country Horsemanship, Fish and Wildlife Management, Interpretive Services and Ranger Services.

Graduates possess exceptionally strong backgrounds in environmental principles, concepts and applied field practices.

Numerous areas on Hocking's 1400 acre campus serve as learning resources: the Hocking Woods Nature Center, fish hatchery ponds, a landscape nursery, picnic shelters, bird and wildlife feeding stations with observation blinds, a complex trail system and the Robbins Crossing Living History Laboratory. Nearly 4,700 acres of nearby land and several regional public forests, parks, and wildlife areas are used for instructional purposes.

Internships and practicum experiences are provided through affiliations with government wildlife areas, fish hatcheries, and park systems.

**Job Opportunities**
Public agencies and private firms across the United States readily employ Hocking College Recreation and Wildlife Management graduates.

| No. | | Course | Credit |
|---|---|---|---|
| NR | 111 | Dendrology | 3 |
| REC | 113 | Watercraft Operations and Maintenance | 2 |
| REC | 115 | Interpretive Methods | 3 |
| MICS | 200A | ASP: Word Processing | 1 |
| NR | 121 | Zoology | 3 |
| COMM | 122 | Communications II | 3 |
| REC | 114 | Recreation Employment Seminar | 1 |
| REC | 122 | Game Animals of East Central U.S. | 3 |
| MICS | 200B | ASP: Database | 1 |
| NR | 120 | Botany | 3 |
| COMM | 123 | Communications III | 3 |
| MATH | 201 | College Algebra I | 3 |
| | •• | Recreation Course (Required) | 3 |
| REC | 110 | Chainsaw Operation | 1 |
| REC | 123 | Cartography | 2 |
| REC | 130 | Recreation Area Equipment | 1 |
| REC | 134 | Environmental Issues | 3 |
| MICS | 200C | ASP: Spreadsheet | 1 |
| REC | 131 | Field Biology | 3 |
| | •• | Recreation Course (Required) | 3 |
| FOR | 222 | Introduction to Forestry | 3 |
| REC | 210 | Woodland Ecology | 3 |
| REC | 215 | Wildlife Mangement I | 3 |
| REC | 217 | Aquatic Ecology | 3 |
| NR | 170 | Natural Resources Expo II | 1 |
| | •• | Recreation Course (Required) | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| COMM | 225 | Technical Writing | 3 |
| REC | 234 | Archaelogy | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |
| | •• | Recreation Courses (Required) | 6 |
| REC | 222 | Recreation Area Maintenance | 2 |
| REC | 132 | Geology | 3 |
| REC | 233 | Ornithology | 3 |
| REC | 244 | Land Management and Soils | 3 |
| EM | 100 | Emergency Victim Care (EMT-A) | 6 |
| | | or | |
| HC | 115 | First Responder | 2 |

# Recreation and Wildlife Back Country Horsemanship Major

The Back Country Horsemanship Major prepares individuals for careers in both the public and private sector of the recreational industry and provides a background sufficient for growth and advancement in the recreation and wildlife profession.

Many indicators point to recreation industries as among the fastest growing segments of the economy with horse and horse-related activities one of the fastest growing. This is particularly true for the use of horses in park and wilderness management and patrol activities. There is a continuing shortage of trained and qualified employees in this field.

Hocking College's Recreation and Wildlife Technology Back Country Horsemanship Major is helping meet this demand by providing graduates for this rapidly growing industry. The Back Country Horsemanship Major focuses on wilderness riding, animal care and equipment repair skills.

**Job Opportunities**
Employment opportunities are found with the National Park Service, U.S. Forest Service, U.S. Border Patrol, state and metropolitan park systems and in the private recreational sector with outfitters and wilderness packers.

| No. | | Course | Credit |
|---|---|---|---|
| NR | 111 | Dendrology | 3 |
| NR | 114 | Horsemanship I: Beginning Riding | 3 |
| REC | 110 | Chainsaw Operation | 1 |
| REC | 130 | Recreation Area Equipment | 1 |
| MICS | 200A | ASP: Word Processing | 1 |
| NR | 121 | Zoology | 3 |
| COMM | 122 | Communications II | 3 |
| NR | 134 | Horsemanship II: Intermediate Riding | 3 |
| REC | 114 | Recreation Employment Seminar | 1 |
| REC | 115 | Interpretive Methods | 3 |
| REC | 122 | Game Animals of East Central U.S. | 3 |
| MICS | 200B | ASP: Database | 1 |
| NR | 120 | Botany | 3 |
| COMM | 123 | Communications III | 3 |
| MATH | 201 | College Algera I | 3 |
| NR | 135 | Horsemanship III: Advanced Trail Riding | 3 |
| REC | 113 | Watercraft Operations and Maintenance | 2 |
| REC | 123 | Cartography | 2 |
| REC | 134 | Environmental Issues | 3 |
| MICS | 200C | ASP: Spreadsheet | 1 |
| REC | 131 | Field Biology | 3 |
| REC | 234 | Archaeology | 3 |
| FOR | 222 | Introduction to Forestry | 3 |
| NR | 116 | Horse Pack and Tack Repair | 3 |
| REC | 210 | Woodland Ecology | 3 |
| REC | 215 | Wildlife Management I | 3 |
| REC | 217 | Aquatic Ecology | 3 |
| REC | 244 | Land Management and Soils | 3 |
| NR | 117 | Horse Program Management | 2 |
| NR | 115 | Horseshoeing I | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| COMM | 225 | Technical Writing | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |
| NR | 271 | Campus Park Patrol | 3 |
| REC | 222 | Recreation Area Maintenance | 2 |
| NR | 118 | Colt Training I | 3 |
| | | or | |
| NR | 272 | Teaching Horseback Riding | 3 |
| REC | 132 | Geology | 3 |
| REC | 233 | Ornithology | 3 |
| EM | 100 | Emergency Victim Care (EMT-A) | 6 |
| | | or | |
| HC | 115 | First Responder | 2 |

# Recreation and Wildlife
# Fish and Wildlife Major

The Fish and Wildlife Management Major prepares individuals for careers with land and resource management agencies, both public and private, in such positions as fish and wildlife conservation aides, fish hatchery technicians and soil conservation service technicians. It also provides a background sufficient for growth and advancement in the fish and wildlife profession.

This "learning by doing" program provides classroom theory presentations through multiple sources of media, lecture and student/instructor interaction while preparing students for field laboratories in pond renovation and fish production, wildlife habitat planning and planting, and actual in-field environmental studies which include indepth studies of birds, fish, animals, and habitats.

**Job Opportunities**
Hocking College's Recreation and Wildlife Technology Fish and Wildlife Major provides the education and training needed for securing entry-level positions in many land and resource management agencies. Fish and wildlife conservation aides, fish hatchery technicians and soil conservation service technicians are only a few of the many positions for which this academic major prepares the graduate.

| No. | | Course | Credit |
|---|---|---|---|
| NR | 111 | Dendrology | 3 |
| REC | 110 | Chainsaw Operation | 1 |
| REC | 130 | Recreation Area Equipment | 1 |
| REC | 134 | Environmental Issues | 3 |
| NR | 121 | Zoology | 3 |
| COMM | 122 | Communications II | 3 |
| REC | 114 | Recreation Employment Seminar | 1 |
| REC | 121 | Ohio Trees | 2 |
| REC | 122 | Game Animals of East Central U.S. | 3 |
| REC | 123 | Cartography | 2 |
| NR | 123 | Surveying and Mapping I | 3 |
| | | or | |
| REC | 120 | Woodshop | 1 |
| NR | 120 | Botany | 3 |
| MATH | 201 | College Algebra I | 3 |
| REC | 113 | Watercraft Operations and Maintenance | 2 |
| REC | 115 | Interpretive Methods | 3 |
| REC | 136 | Wildlife Investigation Techniques | 2 |
| REC | 161 | Ichthyology | 3 |
| REC | 131 | Field Biology | 3 |
| MATH | 202 | Geometry and Trigonometry | 3 |
| REC | 210 | Woodland Ecology | 3 |
| REC | 215 | Wildlife Mangement I | 3 |
| REC | 217 | Aquatic Ecology | 3 |
| MICS | 200A | ASP: Word Processing | 1 |
| REC | 132 | Geology | 3 |
| REC | 244 | Land Management and Soils | 3 |
| REC | 234 | Archaeology | 3 |
| REC | 221 | Fish Management I | 3 |
| REC | 222 | Recreation Area Maintenance | 2 |
| EM | 100 | Emergency Victim Care (EMT-A) | 6 |
| HC | 115 | First Responder | 2 |
| COMM | 123 | Communications III | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| MICS | 200B | ASP: Database | 1 |
| NR | 131 | Environmental Chemistry | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |
| FOR | 222 | Introduction to Forestry | 3 |
| REC | 238 | Fish Management II | 4 |
| | | or | |
| REC | 239 | Wildlife Management II | 4 |
| REC | 241 | Fish Hatchery Management | 4 |
| MICS | 200C | ASP: Spreadsheet | 1 |
| REC | 233 | Ornithology | 3 |
| COMM | 225 | Technical Writing | 3 |

# Recreation and Wildlife Interpretive Services Major

The Interpretive Services Major prepares individuals for careers in the fields of natural, cultural and/or historical interpretation and provides an academic background sufficient for growth and advancement in the recreation and wildlife profession.

Hocking College's Interpretive Services Major focuses on the interpretive application of natural, cultural and living history. Training in visitor interaction, exhibit design, interpretive graphics, development of outdoor study sites, research and character development, historical programming, and costuming are included in the curriculum.

Interpretive students practice their skills at Robbins Crossing Living History Learning Laboratory where they authentically recreate the setting and people of 19th century rural southeastern Ohio.

Programming at the Hocking Woods Nature Center is designed and conducted by Interpretive Services students.

**Job Opportunities**
As a result of increased park, museum and other natural and cultural education center visitations, the interpretive field has diversified creating many new employment positions. Interpretive programs operate in federal, state and metropolitan park systems, zoos, museums, and public and private outdoor education centers. There is an ever increasing demand for interpreters who can manage archives, conduct interpretive walks and presentations, and script and perform living history mini-dramas.

| No. | | Course | Credit |
|---|---|---|---|
| NR | 111 | Dendrology | 3 |
| REC | 113 | Watercraft Operations and Maintenance | 2 |
| REC | 120 | Woodshop | 1 |
| REC | 150 | Introduction to Interpretation | 2 |
| MICS | 200A | ASP: Word Processing | 1 |
| NR | 121 | Zoology | 3 |
| COMM | 122 | Communications II | 3 |
| REC | 114 | Recreation Employment Seminar | 1 |
| REC | 115 | Interpretive Methods | 3 |
| REC | 122 | Game Animals of East Central U.S. | 3 |
| MICS | 200B | ASP: Database | 1 |
| NR | 120 | Botany | 3 |
| COMM | 123 | Communications III | 3 |
| MATH | 201 | College Algebra I | 3 |
| REC | 110 | Chainsaw Operation | 1 |
| REC | 117 | Interpretive Interaction Techniques | 2 |
| REC | 123 | Cartography | 2 |
| REC | 130 | Recreation Area Equipment | 1 |
| REC | 134 | Environmental Issues | 3 |
| MICS | 200C | ASP: Spreadsheet | 1 |
| NR | 259 | Outdoor Programs | 3 |
| REC | 131 | Field Biology | 3 |
| FOR | 222 | Introduction to Forestry | 3 |
| NR | 264 | Recreation Programming | 3 |
| REC | 210 | Woodland Ecology | 3 |
| REC | 215 | Wildlife Mangement I | 3 |
| REC | 217 | Aquatic Ecology | 3 |
| REC | 243 | Living History Techniques | 2 |
| REC | 118 | Historical Perspectives | 2 |
| REC | 226 | Development and Design of Outdoor Studies Situations | 3 |
| REC | 236 | Exhibit/Visitor Center Design | 2 |
| REC | 237 | Self Guided Interpretive Activities | 2 |
| COMM | 135 | Verbal Career Skills | 3 |
| REC | 234 | Archaeology | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |
| REC | 141 | Nature Center and Museum Operations | 2 |
| REC | 222 | Recreation Area Maintenance | 2 |
| EM | 100 | Emergency Victim Care | 6 |
| | | or | |
| HC | 115 | First Responder | 2 |
| REC | 132 | Geology | 3 |
| REC | 244 | Land Management and Soils | 3 |
| COMM | 225 | Technical Writing | 3 |
| REC | 233 | Ornithology | 3 |

# Recreation and Wildlife Ranger Services Major

The Ranger Services Major prepares individuals for resource, visitor protection and emergency services careers in natural resource recreation areas throughout the United States which are administered, owned, and/or operated at all levels of government and private industry. It provides a background sufficient for growth and advancement in the recreation and wildlife profession.

At the federal level, the National Ranger Training Institute at Hocking College has been recognized as a satellite training facility of the Federal Law Enforcement Training Center. Hocking College's Recreation and Wildlife Ranger Services Major, through the National Ranger Training Institute at Hocking College, includes Seasonal Officer Training which is certified by the U.S. Department of the Interior, National Park Service, the U.S. Fish and Wildlife Services and the prestigious City and Guilds Institute of London, England.

**Job Opportunities**
Successful completion of the seasonal officer program qualifies graduates for federal seasonal law enforcement commissions and will aid in employment with federal, state and metropolitan park systems.

| No. | | Course | Credit |
|---|---|---|---|
| NR | 111 | Dendrology | 3 |
| REC | 113 | Watercraft Operations and Maintenance | 2 |
| REC | 115 | Interpretive Methods | 3 |
| REC | 123 | Cartography | 2 |
| MICS | 200A | ASP: Word Processing | 1 |
| NR | 121 | Zoology | 3 |
| COMM | 122 | Communications II | 3 |
| NR | 169 | Natural Resources Expo I | 1 |
| REC | 114 | Recreation Employment Seminar | 1 |
| REC | 122 | Game Animals of East Central U.S. | 3 |
| MICS | 200B | ASP: Database | 1 |
| NR | 120 | Botany | 3 |
| COMM | 123 | Communications III | 3 |
| MATH | 201 | College Algebra I | 3 |
| | •• | Enforcement Elective (Required) | 3 |
| REC | 110 | Chainsaw Operation | 1 |
| REC | 130 | Recreation Area Equipment | 1 |
| MICS | 200C | ASP: Spreadsheet | 1 |
| REC | 131 | Field Biology | 3 |
| REC | 233 | Ornithology | 3 |
| REC | 244 | Land Mangement and Soils | 3 |
| REC | 234 | Archaeology | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |
| EM | 123 | Rappelling and Rope Techniques | 2 |
| NR | 113 | How to Get Government Jobs | 1 |
| REC | 210 | Woodland Ecology | 3 |
| REC | 215 | Wildlife Management I | 3 |
| REC | 217 | Aquatic Ecology | 3 |
| REC | 222 | Recreation Area Maintenance | 2 |
| EM | 100 | Emergency Victim Care (EMT-A) | 6 |
| | | or | |
| HC | 115 | First Responder | 2 |
| EM | 126 | Search and Rescue Introduction | 2 |
| FOR | 222 | Introduction to Forestry | 3 |
| NR | 150 | Wildfire Control/Recreation Areas | 2 |
| REC | 134 | Environmental Issues | 3 |
| REC | 132 | Geology | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| COMM | 225 | Technical Writing | 3 |
| NR | 215 | Vehicle Operations for Natural Resources Officers | 1 |

| No. | | Course | Credit |
|---|---|---|---|
| NR | 242 | Law, Philosophy and Objectives for Natural Resources Officers | 2 |
| NR | 243 | Law Problems and Recognition | 1 |
| NR | 244 | Vehicular Accident Investigation | 1 |
| NR | 245 | Public Relations for Natural Resources Officers | 1 |
| NR | 269 | Conservation Law for Natural Resources Officers | 3 |
| NR | 280 | Defense Weapon Training for Natural Resources Officers | 3 |
| REC | 240 | Environmental Enforcement Problems | 2 |

# Timber Harvesting

The Timber Harvesting specialist program prepares individuals for jobs in timber harvesting and in timber harvesting equipment operations, maintenance and repair and provides a background sufficient for growth and advancement in the timber harvesting profession.

The Timber Harvesting specialist program at Hocking College is a complete logger training program which emphasizes safe, efficient timber production techniques while incorporating "best management practices." The Timber Harvesting program frequently works in the Wayne National Forest in specialized harvesting situations, in addition to performing custom logging operations for private landowners. Students in the Timber program are expected to master the operation and maintenance of all equipment used in logging operations. Field work is scheduled for an average of three days per week. In the third quarter students operate a commercial logging operation for eleven weeks. Upon completion of the program the student has mastered the basic entry level skills required by the harvesting industry and receives a technical certificate in Timber Harvesting.

The Timber Harvesting and Tree Care certificates can be combined with basic and general courses resulting in an Associate of Technical Studies.

### Job Opportunities

Numerous employment opportunities are available with private logging operations throughout the eastern hardwood region of the United States.

| No. | | Course | Credit |
|---|---|---|---|
| FOR | 111 | Forest Dendrology | 3 |
| NR | 169 | Natural Resources Expo I | 1 |
| SLG | 111 | Log Grading and Scaling | 2 |
| THS | 112 | Timber Harvesting Skills I | 6 |
| HC | 114 | Standard First Aid | 1 |
| NR | 126 | Woods Safety | 1 |
| THS | 111 | Diesel, Gas, Small Engine Repair | 3 |
| NR | 226 | Production Analysis | 3 |
| THS | 122 | Timber Harvesting Skills II | 6 |
| COMM | 104 | Job Search Techniques | 1 |
| THS | 120 | Hydraulics and Mechanical Systems Maintenance and Repair | 3 |
| THS | 121 | Welding | 3 |
| THS | 130 | Timber Harvesting Skills III | 9 |
| THS | 131 | Timber Harvesting Seminar | 3 |
| NR | 170 | Natural Resources Expo II | 1 |
| NR | 256 | Pesticide Use in Natural Resources | 2 |
| FOR | 123 | Forest Measurements | 4 |
| REC | 244 | Land Management and Soils | 3 |

### Basic and General Courses

| No. | | Course | Credit |
|---|---|---|---|
| BUS | 120 | Personal Finance | 3 |
| EGR | 201 | Occupational Safety | 3 |
| COMM | 122 | Communications II | 3 |
| BUS | 100 | Small Business Management I | 3 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 123 | Communications III | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |
| COMM | 225 | Technical Writing | 3 |
| SOCI | 160 | Introduction to Sociology | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |

# Tree Care

The Tree Care program prepares individuals for careers in tree surgery such as residential tree trimming or as utility right-of-way clearing workers. It also provides students with a background sufficient for growth and advancement in the tree care profession.

The Tree Care program at Hocking College is a one quarter program that prepares the student to become an entry level climber and tree surgeon. The program combines classroom learning with experience at work sites. Successful graduates earn a certificate in Tree Surgery.

The Tree Care and Timber Harvesting certificates can be combined with basic and general courses resulting in an Associate of Technical Studies.

**Job Opportunities**
Trained tree surgeons are in great demand. Depending on the individual's skill level, graduates may be hired as ground-workers or apprentice climbers. Exceptional individuals with a few months of experience may move into foreman positions.

| No. | | Course | Credit |
|---|---|---|---|
| TRC | 110 | Climbing | 3 |
| TRC | 112 | Mechanics of Tree Care | 3 |
| TRC | 113 | Tree Care Equipment | 3 |
| TRC | 115 | Climbing II | 3 |

**Basic and General Courses**

| No. | | Course | Credit |
|---|---|---|---|
| BUS | 120 | Personal Finance | 3 |
| EGR | 201 | Occupational Safety | 3 |
| COMM | 122 | Communications II | 3 |
| BUS | 100 | Small Business Management I | 3 |
| MATH | 201 | College Algebra I | 3 |
| COMM | 123 | Communications III | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |
| COMM | 225 | Technical Writing | 3 |
| SOCI | 160 | Introduction to Sociology | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |

# Public Safety Services Technologies

**Technical Programs**

Programs leading to an Associate Degree:

Emergency Medical
Fire and Emergency Services
Human and Correctional Services
    Juvenile Corrections Major
Police Science

**Certificate Programs**

Programs providing specific technical skills:

Advanced Fire Fighting
Advanced Industrial Security
Advanced Retail Security
Basic Fire Fighting (36-Hour)
Basic Industrial Security
Basic Retail Security
Certificate Ohio EMT-P (5-3 002)
Correctional Officer Training
Dispatcher Training
Domestic Violence Laws and Techniques
Emergency Medical Technology-Ambulance
Fire Science
Homicide Investigation Techniques
NASAR Managing the Search Function
Ohio Peace Officers' Basic Training
Rappelling
Side-Handled Baton Training
Unarmed Self Defense
Vertical Rope Rescue

# Emergency Medical

The Emergency Medical Technology prepares students for entry-level career positions as EMT-A's and EMT-P's and ultimately for middle management positions.

Emergency Medical Technicians administer lifesaving care at the scene of accidental injury or sudden illness. The EMT program consists of three phases of training: EMT-A (Basic), EMT-P (Paramedic) and Associate of Applied Science.

The one-quarter EMT-A (Basic) program covers basic life support and leads to eligibility for state and national certification. The EMT-P (Paramedic) program includes training in basic and advanced life support management. Each phase prepares students to take the appropriate national registry exam and be certified both state and nationally.

**Job Opportunities**
The six-quarter associate degree program prepares paramedics for beginning management positions in emergency medical services and for emergency room technician positions. Employment is also available in government agencies, privately owned emergency services including health or emergency services and fire, police, forest and recreation services.

**EMT-A (Basic)**

| No. | | Course | Credit |
|---|---|---|---|
| EM | 100 | Emergency Victim Care (EMT-A) | 6 |
| EM | 101 | EMT Clinical Experience I | 2 |
| EM | 102 | Defensive Driving and Emergency Vehicle Operation | 1 |

**EMT-P (Paramedic)**

| No. | | Course | Credit |
|---|---|---|---|
| EM | 110 | EMT Paramedic I | 7 |
| EM | 203 | Emergency Rescue Operations | 4 |
| EM | 204 | Introduction to Hazardous Materials | 1 |
| HC | 100 | The Human Organism | 3 |
| NT | 104 | Pharmacology Math | 1 |
| EM | 111 | EMT Clinical Experience II | 2 |
| EM | 113 | EMT Squad Experience I | 2 |
| EM | 120 | EMT Paramedic II | 7 |
| HC | 101 | Medical Terminology I | 3 |
| EM | 114 | EMT Squad Experience II | 2 |
| EM | 121 | EMT Clinical Experience III | 2 |
| EM | 140 | EMT Paramedic III | 6 |
| HC | 102Q | H.P.E.: Physical Conditioning | 1 |
| PSYC | 152 | Abnormal Psychology | 3 |

| No. | | Course | Credit |
|---|---|---|---|
| COMM | 122 | Communications II | 3 |
| HC | 149 | Stress and Stress Management | 1 |
| EM | 160 | EMT Self Defense Tactics | 2 |
| EM | 275 | EMT Seminar | 1 |
| COMM | 104 | Job Search Techniques | 1 |
| PSYC | 150 | Introduction to Psychology | 3 |
| EM | 116 | Introduction to Aeromedical Evac | 1 |
| EM | 201 | Paramedic Supervision Practicum | 3 |
| EM | 227 | Emergency Response to Hazardous Materials | 4 |
| ACC | 120 | Payroll Accounting | 3 |
| BUS | 100 | Small Business Management I | 3 |
| OAT | 180 | Keyboarding | 1 |
| SOCI | 169 | Human Relations in Organizations | 3 |
| EM | 200 | Physical Assessment and Emergency Room Techniques | 3 |
| HUM | 203 | Ethics, Values and Morality | 3 |
| MICS | 121 | MicroSoft Works for Windows | 3 |
| SUPR | 235 | Supervision and Leadership | 3 |

| No. | | Course | Credit |
|---|---|---|---|
| EM | 202 | Advanced Cardiac Life Support (ACLS) | 1 |
| EM | 221 | In-Service Education Clinical Experience for EMT's | 3 |
| BUS | 230 | Labor-Management Relations | 3 |
| CJ | 225 | Basic River Rescue | 2 |
| EM | 213 | Public Administration, Relations and Education | 4 |
| COMM | 123 | Communications III | 3 |
| COMM | 130 | Speech | 3 |

# Fire and Emergency Services

The Fire and Emergency Services Technology educates and trains students in the attributes essential to entry level fire-medics. In addition, it encourages professional growth and attempts to inspire a lifetime of service to the profession and society.

The Fire and Emergency Services Technology provides education and training in handling fires and other emergencies in communities, industrial operations and recreational areas. Students learn fire fighting and prevention techniques during one year of study and receive additional education and training in the Emergency Medical Technology during the second year. Students earn a Fire Science Certificate upon completion of the first year, complete requirements for the 200 hour Fire Certificate (Ohio Public Safety Services) and earn certification in hazardous materials. Completion of two years of study results in an Associate of Technical Studies Degree as well as completion of requirements for the EMT-P National Registry.

**Job Opportunities**
Upon completion of their degree or selected courses students may be employed as fire fighters, fire medics, EMT-A's, or EMT-P's.

| No. | | Course | Credit |
|---|---|---|---|
| EM | 100 | Emergency Victim Care (EMT-A) | 6 |
| EM | 204 | Introduction to Hazardous Materials | 1 |
| FS | 100 | Basic Fire Fighting | 3 |
| FS | 105 | Orientation to Fire Services | 2 |
| COMM | 122 | Communications II | 3 |
| MATH | 201 | College Algebra I | 3 |
| FS | 110 | Advanced Fire Fighting I | 5 |
| FS | 116 | Fire Prevention and Investigation Techniques | 3 |
| EM | 213 | Public Administration, Relations and Education | 4 |
| EM | 227 | Emergency Response to Hazardous Materials | 4 |
| HUM | 203 | Ethics, Values and Morality | 3 |
| CJ | 225 | Basic River Rescue | 2 |
| FS | 115 | Advanced Fire Fighting II | 5 |
| CHEM | 100 | Introduction to Chemistry | 3 |
| EM | 203 | Emergency Rescue Operations | 4 |
| COMM | 130 | Speech | 3 |
| HC | 102Q | HPE: Physical Conditioning | 1 |
| MICS | 143 | WordStar | 1 |
| EM | 101 | EMT Clinical Experience I | 2 |
| EM | 102 | Defensive Driving and Emergency Vehicle Operation | 1 |
| EM | 110 | EMT Paramedic I | 7 |
| HC | 100 | The Human Organism | 3 |
| NT | 104 | Pharmacology Math | 1 |
| PSYC | 154 | Interpersonal Communications | 3 |
| EM | 111 | EMT Clinical Experience II | 2 |
| EM | 113 | EMT Squad Experience I | 2 |
| EM | 120 | EMT Paramedic II | 7 |
| COMM | 123 | Communications III | 3 |
| HC | 101 | Medical Terminology I | 3 |
| HC | 149 | Stress and Stress Mangement | 1 |
| EM | 114 | EMT Squad Experience II | 2 |
| EM | 121 | EMT Clinical Experience III | 2 |
| EM | 140 | EMT Paramedic III | 6 |
| EM | 160 | EMT Self Defense Tactics | 2 |
| EM | 275 | EMT Seminar | 1 |
| NR | 150 | Wildfire Control/Recreation Areas | 2 |
| COMM | 104 | Job Search Techniques | 1 |
| PSYC | 150 | Introduction to Psychology | 3 |

# Human and Correctional Services

The Human and Correctional Services Technology provides quality instruction to students in the areas of probation, parole, corrections and human services in both the adult and juvenile systems. The goal of this instruction is to provide the skills necessary for entry level positions in these areas.

The Human and Correctional Services Technology provides educational experiences that build skills necessary to help adults and children who need direction and reorganization in their lives. Recognizing the causes of deviant behavior and referring the individual for treatment are just two of the practical skills students learn in this two-year associate degree program. Students also develop strong skills in counseling through both class and laboratory experiences.

This program includes two quarters of practicum experience where a student has the opportunity for direct application of his/her learned skills.

**Job Opportunities**
Graduates are employed as juvenile probation or parole officers, corrections officers or investigators, youth leaders/coordinators at social welfare agencies or halfway houses and in many other human services agencies.

| No. | | Course | Credit |
|---|---|---|---|
| CORR | 100 | Orientation to Corrections | 2 |
| CORR | 105 | Adult Residential Services | 4 |
| CORR | 161 | Reality Therapy | 3 |
| CJ | 100 | Criminal Justice Systems | 3 |
| CJ | 121 | Ohio Criminal Law | 4 |
| COMM | 122 | Communications II | 3 |
| CJ | 190 | Chemical Abuse and Dependency | 3 |
| CORR | 106 | Probation and Parole | 3 |
| CORR | 151 | Unarmed Self-Defense | 2 |
| CORR | 160 | Group Work Techniques | 3 |
| HUM | 203 | Ethics, Values and Morality | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |
| CORR | 260 | Interviewing Techniques | 4 |
| JUV | 102 | Juvenile Delinquency | 3 |
| CORR | 122 | Correctional Law | 3 |
| COMM | 123 | Communications III | 3 |
| MICS | 101 | Computer Literacy | 1 |
| SOCI | 160 | Introduction to Sociology | 3 |
| CJ | 250 | Criminology | 3 |
| CORR | 235 | Correctional Report Writing | 3 |
| CORR | 261 | Approaches to Counseling | 4 |
| CORR | 298 | Corrections Practicum Orientation | 1 |
| SEPS | 205 | Correctional Security | 3 |
| PSYC | 151 | Developmental Psychology | 3 |
| CORR | 262 | Counseling Techniques | 3 |
| CORR | 296A | Corrections Practicum | 3 |
| CJ | 263 | Crisis Recognition and Referral | 3 |
| PSYC | 152 | Abnormal Psychology | 3 |
| SOCI | 161 | Sociology of Family Living | 3 |
| SOCI | 162 | Social Issues | 3 |
| CORR | 265 | Case Analysis | 3 |
| CORR | 296B | Corrections Practicum | 3 |
| HC | 114 | Standard First Aid | 1 |
| SOCI | 165 | Cross Cultural Studies | 3 |
| SUPR | 235 | Supervison and Leadership | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| | | or | |
| GOVT | 142 | Interaction with Government and Politics | 3 |

# Human and Correctional Services Juvenile Major

The Human and Correctional Services Technology Juvenile Major provides quality instruction to students in the areas of probation, parole, corrections and human services in the juvenile system. The goal of this instruction is to provide the skills necessary for entry level positions in these areas.

Job opportunities in juvenile corrections are growing. The Ohio Department of Youth Services is building new institutions in response to current institution overcrowding. The Hocking College Juvenile Major will provide instruction necessary to gain skills and knowledge to work in one of these new facilities or in a program to support these facilities.

The Human and Correctional Services Technology Juvenile Major provides educational experiences that build skills necessary to help youth who need direction and reorganization in their lives. Recognizing the causes of deviant behavior and referring the individual for treatment are just two of the practical skills students learn in this two-year associate degree program. Students also develop strong skills in counseling through both class and laboratory experiences.

This program includes two quarters of practicum experience where a student has the opportunity for direct application of his/her learned skills.

**Job Opportunities**
Graduates are employed as juvenile probation or parole officers, corrections officers or investigators, youth leaders/coordinators at social welfare agencies or halfway houses and in many other human services agencies.

| No. | | Course | Credit |
|---|---|---|---|
| CORR | 100 | Orientation to Corrections | 2 |
| JUV | 100 | Juvenile Residential Services | 3 |
| CJ | 100 | Criminal Justice Systems | 3 |
| CJ | 121 | Ohio Criminal Law | 4 |
| COMM | 122 | Communications II | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |
| CJ | 190 | Chemical Abuse and Dependency | 3 |
| CORR | 106 | Probation and Parole | 3 |
| CORR | 160 | Group Work Techniques | 3 |
| JUV | 110 | Adolescent Cognitive Behavior | 3 |
| SEPS | 205 | Correctional Security | 3 |
| CJ | 263 | Crisis Recognition and Referral | 3 |
| CORR | 260 | Interviewing Techniques | 4 |
| JUV | 102 | Juvenile Delinquency | 3 |
| CORR | 122 | Correctional Law | 3 |
| CORR | 151 | Unarmed Self Defense | 2 |
| COMM | 123 | Communications III | 3 |
| MICS | 101 | Computer Literacy | 1 |
| SOCI | 160 | Introduction to Sociology | 3 |
| CJ | 250 | Criminology | 3 |
| CORR | 161 | Reality Therapy | 3 |
| CORR | 235 | Correctional Report Writing | 3 |
| CORR | 261 | Approaches to Counseling | 4 |
| CORR | 298 | Corrections Practicum Orientation | 1 |
| JUV | 101 | Family Dynamics | 3 |
| CORR | 262 | Counseling Techniques | 3 |
| CORR | 296A | Corrections Practicum | 3 |
| JUV | 105 | Child Abuse | 3 |
| PSYC | 151 | Developmental Psychology | 3 |
| HUM | 203 | Ethics, Values and Morality | 3 |
| SOCI | 162 | Social Issues | 3 |
| CORR | 265 | Case Analysis | 3 |
| CORR | 296B | Corrections Practicum | 3 |
| JUV | 111 | Juvenile Sexual Offender | 3 |
| PSYC | 152 | Abnormal Psychology | 3 |
| HC | 114 | Standard First Aid | 1 |
| SOCI | 165 | Cross Cultural Studies | 3 |
| COMM | 135 | Verbal Career Skills | 3 |
| | | or | |
| GOVT | 142 | Interaction with Government and Politics | 3 |

# Police Science

*Recipient of the Ohio Board of Regents Program Excellence Award.*

The Police Science Technology provides quality education and training for students leading to entry-level career positions in law enforcement. Programming incorporates Ohio Peace Officer academy student performance objectives into the curriculum to prepare students for pre-service certification as a peace officer in Ohio.

The Police Science Technology teaches students the technical and human relations skills required to become modern law enforcement officers. Students learn through courses in law, criminalistics, photography and human interaction as well as through laboratory exercises. Students master investigative techniques by reenacting crime scenes and witness the processing and testing of actual case evidence at area law enforcement agencies. The state mandated training requirements of the Ohio Peace Officer Training Council have been integrated into the associate degree program.

**Job Opportunities**
Graduates are employed by private, federal, state and local law enforcement agencies. Job titles include sheriff's deputy, police and security officers.

| No. | | Course | Credit |
|---|---|---|---|
| CJ | 101 | Orientation to Law Enforcement | 1 |
| PSCI | 106 | Police Communication Operations | 2 |
| PSCI | 140 | Investigations Techniques and Methods | 3 |
| PSCI | 210 | Crime Prevention and Community Relations | 2 |
| CJ | 130 | Photography | 2 |
| HC | 102Q | HPE: Physical Conditioning | 1 |
| SEPS | 100 | Introduction to Security | 3 |
| COMM | 122 | Communications II | 3 |
| CJ | 132 | Evidentiary Photography | 3 |
| PSCI | 245 | Accident Investigation | 3 |
| CJ | 120 | Criminal Law | 4 |
| HUM | 203 | Ethics, Values and Morality | 3 |
| MATH | 201 | College Algebra I | 3 |
| PSYC | 150 | Introduction to Psychology | 3 |
| CJ | 150 | Juvenile Delinquency and Procedures | 4 |
| CJ | 250 | Criminology | 3 |
| PSCI | 180 | Criminalistics I | 3 |
| PSCI | 235 | Police Report Writing | 2 |
| PSCI | 260 | Interviewing and Interrogation | 2 |
| OAT | 180 | Keyboarding | 1 |
| COMM | 123 | Communications III | 3 |
| PSCI | 270 | Police Administration | 3 |
| PSCI | 280 | Criminalistics II | 3 |
| HC | 115 | First Responder | 2 |
| MICS | 121 | MicroSoft Works for Windows | 3 |
| SOCI | 165 | Cross Cultural Studies | 3 |
| COMM | 130 | Speech | 3 |
| PSCI | 223 | Criminal Evidence | 3 |
| PSCI | 240 | Advanced Investigation | 3 |
| PSCI | 281 | Criminalistics III | 3 |
| CJ | 222 | Laws of Arrest, Search and Seizure | 3 |
| CJ | 263 | Crisis Recognition and Referral | 3 |
| COMM | 104 | Job Search Techniques | 1 |
| PSYC | 152 | Abnormal Psychology | 3 |
| PSCI | 250 | Peace Officer Basic Training | 18 |

# Admission Information

## Who Can Apply?

Hocking College follows an open admission policy by accepting high school graduates, persons holding a GED or those with an interest in pursuing a technical program or the Transfer Module. Some programs may require additional criteria. Prospective students having neither a high school diploma nor an equivalency certificate should schedule an appointment with an admission counselor.

## How To Apply

Applicants should follow the admission procedures outlined below:

**Application** Applicants must complete and return the admission application with a non-refundable $15 application fee.

**Transcripts** Applicants should forward high school transcripts (and college transcripts if applicable) to the Admission Office. If the applicant is not a high school graduate but has completed the GED test, then these results should be forwarded to the Admission Office.

## Campus Visits

Prospective students may schedule a campus visit and admission interview by calling the Admission Office. Admission counselors are available Monday through Friday from 8AM to 5PM and on selected Saturdays by appointment. In addition, group Campus Visitation Sessions, which include campus and technology tours, financial aid and housing overviews, are held on selected Thursday afternoons. Reservations for Campus Visitation Sessions are made through the Admission Office.

If you need accommodations while visiting the College, call our own Quality Inn Hocking Valley for reservations, 614 753-3531. Travel arrangements may be made through the Uniglobe Travel Agency at 614 753-3510.

## Special Admission Requirements

The Dietetic, Emergency Medical (EMT-A and EMT-P), Fire and Emergency Services, Health Information Management, Medical Assisting, Nanny, Nursing Level I and II and Police Science technologies have special admission requirements in addition to the basic requirements previously listed. Special requirements are due to limited class and clinical facility spaces and are necessary to meet state or national requirements. These special admission requirements may be obtained from the Admission Office. The Vice President for Enrollment Services will make the final decision in the admission of all students.

## Admission For International Students

Hocking College is authorized under federal law to enroll non-immigrant aliens. International applications should be made six months prior to the quarter the applicant seeks to enter the College in order to insure the processing of the F-1 Visa. International applicants should follow the procedure below:

**Application** The applicant must submit a complete application form and non-refundable $25 application fee.

**Financial Statement** Applicants must submit a financial statement certifying that financial resources are available for education and support while studying at the College.

**Personal Information Sheet** Applicants must submit a completed personal information sheet.

**Transcripts** Official credentials, including subject and grades, must be received from all secondary schools, colleges or universities which the applicant has attended. If credentials are not in English, an official translation must be provided.

**English Language Proficiency** Results from the Test of English as a Foreign Language (TOEFL) exam are encouraged, but not required for admission. Students are tested upon their arrival at the College. If language proficiency is below acceptable standards, students must attend ESL classes until proficiency is obtained. Students in upper level ESL courses may be eligible to take technical courses simultaneously.

**Transfers** Hocking College accepts international students who may wish to transfer from other U.S. colleges and universities. Students who wish to transfer should follow the application procedures outlined above.

**Interview** Applicants must interview with the International Student Advisor before enrolling in classes. Pre-registration requirements must be completed.

## Affirmative Action Statement

Hocking College offers equal educational and employment opportunities without regard to race, color, religion, marital status, national origin, sex, age or disability. Hocking College is an equal opportunity institution. Our services and facilities are available to all.

# Financial Information

## Tuition and General Service Fees*

| | | |
|---|---|---|
| **Residents of Ohio** | | |
| Full-time fee | 12-19 credits | $694 per quarter |
| Part-time fee | 1-11 credits | $58 per credit hour |
| **Students Residing Outside of Ohio** | | |
| Full-time fee | 12-19 credits | $1388 per quarter |
| Part-time fee | 1-11 credits | $116 per credit hour |
| **International Students** | | |
| Full-time fee | 12-19 credits | $1500 per quarter |

Laboratory and uniform fees, if required, are in addition to tuition and general service fees.

## Approximate Living Expenses

| | |
|---|---|
| Room and Board | $1350 per quarter |
| Books | $300 per quarter |

## Student Activity Fee

| | |
|---|---|
| Full-time students | $5 per quarter |
| Part-time students | Prorated |

## What These Fees Mean

*Tuition* covers the cost of classroom instruction. The *General Service Fee* partially supports Admission, Financial Aid, Student Affairs and other non-instructional support services. *Approximate Living Expenses* will vary depending on accommodations. The *Student Activity Fee* was approved by a vote of the student body and helps to support the Student Center. *Laboratory and Uniform Fees* cover the cost of consumable supplies required for specific courses.

*All fees are subject to change without prior notice.

## Payment of Fees

Students will receive a fee bill detailing charges assessed at the time of registration. Fees or other financial arrangements are due at the time of registration. Checks should be made payable to Hocking College. Social Security numbers should be shown on the face of the check to ensure proper credit. American Express, Discover, Mastercard and Visa may be used to pay tuition and fees.

To avoid a late charge, all accounts must be paid in full by the first day of the quarter. Assessment of a $10 fee plus any collection cost will be made for payment of fees with a check returned by the bank for any reason. Students may not register, receive a transcript or graduate if the account balance is not paid in full.

## Refunds

Instructional, general service and laboratory fees are returnable in part if a student withdrawls from the college. In order to be eligible for a return of fees, the student must present, within the times listed, the written withdrawal form to the Student Affairs Office as per instructions on the withdrawal form.

If exceptional circumstances prevent the student from officially withdrawing, this case can be presented for special consideration.

The admission application fee and a one time registration fee charged to first term students are not returnable. An administrative fee of 5% of tuition and fees is nonreturnable for all students.

For all students, except those registered for the first time, quarter fees will be returned according to the following schedule:

- From the date on which the fees were charged until the date before classes begin, full refund, less a 5% administrative fee.
- From the first day of classes through the sixth day of classes, 90% of tuition, general service and laboratory fees.
- From the seventh day of classes through the fourteenth day of classes, 50% of tuition, general service and laboratory fees.
- From the fifteenth day of classes through the twenty-eighth day of classes, 25% of tuition, general service and laboratory fees.
- No refund after the twenty-eighth day of classes.

For students registering with the college for the first time, quarter fees will be returned according to the following schedule:

- From the date on which the fees were charged until the day before classes begin, full refund less an administrative fee of 5% of tuition and fees.
- From the first day of classes through the fifth day of classes, 90% of tuition, general service and laboratory fees.
- From the sixth day of classes through the eleventh day of classes, 80% of tuition, general service and laboratory fees.
- From the twelfth day of classes through the sixteenth day of classes, 70% of tuition, general service and laboratory fees.
- From the seventeenth day of classes through the twenty-second day of classes, 60% of tuition, general service and laboratory fees.
- From the twenty-third day of classes through the twenty-eighth day of classes, 50% of tuition, general service and laboratory fees.
- From the twenty-ninth day of classes through the thirty-third day of classes, 40% of tuition, general service and laboratory fees.
- There are no refunds after the thirty-third day of classes.

Students who are dismissed by the college, and students who leave without following the withdrawal process, are not entitled to returned fees.

The refund policy for summer sessions or for modular, weekend and flexibly scheduled courses will use these same percentages. However, the periods of time involved are proportional to the length of the sessions, module or class period.

## Residence Policy

Because Hocking College is supported by taxpayers of Ohio, out-of-state students must pay a tuition surcharge. A student's residence is determined at the time of enrollment, according to the residence policy of the Ohio Board of Regents. Requests for information should be addressed to the Residency Committee, Hocking College Admission Office.

## Financial Aid

Grants, scholarships, loans, student employment and tuition work-off programs are available through the Financial Aid Office. Most programs are based on financial need as determined according to federal guidelines. The following briefly describes some of the forms of aid available, although complete information must be obtained from the Financial Aid Office.

**Grants** The two major sources of grant money are the Ohio Instructional Grant (OIG) and the federal Pell Grant. Both grants are awarded on the basis of financial need and do not require repayment. Students must maintain full-time status in order to receive maximum funding, but both the OIG and federal Pell may be prorated for less than full-time enrollment.

**Scholarships** Special donations have been made by different industries, businesses and private citizens to fund scholarships for first-year students and various technical programs including Ceramic, Culinary Arts, Nursing, Materials, Natural Resources and Computer Science. More than 30 special scholarships are available to first- and second-year students in these technologies.

Hocking College Foundation Scholarships are available through the generosity of the College and its faculty and staff. Foundation scholarships are given to outstanding first-year students and Principal Scholarships are awarded to 35 students through area high school principals each year.

The JOMc Academic Scholarship benefits both first- and second-year students with the highest academic achievement.

Scholarship selection is based on scholastic achievement, personal recommendations and a narrative accompanying the application. All students with a grade point average of 3.0 or better are encouraged to apply. Awards range from $300 to $1500 per year.

**Campus-Based Programs** The campus-based programs supplement financial aid awarded through the OIG and federal Pell Grant. The Federal Supplemental Educational Opportunity Grant (SEOG) is available to students who are U.S. citizens and demonstrate exceptional financial need. The Federal College Work-Study program allows students to work in a part-time job with earnings applied toward their college expenses.

Two college employment program let students work part-time to either earn money or reduce tuition. The Part-Time Employment program gives students with special skills who otherwise would not qualify for financial assistance a chance to work in on-campus part-time jobs. The Tuition Work-Off program allows students with exceptional need to "work off" tuition at on-campus work sites. Students skills are matched with job requirements.

**JTPA** The Jobs Training Partnership Act (JTPA) provides limited funds for books, tuition and fees to students meeting specific guidelines while attending Hocking College. Interested persons may contact the College or their local employment service for eligibility guidelines or additional information.

**Other Funding Sources** The federal Stafford Student Loan gives student access to low-interest educational loans through banks, savings and loan associations and credit unions participating in the program. Family income levels and need determine eligibility for either the Subsidized or Unsubsidized version of the loan. For students qualifying for a federal Subsidized Stafford Loan, the federal government pays the interest while the student is enrolled.

Other funding sources include the Bureau of Vocational Rehabilitation (BVR), Ohio National Guard Tuition Assistance Program and the GI Bill. BVR provides assistance to individuals with disabilities or handicaps and approximately ten percent of the students attending Hocking College receive some financial help through this agency. Men and women who are either enlisted in the National Guard or who are veterans are assisted financially through the other two programs.

Students should contact the Financial Aid Office for further details and applications.

**Ability to Benefit** Any student admitted to Hocking College who does not have a high school diploma or GED is admitted on the basis of the institution's determination of the student's ability to benefit from a college education. Students admitted under this classification are not eligible for federal financial aid programs (federal Pell Grant, federal Supplemental Educational Opportunity Grant, federal College Work-Study or federal Stafford Student Loan) until ability to benefit can be determined. All ability to benefit students desiring federal student aid must achieve minimum scores on a standardized assessment test administered by Academic Affairs in order to receive funding.

# Services for Students

### Academic Advising

Each student is assigned an academic advisor who assists the student to explore and pursue his or her educational goals. A student obtains a quarterly schedule block from the advisor and they work together to make schedule adjustments and assure progress toward the student's educational goals.

### Academic Advising Center

The Academic Advising Center offers advising services, coordinates absence tracking systems, refers students to other services such as counseling and career planning and provide in-depth advising intervention to all students on academic probation.

### Access Center

The Access Center, offered through the Center for Alternative Education, assists students with personalized inquiry, academic and support services. Staff assist with advising, tutoring, test-taking and arrange for campus transportation and classroom access. The Access Center also links students with other college services and with external service agencies.

### Alumni Association

The Board of Trustees officially recognized the Hocking Alumni Association to"...foster a fellowship of alumni, perpetuate a source of collegiate heritage for the present and future well-being of Hocking College." The Alumni Association provides special discounts, sponsors alumni social activities, establishes scholarships and publishes an alumni newsletter. Graduates are encouraged to keep the Alumni Office informed of name or address changes.

### Assessment

Prior to scheduling classes, students are required to be assessed in the areas of reading, writing and math. Results of the assessment are used to place students in the proper starting course for each of these areas

### Bookstore

For books and supplies or the sweatshirt that's a must in every student's wardrobe, Hocking's Bookstore meets most students' needs. Textbooks and other supplies for each technology are available, as well as an assortment of convenience items. The Bookstore is adjacent to the main parking area.

### Campus Ministry

The Campus Minister is employed by the Ohio Board of United Ministry in Higher Education and is available to students of all religious backgrounds. The Minister provides a listening and support system and coordinates fellowship gatherings.

### Career Planning

For many students, choosing the right career may be difficult. The Career Planning Center helps students explore interests, aptitudes and achievement levels.

### Counseling Services

Counseling Services offers a variety of personal, confidential counseling and student development services. Individual counseling is available to those experiencing personal or academic problems. Special workshops and courses cover topics of student interest such as assertiveness training, motivation, stress management, test taking and study habits.

### Day Care Connection

Tri-County Community Action Agency operates the Day Care Connection, a preschool day care center located on campus. The facility is a safe, protected learning environment for children and is convenient for parents attending the College. Inquiries should be directed to Child Care Director, 3485 College Road, Nelsonville OH 45764-9586. Telephone 614 753-9404.

### Entry Center

The Entry Center provides services to non-traditional students. The Center serves as a resource for individuals, groups and organizations to inquire and obtain information about Hocking College's educational opportunities for non-traditional students as well as a location for initiating the learning process by enrolling in courses.

### Food Service

Full meals and snacks are offered at several locations on campus by private vendors. Meal tickets may be purchased. Further information is available by contacting the Restaurant and Deli, 614 753-2770.

### Fresh Start

The Fresh Start program provides an opportunity for students who previously had academic difficulties to successfully return to the College. Fresh Start assists students in reversing the complications of poor academic standing.

## Health Center

The Health Center provides routine and emergency services for minor medical conditions and accidents. The Center is staffed by a registered nurse who acts under the direction of a local physician. Students are asked to provide a medical history and written authorization for emergency treatment. Claim forms regarding the student health insurance program are available at the Health Center.

## Hocking College Experience

The HC Experience, Hocking's student orientation program, provides services and assistance to new students in their transition to Hocking College. The orientation program also acquaints students with the purposes and programs of the College.

HC Experience days are schedule each quarter and all new students are expected to attend. Students meet with faculty and staff and learn about academic and student life at the College. For more information, contact Student Affairs.

## Housing

Hocking College is the only technical college in Ohio offering on-campus residential facilities. Hocking Heights Residence Hall, an on-campus dormitory, accommodates up to 325 students. Hocking Heights has made a commitment to the quality of life of every resident. Students must complete a Hocking Heights application, which is separate from the admission application, and return it to the Cashiers Office.

Many students move to the Nelsonville area while attending Hocking College. To assist with off-campus housing needs the College publishes an off-campus housing guide. The Housing Office assists students with on- and off-campus housing needs.

## Job Placement

The Placement Office connects students and alumni with prospective employers. Throughout the year, representatives from business and industry visit the campus to interview students. Students are assisted with the job search process, resume writing and interviewing skills. The Placement Office is located in Student Affairs.

## Learning Labs (PACE)

PACE (Personally Accelerated Career Education) instruction is offered in the learning labs. Special services available through these labs include flexible course scheduling for students with job and family commitments and a flexible rate of learning for those who choose to move rather quickly or slowly through a course. Students learn through written and audio-visual materials that are individualized and competency based. They also receive one-on-one assistance from instructors. The Reading Lab offers improvement programs in comprehension, vocabulary and word analysis.

## Learning Resources Center

**Library** The Library is dedicated to building a collection that supports and implements the instructional programs of the college. It contributes to institutional objectives by acquiring, organizing and circulating books and other print materials and by providing reference service and bibliographic instruction. Though the collection reflects Hocking's technical programs, students discover resource materials to enhance learning activities as well as materials for recreational reading. Access to collections at other libraries is available through consortium memberships and on-line database services.

**Media Center** The Media Center houses an extensive collection of computer-assisted instructional software, videotapes, films, audio-cassettes, slides and filmstrips related to the different programs of students at HC. Individual carrels are equipped for audio-visual viewing, listening, and computer use.

## News Network

Announcements and news for students are broadcast on the TV News Network. Monitors are located in the student lounge areas.

## Perry County Campus

The Perry County Campus in New Lexington, Ohio, offers a variety of courses both day and evening. Students may attend classes on a full- or part-time basis. Information on courses offered at the Perry County Campus may be obtained by calling 614 342-3337.

## Phi Theta Kappa

Phi Theta Kappa, an academic honorary fraternity, provides opportunities and services for outstanding students. Students are invited to become members in this national organization which serves the College and the community. For more information, contact Student Affairs.

## Student Activities

Hocking College offers a wide variety of recreational activities. The intramural program includes competition in flag football, indoor and outdoor soccer, volleyball, tennis, softball, basketball, bowling and golf. Facilities include the Recreation Center, the Student Center, tennis courts, softball fields, football/soccer fields, fitness trails, basketball courts, weight room, fitness exercise room, full locker room facility and student lounge with a big screen TV.

Outdoor recreation is plentiful in Southeastern Ohio. Within a short drive are five state parks and Wayne National Forest. Students interested in hiking, fishing, hunting, camping, rappelling and boating have hundreds of acres of Ohio countryside to enjoy. The 1,400-acre campus is criss-crossed with hiking and horseback riding trails.

A number of student organizations, including technology-related clubs, special interest groups and the Student Senate, sponsor a variety of student activities throughout the year.

## Student Guide

A student guide describing services, academic procedures, college rules and regulations is available in Student Affairs. Students are encouraged to obtain a copy and to become familiar with the information provided.

## Student Health Insurance

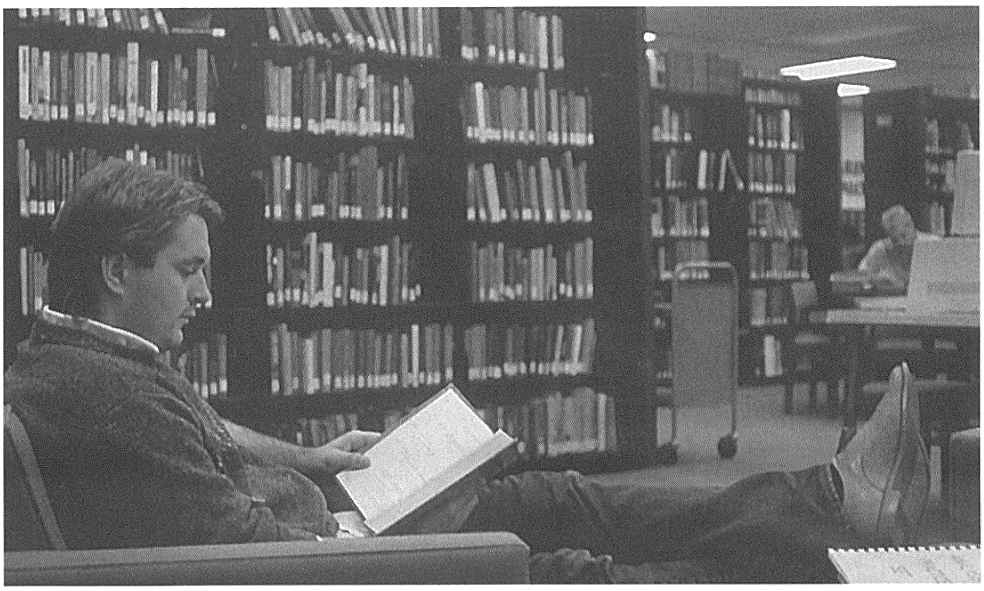
The college offers a comprehensive health and accident group major medical insurance policy designed to supplement the services provided by the college Health Center. This insurance is mandatory for all students carrying six or more credit hours unless the student completes a waiver indicating that comparable coverage is provided through a private or other health insurance plan. The college health insurance is not required for treatment at the college Health Center.

## Student Leadership Opportunities

Future employers are interested in a prospective student's ability to plan, promote, supervise and evaluate projects and events. Participation in the Student Senate, a technology club or special interest group offers the opportunity to learn important, marketable skills in a supportive, enjoyable environment.

## Testing Center

The Testing Center provides the opportunity for supervised testing outside the classroom and gives added flexibility to busy schedules.



### Transition Program and Center

The Transition Program provides a program and center enabling students access to a variety of instructional services designed to promote success in college and to facilitate communication among programs for special needs students. The Transition Program coordinated many special learning assistance areas: PASS classes, English support services, women's issues programming, reading and basic writing and other support services for special needs students. A vital part of the program is the Transition Center. During selected open hours, students are provided with academic help through such methods as instructor assistance, computer software, audio visuals and printed materials. Students may access the Center through instructor referrals or as a walk-in.

### Tutoring

Peer tutors are available to assist students in mastering general and technical course materials. Qualified tutors are chosen by technology instructors to tutor students individually or in groups. Students interested in these services should contact the General Studies Department, the Transition Center or Academic Advising.

### Veterans Assistance

Hocking College is approved for the training of veterans. The Veterans' Affairs Office is an important link between the student, the college and the Veterans Administration. The VA Office provides information regarding VA educational benefits, assists with the necessary paperwork and aids veterans in adjusting to college life. Federal laws governing the eligibility for educational benefits are strict, and veterans planning to attend Hocking College should contact the VA Office as far in advance of their anticipated enrollment as possible.

# Special Programs

## Alternative Education

Hocking College's Center for Alternative Education recognizes that students' ages, backgrounds and career interests may vary widely. Since each student is different, preferred methods of learning also differ. The Center for Alternative Education meets these varying needs through special programs and courses outside the boundaries of traditional classroom instruction. Included in CAE's offerings are support services for non-traditional, low-income, handicapped and returning adult students.

## Cooperative Education (Coop) Programs

Coop programs offer students the opportunity to combine paid work experience and college instruction. A number of coop programs are offered at the college. Students alternate working in a business/industry setting relating directly to their program of study with taking classes at the college.

## Customized Industry Training

Hocking College can provide technical courses on the premises of private and governmental agencies as part of its outreach program. Courses may be conducted day or evening, depending on the needs of the agency or business requesting the service. An alternative to conducting a full course is the on- or off-campus short course, which provides course work in a concentrated time frame. Examples include the International Homicide Investigation Seminar and seminars in Natural Gas Vehicle Conversion and Powerhouse computer training.

## Evening College

Courses and programs offered through Evening College prepare individuals for technical careers and provide technology updates. Evening courses are an alternative to regularly scheduled day courses. Classes after 5:30 PM make it possible for individuals with job and family commitments to attend college.

Several associate degree and certificate programs may be completed entirely through Evening College:

**Associate Degree Programs**

Accounting
Business Management
Human and Correctional Services

**Certificate Programs**

Accounting Clerk
Accounts Payable/Accounts Receivable Clerk
Juvenile Corrections Management Specialist
Massage Therapy

Activities Therapy
Advanced Cardiac Life Support
Advanced EMT-A
Baking
Bartender
Basic Trauma Life Support
Broadcast Production
Coding Clerk
Computer Applications for Business Owners
Cost Clerk
EMT-A
Hazardous Materials
Health Information Management Clerk
Income Tax Preparation
Microcomputer Accounting
Non Profit Accounting
Payroll Clerk
Pediatric Life Support
Practical Nurse
Purchasing Agent
Real Estate
Red Cross Standard First Aid Instructor
Refrigerant Technician
Running a 12 Lead EKG
Safety and Sanitation
Small Business Specialist
Volunteer Fire Fighting
Wildlife Control
Word Processing

**Hocking Institute for Minority and International Programs**

This institute is part of the Hocking College Affirmative Action program and is largely comprised of community volunteers. The institute offers specially designed outreach and support services and assists in preparing minority and international students for the opportunities and challenges at Hocking.

**Hocking Management Institute**

The Hocking Management Institute serves the special educational interests of those who have managerial or other professional responsibilities and wish to simultaneously pursue a college degree or professional development. The full degree program leads to an Associate Degree in Business Management or an Associate of Technical Studies degree. Advantages includes a special advising system, streamlined methods for taking courses and credit for prior learning gained through experience. Participants may choose the HMI Certificate which is part of the degree program and consists of courses covering topics relevant to managers.

### National Ranger Training Institute

The National Ranger Training Institute (NRTI) offers a series of certificate programs. The National Park Service/Fish and Wildlife Service Seasonal Officer Training program is designed for persons interested in seasonal positions with the National Park Service (NPS) or seasonal refuge officer positions with the Fish and Wildlife Service (FWS). The Seasonal Officer Training program is offered quarterly and prepares participants to perform law enforcement activities in areas administered by the NPS and the FWS. The Seasonal Officer Training program is sanctioned by the U.S. Department of Interior. Other certificates offered by the NRTI include Vertical Rope Rescue, NASAR Managing the Search Function, Wildfire Management and Emergency Medical Technician-Ambulance (EMT-A) Training, as well as 20 other individual modules.

### Ohio Peace Officer Basic Training

This program provides state mandated training for those interested in employment as law enforcement officers in Ohio. Applicants must hold a current commission from an Ohio law enforcement agency or political subdivision. Topics include patrol techniques, legal concerns, firearms training and general law enforcement.

### Open Entry

Students may start classes any day the college is open in a number of general and technical programs.

### PACE

Personally Accelerated Career Education (PACE) is a unique instructional method which allows students to enroll in selected courses any time the college is in session and to proceed through the course work at their own rate. Students choose instructional times most convenient to individual schedules - day or evening. PACE offerings include Communication, Math, Social Science, Business, Accounting, Drafting, Nutrition/Dietetic, Typing, Physics, Chemistry and First Aid/CPR courses. The PACE labs are staffed with full-time instructors who work with students on a one-to-one basis as needed.

**Portfolio Development**

Portfolio Development gives students the chance to earn course credit for learning based on non-college experience and training acquired before entering Hocking. The program helps both new and returning college students who have skills developed through employment, military or community experience. Students identify and document their prior learning as it relates to specific courses and submit the completed portfolio for assessment. Credits are granted directly, without taking the courses, on the basis of a satisfactory assessment evaluation.

**Public Safety Services Training Center**

This training center offers training and continuing education for emergency medical, fire, law enforcement and human and correctional services personnel. Programs may be offered at Hocking College or at the work site.

**Quest for Success**

Quest for Success is designed especially for new students to prepare them for college. Courses include college life, effective listening, study skills, interpersonal communications and a recreation program.

**Second Season**

Second Season offers a variety of courses, workshops and seminars beginning in October.

**Vehicular Fuels Institute**

The Vehicular Fuels Institute is a training and resource center providing instructional, consulting, applied research, testing, data collection and analysis and services related to alternative fueling of vehicles. The Institute has evolved in response to pressing national needs related to clean air, shortages of traditional fuels and technological shifts in conversion to dual fuels or dedicated alternative fuel operation; service, safety and operation of alternatively-fueled vehicles; compressor station design, operation and maintenance; and data collection, testing and analysis on a national basis related to performance of alternatively-fueled vehicles.

**WIN Careers**

Women in Non-Traditional Careers (WIN) encourages and assists women in entering and completing technical programs in non-traditional career areas.

# HC Means Business

Businesses owned and operated by the College and student-run corporations provide a wealth of business and hands-on experience.

### Campus Safety

The Department of Campus Safety is a full-time, around-the-clock security service for Hocking College and is also available to private businesses or institutions. Assistance is provided to local law enforcement agencies, community and civic groups and at college-related events which benefit from traffic control, investigative assistance and other security services.

### Forest Management

With faculty supervision, Forestry and Timber Harvesting students cruise, buy, cut and sell timber and operate forest management and timber stand improvement programs for a variety of clients in the area.

### Friendship Pottery

The Friendship Pottery Outlet in Nelsonville is run by Business Management students and was initiated through a connection with Friendship Pottery in Roseville, Ohio.

### Gittinger Assessment Center

The Gittinger Assessment Center staff uses a variety of standardized assessment instruments to determine preferred learning styles, interests, attitudes and achievement levels of each student. From these processes, students gain self-knowledge and faculty and staff are aided in helping students focus on career and development plans. These same assessment instruments may be used to provide services to business, industry, agency or education professionals.

### Hocking Special-T's

A student run business in design application on t-shirts and sweatshirts for various technologies, intramural teams and outside businesses and agencies.

### Quality Inn Hocking Valley

The Quality Inn Hocking Valley is a full-service public facility on Hocking's campus. Culinary Arts and Hotel/Restaurant Management students learn each aspect of the business by rotating through job assignments not only as students, but as part-time employees.

### Uniglobe Travel Agency

The Uniglobe Travel Agency is a full-service travel agency in Nelsonville. The Agency allows students to work under the supervision of travel professionals.

**Wildlife Products**

Wildlife Products is a student-run profit center providing on-campus employment for Natural Resources and Business students. Several types of birdfeeders and houses are constructed and sold to state departments of natural resources and the general public.

# HC and the Community

## Welcome to Nelsonville

Nelsonville is an historic community rich in the history of Southeastern Ohio and the Hocking Valley. The area is home to approximately 5,000 people. Restored buildings and shops line the Public Square where a turn-of-the-century fountain marks the center of town. Forested hills surround the town and farmhouses dot the countryside.

The area's climate varies with the seasons. Warm, humid summers are followed by clear autumn days and cool nights. Winters are cold and damp with occasional snow. Spring can be changeable and wet. Summer highs average in the 80's and winter temperatures are usually in the 20's and 30's.

## Hocking Valley Scenic Railway

Visitors can board old Engine 33 in Nelsonville for a scenic ride across the campus and through the hills of Southeastern Ohio. The train runs on weekends from Memorial Day through October with special Christmas schedules. For more information call 513 335-0382.

## Hocking Woods Nature Center

Hocking Woods Nature Center features an interpretive building, wildlife habitats, ponds, walkways, feeding stations and seasonal programming for the public and groups of school children. All activities at the Nature Center are designed and conducted by Recreation and Wildlife students majoring in Interpretive Services.

## International Bowhunter Challenge

The International Bowhunter Challenge is held on campus each summer and is sponsored by the Hocking College Archery Club and the International Bowhunter's Organization. The competition is the third and final round which determines national champions in over ten major shooting classes for men, women and youth. More than 1,000 archers compete each year.

## Paul Bunyan Show

The Paul Bunyan Show, Ohio's premier lumberjack and logging show, is held on campus the first Friday, Saturday and Sunday in October. Over 55,000 visitors come to see the latest lumbering equipment and special attractions such as student and professional lumberjack competitions, the Ohio Flat Pickin' Guitar Championship and to enjoy the popular Bunyan Burger. The Paul Bunyan Show is sponsored by Hocking College and the Ohio Forestry Association. Hocking students are involved in nearly every aspect of the show.

**Robbins Crossing and Ohio-Hocking Forestry Museum**

Exhibits at the Ohio-Hocking Forestry Museum, part of Hocking's campus park, illustrate the history of the forest industry in Southeastern Ohio. The museum also features Robbins Crossing, a restored living history community. Each weekend throughout the summer and fall, costumed Interpretive Services students recreate the people and setting of rural 19th century Southeastern Ohio for thousands of visitors, many of whom arrive aboard the Hocking Valley Scenic Railway.

# Policies and Procedures

## Attendance

The academic and laboratory demands of many technical programs make class attendance essential for success. Specific attendance requirements are established by the instructor for each course, and instructors are required to keep a record of absences for each student. Attendance is reported on Hocking College grade transcripts. Students receiving assistance from federal agencies such as the Veterans Administration and the Bureau of Vocational Rehabilitation are required by those agencies to attend classes regularly.

## Auditing of Courses

Students may enroll in courses for no credit by registering on an audit basis. Students may not change from an audit to a credit basis after the quarter has begun. Regular fees must be paid for auditing a class.

## Auto Registration and Parking

All vehicles driven by students to school must be registered with the Department of Campus Safety. A schedule of when and how to register vehicles may be obtained at the Campus Safety Office. Only properly registered cars will be permitted in HC parking areas. Students who register cars will receive a copy of parking regulations which are strictly enforced.

## Cancellation of Classes

Only in rare circumstances will the college close due to inclement weather. There will be a number of times when the public schools might close while the campus remains open. Also, the campus might close only for morning classes and reopen for afternoon and evening classes. In the event of a forced cancellation, announcements will be made on major radio stations in the surrounding area. The stations will be notified by at least 7 AM. Students are asked not to call the college switchboard. Listen for specific instructions on one of these radio stations

| **Athens** | | **Nelsonville** | |
|---|---|---|---|
| WOUB | 91.3 FM | WAIS | 770 AM |
| WXTQ | 105 FM | WAIS | 89.1 FM |
| WATH | 97 AM | WSEO | 107.7 FM |
| **Lancaster** | | **Logan** | |
| WHOK | 95.5 FM | WLGN | 98.3 FM |
| WLOH | 1320 AM | WLGN | 1510 AM |

## Change of Technology

Students may wish to change from one technology to another due to changing interests. Students should first consult their academic advisor and the current program coordinator as well as the coordinator of the program into which they wish to change. After this consultation, students should contact the Records Office to complete the required forms.

## Grading

Hocking College uses a standard letter grade system and assigns quality points to each letter grade 'A' through 'D'. These letter grades are the only grades assigned quality points. The grade point average (GPA) is the sum of the quality points divided by the sum of all credit hours where letter grades are earned. The grade report contains both a cumulative (total to date) grade point average (CPA) and a quarterly grade point average (QPA). The letter grade symbols and their quality points used in the calculation of the GPA are as follows:

| | | | | | |
|---|---|---|---|---|---|
| A | 4.0 | B- | 2.7 | D+ | 1.3 |
| A- | 3.7 | C+ | 2.3 | D | 1.0 |
| B+ | 3.3 | C | 2.0 | D- | 0.7 |
| B | 3.0 | C- | 1.7 | F | 0.0 (course failure) |

The following grade symbols are not included in the calculation of the GPA:

| | |
|---|---|
| NR | Not reported by instructor |
| S | Satisfactory |
| U | Unsatisfactory |
| AU | Audit |
| PR | PACE course in progress (converts to an F after two quarters) |
| CT | Continuing traditional course |
| I | Incomplete (converts to an F after one quarter) |
| W | Withdrawal |
| CE* | Credit by examination |
| CA* | Credit by advanced standing |
| CL* | Credit for life experience |
| T* | Transfer |

*These credits are not officially granted until students have completed 12 regular credits. Consult the Student Guide for information and procedures.

The following symbols may appear before a course name on a grade report or transcript.

| | |
|---|---|
| * | Course dropped from cumulative totals because of program change |
| X | Repeated course not figured into cumulative totals |
| CS | Course substitution |

**Change of Grade** If students are unable to complete a course in the normal allotted time, they may be eligible to receive an 'incomplete' or progress (PACE) grade. Eligibility is determined by the course instructor. After completing the course, a grade change form, submitted by the instructor, is required.

## Graduation Requirements

**Associate Degree Requirements** Successful completion (with passing grade) of the course requirements as specified on the technology curriculum sheet, with the following exceptions: course substitutions; credit by advanced standing; credit by exam; credit by life experience (portfolio development) and course waiver.

Students must earn a minimum of 30 credit hours at Hocking College or in a Hocking College approved program in addition to credits awarded by any special credit method (credit by examination, credit by advanced standing and credit by life experience through portfolio development), or credits transferred from other colleges or any combination of methods. Residency requirements are a minimum of 15 credits.

The attainment of a "C" (2.00) average in all technical courses for the specific degree program and a "C" (2.00) total overall cumulative point average toward the specified degree at Hocking College.

Completion and filing of an application for graduation form through Student Records. Payment of graduation fee.

Students must meet all financial obligations to the college before their diploma or certificate is issued.

**Dual Degrees** To obtain a second degree, a student must have credit for all the technical courses in the second degree program and they must also have the basic and general courses that are determined as necessary for the administrator of that technical program. The student must earn a minimum of 18 technical credits beyond the total required in the first associate degree program.

## Probation and Academic Dismissal

Academic dismissal from the institution in all cases will be determined by the Vice President of Student Affairs. Students will be placed on academic probation if, after completing the following credit hours, they have failed to earn the corresponding minimum cumulative grade point averages.

| Credits Attempted | Minimum Cumulative GPA |
|---|---|
| 12-30 | 1.500 |
| 31-44 | 1.600 |
| 45-74 | 1.750 |
| 75 or more | 2.000 |

In addition, students completing more than five credits and earning less than a 1.500 for any given quarter will be placed on probation. These minimum grade point averages insure progress toward graduation.

Students on academic probation two consecutive quarters who have not earned the required grade point average will be subject to academic dismissal. Students will be subject to academic dismissal if the cumulative grade point average falls below .750 at any time after completing 20 hours. Appeals of these policies should be made to the Vice President for Student Affairs.

## Transfer Credit

Students who have completed course work at another institution should have their work evaluated for transfer credit at Hocking College. An official copy of a transcript should be sent to the Admission Office.

Students have successfully transferred credits earned at Hocking College to a number of institutions. The accepting institution is responsible for determining the transfer of credit. Students who want to transfer Hocking College credits to another institution should ask about the institution's transfer procedure.

# Academic Terms

This section provides an explanation of academic terms used at Hocking College.

**Academic Advising**
The process by which a faculty advisor or counselor assists a student in scheduling a program of study and courses appropriate to the program, monitors the student's progress, assists with academic problems, answers academic questions or refers the student to appropriate resources.

**Academic Probation**
The status of a student who fails to achieve minimum grade standards.

**Accreditation**
The voluntary process of certification by which an institution or educational program maintains certain standards. Hocking College is accredited by the North Central Association of Colleges and Schools, and various programs at the college are accredited by specialized accrediting agencies.

**Add a Class**
The process of registering for additional classes when a student has already completed the registration process.

**Advanced Standing Credit (CA)**
The determination that a student, because of acceptable education, training or military experience, has a specified number of credit hours applicable to a degree program.

**Associate Degree**
A credential awarded to students who have successfully completed an educational program usually lasting two years.

**Associate of Applied Business (A.A.B.)**
**Associate of Applied Science (A.A.S.)**
These degrees are awarded in recognition of successful completion of two-year technical education programs which require a minimum of 90 credit hours enrollment in a specialized degree program aimed at preparing students for entry into specific occupations.

**Associate of Individualized Study (A.I.S.)**
A customized program for those whose career interests do not fit regular associate degree offerings. This program combines technical and general studies courses with prior learning experience.

**Associate of Technical Study (A.T.S.)**
The Associate of Technical Study is awarded for successful completion of an individually planned technical education program designed to respond to the needs for specialized technical education with an identifiable career goal. An area equivalent to 45 credit hours in technical studies may be formed either by a) a coherent combination of techjical courses selectively drawn from two or more technical programs currently offered or b) courses completed or trainin received by a student at other post secoindary institutions, vocational centers or other educational enterprises judged by the institution to be of college level. A minimum of 90 credit hours is required for the degree.

**Auditing a Course**
Enrolling in a course for no credit. A student who audits a course is not expected to carry out assignments or take examinations, and class attendance for the auditing student is optional. A student who audits a course pays the regular fee but receives a grade of AU which carries no credit.

**Board of Trustees**
Comprised of nine citizens living within Athens, Hocking and Perry counties, the Board of Trustees is a legal policy-forming board which owns the college building, grounds and equipment and determines college policy.

**Board Policy**
A written statement approved by the Board of Trustees of Hocking College outlining principles which direct of the operation of the college.

**Certificate of Completion**
Awarded for successful completion of a course or series of courses less than twelve credit hours leading to acquisition of specific knowledge and skills.

**Certificate Program**
Anintegrated series of courses within a technical program by which an individual acquires knowledge and skills that are directly applicable to entry-level employment. A certificate rpogram is completed in less times than a program leading to an associate degree.

**Class Hour**
Time scheduled as part of the instructional plan of most courses utilizing any combination of instructional methods such as lecture, directed discussion, demonstration or presentation of audio-visual materials.

**Clinical Laboratory Hour**
An hour in Health Careers technology programs in which students are assigned to a health-related agency because such a facility provides a realistic environment for learning.

**College Procedure**
A written statement approved by the college administration outlining the steps to be taken for carrying out Board policies or college processes.

**Commencement**
The college graduation exercise at which degrees and certificates are awarded to successful students.

**Concurrent**
Describes courses that must be taken at the same time.

**Contact Hour**
A 50- to 60-minute period of educational activities which is part of a course of instruction, whether in a classroom, a laboratory or at an off campus site.

**Corequisite**
A course which must be taken at the same time as another course.

**Counseling**
A professional service designed to guide students to a better understanding of themselves, their career goals, problems or potentials by using modern psychological principles.

**Course**
A planned series of educational experiences such as presentations, discussion and laboratory exercises centered around a particular subject and conducted by an instructor.

**Course Description**
A written statement briefly explaining the subject matter of a course.

**Course Number**
The two, three or four letter and three digits (for example, CER 203) which identifies a course offered by the college.

**Course Substitution**
The process of allowing students to replace a course in the curriculum with another course.

**Credit by Advanced Standing (CA)**
Students may submit materials documenting prior learning. Advanced standing credit is granted by the department director/dean.

**Credit by Examination (CE)**
Credit awarded to a student for learning gained from sources other than college classes and demonstrated by successful performance on a comprehensive test - either a standardized examination prepared by a national organization or one developed by a college instructor.

**Credit for Life Experience (CL)**
Credit awarded to a student for skills and knowledge acquired from experience on the job, in the community, in the military or through personal development or travel. Learning is described, documented and evaluated through portfolio development.

**Credit Hour**
A standard unit of measurement for college work. The number of contact hours per credit hour is determined by the type of activities (class hour, laboratory hour or clinical hour).

**Curriculum**
A series of courses, required and elective, the successful completion of which entitles students to a degree or certificate.

**Deans' List**
Recognition of outstanding academic accomplishment by students who achieve a 3.30 grade point average while completing at least 12 credit hours during any given quarter.

**Degree**
A credential conferred upon students by a college or university for the completion of a prescribed course of study. Technical and community colleges traditionally award the associate degree at the end of a program usually requiring two years. Four-year colleges confer the Bachelor's Degree for the completion of a program usually requiring four years. Graduate degrees are awarded for study beyond the Bachelor's and include the Master's and the Doctoral Degrees.

**Drop a Class**
The process of removing a class from a student's registration.

**Elective**
A course which may or may not be required in a degree or certificate but which the student selects freely or from a specified type or group of courses.

**Faculty**
The teachers of a college.

**Financial Aid**
Money provided to students from institutional, governmental or private sources in the form of grants, scholarships or loans. Financial aid helps students pay tuition or other costs of education.

**Full-Time Student**
A student who is enrolled in at least 12 credit hours.

**GED Test**
General Education Development Test for Ohio Certification of High School Equivalence. Individuals who have not completed a high school education may earn an equivalent by taking the GED test.

**Grade Point Average**
Mathematically computing academic performance by assigning a value (quality point) to each grade, multiplying the number of credit hours by the quality points, and dividing the product by the number of hours attempted.

**Graduation Requirements**
Those courses specified in a program of study which must be completed and the academic achievement level students must attain in order to qualify for a degree.

**Grant**
Money provided to students for reason other than scholarly achievement (usually financial need) to help pay tuition or other costs of education.

**Intramural Activities**
Organized pursuits of students at Hocking College, such as athletics, in which they compete with other students from Hocking.

**Internship**
On-the-job training in the workplace of a cooperating agency coordinated by an instructor.

**Laboratory Hour**
Time scheduled as part of the instructional plan for the practical application of the theory presented in courses. Laboratory activities include conducting experiments, perfecting skills and practicing procedures.

**Occupational Certificate**
Awarded for successful completion of twelve or more credit hours in which the individual acquires knowledge and skills that are directly applicable to entry-level employment.

**Out-of-State Resident**
A person whose permanent residence is outside the state of Ohio.

**Part-Time Student**
A student who is enrolled for less than twelve credit hours.

**Portfolio Development**
The process of documenting skills and knowledge acquired from experience on the job, in the community, in the military, through travel or through personal development.

**Practicum**
A course involving on- or off-campus work experience integrated with academic instruction in which learned concepts are applied to practical situations within an occupational field.

**Prerequisite**
A course which must be completed before a student is prepared to take a subsequent course in a sequence. If a course has a prerequisite, that requirement is indicated following the course description.

**President's List**
Selected students recognized by the President of the college for outstanding academic achievement, college service and demonstrated leadership ability.

**Program of Study**
A series of courses, required and elective, the successful completion of which entitles students to a degree or certificate.

**Quarter**
An identified portion of the academic year during which most courses are scheduled. Quarters at Hocking College are 11 weeks in length.

**Registration**
The process of selecting courses, choosing section by day and hour, paying tuition and submitting the schedule.

**Satisfactory Progress**
The level of achievement and advancement toward a degree or certificate required for continuing enrollment in the college and maintenance of eligibility for financial aid. The criteria for satisfactory academic progress is a specified accumulative grade point average for the number of hours earned. The criteria for satisfactory progress for financial aid eligibility is available from the Financial Aid Office.

**Scholarship**
Money provided to students as recognition of academic or special achievement to help them pay tuition or other costs of education.

**Section**
An individual class meeting at a particular time and assigned to a specific instructor. Example: Section 11 of Personal Finance meets from 12:00 to 12:50 Tuesday, Thursday and Friday.

**Seminar**
An educational experience in which a faculty member directs a relatively small number of students in discussion involving the development and/or review of concepts which are applied to practical situations.

**Short Course**
A brief instructional program.

**Standards of Student Conduct**
A code of behavior required of persons enrolled at Hocking College. See Student Code and Discipline in the Student Guide.

**State of Legal Residency**
Based upon the information on the student's admission application, the student is classified as an Ohio resident or an out-of-state student. Ohio residency requires that a person maintain a place of residence in Ohio for at least 12 consecutive months immediately preceding enrollment, be qualified to vote in Ohio and receive state welfare benefits and be subject to tax liability.

**Student Employment**
A program which permits students with demonstrated need to earn income by working in jobs on campus. When possible the assignment is relevant to a student's educational interest.

**Student Load**
The number of credit hours for which a student is registered during a quarter. A full-time load is a minimum of 12 credit hours per quarter.

**Technical Certificate**
Awarded for successful completion of a prescribed sequence of courses within a given technology in which the certificate is offered. The total credit hours are at least 50% of the number required for the associate degree in that technology. The technical component will be 27-33 quarter hours with the balance being in general courses.

**Technology**
The program of study in which a student is enrolled at Hocking College.

**Transcript**
A copy of a student's academic record listing courses taken, grades earned and degrees or certificates conferred.

**Tuition**
The fees charged for taking courses at the college and for using general services such as the library, counseling or the health center.

**Undergraduate**
A student enrolled in a technical or community college or the first four years of a university program, as opposed to a graduate student, who has completed the Bachelor's Degree.

**Workshop**
A brief intensive educational program.

# Personnel

## Board of Trustees

**Richard Brandt**
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## Administrative Staff

**Dr. John J. Light**
President

**Dr. Corrine Brown**
Director of Management Information Systems

**Dr. James Bowser**
Vice President of Marketing/ Development

**Dr. J. William Hill**
Vice President of Fiscal Operations

**Dr. Judith Maxson**
Vice President of Academic Affairs

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Vice President of Administrative and Special Services

**Dr. Leif Hatlestad**
Executive Personnel Officer

**Dr. Roxanne DuVivier**
Vice President of Student Affairs

**Dr. Josh Lancaster**
Dean of Academic Education

**Dr. Steve Miller**
Director of Counseling

**Dr. Bonnie Prince**
Dean of Alternative Education

**Dr. Candace Vancko**
Vice President of Enrollment Services

**Karen Diller**
Director of Financial Aid

**Judith Sinnott**
Director of Public Relations

**E. Wilburn Smith**
Director of Affirmative Action and Intercultural Programs

## Automotive and Energy Technologies Faculty

**Pat Walsh**, 1991
Department Director, B.A., 24 years industrial experience.

**Tony Ross**, 1990
Technician, 11 years industrial experience.

**Frank Talbott**, 1995
Technician, 18 years related experience.

**Richard Vieland**, 1984
Instructor, A.A.S., 11 years industrial experience.

**Steve West**, 1991
Instructor, B.A., 18 years industrial experience.

**Larry Wright**, 1985
Technician, A.A.S., 20 years industrial experience.

## Business Technologies Faculty

**Nenna Davis-Maurath**, 1986
Department Director/Business, M.A., 4 years teaching experience, 6 years related experience.

**Mary Luttrell**, 1992
Department Director/Hospitality (Acting), Masters Degree, 25 years related experience.

**Dave Aiken**, 1979
Instructor, M.Ed., 11 years previous teaching experience, 11 years related experience.

**Sam DiLiberto**, 1981
Instructor, M.Ed., 3 years previous teaching experience, 3 years related experience.

**Randy King**, 1984
Instructor, B.S., 15 years related experience.

**Tom Landusky**, 1992
Instructor, Associate Degree, 19 years related experience.

**Thomas Lynch**, 1979
Instructor, Licensed Public Accountant, M.Ed., 4 years previous teaching experience, 12 years related experience.

**Janet McComb**, 1974
Instructor, M.Ed., 2 years previous teaching experience, 7 years related experience.

**Bill McDaniel**, 1987
Instructor, B.S., 25 years related experience.

**Barbara McGoye**, 1983
Instructor, A.A.S., 12 years previous industry experience.

**Pete Meyer**, 1990
Instructor, 10 years related experience.

**Marc Newman**, 1977
Instructor, Ph.D., 12 years previous teaching experience, 6 years related experience.

**John Noble**, 1982
Instructor, B.A., 12 years related experience.

**Kathleen Patton**, 1986
Instructor, A.A.S., 3 years previous teaching experience, 10 years industry experience.

**Anne Polenchar**, 1982
Technician, B.S., 6 years previous industry experience.

**Dorothy Poling**, 1971
Instructor, M.Ed., 3 years previous teaching experience, 2 years related experience.

**William Rood**, 1988
Instructor, Licensed Broker, B.S., 17 years related experience.

**Barbara Sunderlin**, 1986
Instructor, M.Ed., 10 years previous teaching experience, 1 year related experience.

**Doug Weber**, 1986
Instructor, A.A.B., 4 years previous teaching experience, 13 years industry experience.

**Jerry Yates**, 1988
Manager of Student Run Businesses, 22 years related experience.

## Engineering and Science Technologies Faculty

**Pat Walsh**, 1991
Department Director (Acting), B.A., 24 years industrial experience.

**David Barger**, 1979
Instructor, M.Ed., 2 years previous teaching experience, 2 years industrial experience.

**Roxane Barrows**, 1993
Instructor, Masters Degree, 3 years related experience.

**Barbara Berry**, 1983
Instructor, M.A., 15 years previous teaching experience, 1 year business experience.

**Todd Davidson**, 1983
Technician, A.A.S., 3 years industrial experience.

**Ted Gabrykewicz**, 1992
Instructor, Masters Degree, 16 years related experience.

**Edward Geckler**, 1982
Instructor, B.S., 1 year previous teaching experience, 2 years industrial experience.

**Jerry Hart**, 1991
Instructor, Ph.D., 7 years related experience.

**Carol Hill**, 1991
Instructor, Masters Degree, 5 years related experience.

**B. Neil Hinton**, 1989
Instructor, B.S., 21 years industrial experience.

**Lindell Holtzmeier**, 1977
Instructor, Ph.D., 7 years previous teaching experience, 5 years industrial experience.

**Bruce Jones**, 1989
Instructor, M.S., 9 years previous teaching experience.

**Gail Jordan**, 1986
Instructor, M.S., 1 year previous teaching experience, 16 years industrial experience.

**Lisa Ketron**, 1991
Instructor, Masters Degree, 10 years related experience.

**Sue Latz**, 1986
Instructor, Ph.D., 5 years previous teaching experience.

**Jerry McClain**, 1987
Instructor, A.A.S., 4 years related experience.

**Sharon Morel**, 1980
Instructor, M.Ed., 4 years previous teaching experience.

**Gus Morris**, 1984
Instructor, A.A.B., 1 year industrial experience.

**Becky Reynolds**, 1984
Instructor, Masters Degree, 13 years related experience.

**Bill Schaller**, 1990
Instructor, Masters Degree, 21 years related experience.

**Jeff Stickler**, 1991
Instructor, Bachelors Degree, 3 years related experience.

**Harry Tompkins**, 1983
Instructor, B.S., 7 years industrial experience.

**Marcia Welch**, 1993
Instructor, Associate Degree, 1 year related experience.

**Ken Wiseman**, 1993
Instructor, Bachelors Degree, 12 years related experience.

## General Studies Faculty

**Claudette Stevens**, 1979
Department Director, M.S., 4 years previous teaching experience, 3 years related experience.

**Rita Bennett, 1989**
Instructor, M.S., 2 years previous teaching experience, 2 years related experience.

**Linda Bitters**, 1987
Instructor, M.A., 3 years previous teaching experience, 3 years related experience.

**Farrell Brody**, 1989
Instructor, Masters Degree, 17 years related experience.

**Jeanne Burgie**, 1973
Instructor, M.A., 6 years previous teaching experience.

**Andrea DeMott**, 1990
Instructor, Masters Degree, 2 years related experience.

**Jane Fuller**, 1991
Instructor, Masters Degree, 2 years related experience.

**Gerald Horvath**, 1980
Instructor, M.A., 14 years previous teaching experience, 6 years related experience.

**Randy Lawrence**, 1993
Instructor, Masters Degree, 13 years related experience.

**Annabelle Mathis**, 1979
Instructor, M.A., 11 years previous teaching experience.

**Nancy McDaniel**, 1990
Instructor, Masters Degree, 8 years related experience.

**Florence McGeoch**, 1973
Instructor, Ph.D., 5 years previous teaching experience.

**Applewhite Minyard**, 1993
Instructor, Masters Degree, 3 years related experience.

**Deni Naffziger**, 1984
Instructor, M.A., 3 years previous teaching experience.

**Bridget Nelson**, 1981
Instructor, M.A., 3 years previous teaching experience, 3 years related experience.

**Ruth Reilly**, 1987
Instructor, M.S., 4 years previous teaching experience, 15 years related experience.

**Judy Rotkis**, 1982
Instructor, M.Ed., 3 years previous teaching experience, 6 years related experience.

**Cynthia Runevitch**, 1975
Instructor, M.A., 5 years previous teaching experience, 2 years related experience.

**Carla Ryan**, 1992
Instructor, Masters Degree, 2 years related experience.

**Merilynne Smith**, 1991
Instructor, Masters Degree, 19 years related experience.

**Ellen Sostarich**, 1981
Instructor, M.A., 5 years previous teaching experience.

**Jim Wallace**, 1984
Instructor, M.A., 6 years previous teaching experience, 6 years related experience.

**Marc Wayner**, 1975
Instructor, Ph.D., 1 year previous teaching experience.

**Renee Williams**, 1990
Instructor, Masters Degree, 1 year related experience.

**Cindy Yeager**, 1991
Instructor, Masters Degree, 6 years related experience.

**Robert Young**, 1993
Instructor, Masters Degree, 3 years related experience.

## Health Careers Technologies Faculty

**Nadine Goebel**, 1969
Dean Allied Health and Nursing, R.N., M.Ed., M.S., 13 years previous clinical experience.

**Don Allen**, 1972
Instructor, B.S., 5 years related work experience.

**Barbara Byrd**, 1979
Instructor, R.N., M.Ed., M.S., 11 years previous teaching experience, 9 years clinical experience.

**Marlene Donovan**, 1975
Instructor, R.N., M.Ed., 2 years previous teaching experience, 14 years clinical experience.

**Kathleen Garza**, 1992
Instructor, Masters Degree, 4 years related experience.

**Barbara Gaskell**, 1980
Instructor, R.N., B.S., 6 years previous clinical experience.

**Lois Highley**, 1984
Instructor, R.N., B.S.N., 13 years previous clinical experience.

**Dawn Holtzmeier**, 1977
Instructor, M.S., 5 years previous teaching experience.

**Sue Ipacs**, 1989
Instructor, B.S.N., 12 years clinical experience.

**Bethany Jagers**, 1991
Instructor, Masters Degree, 10 years related experience.

**Tammy Keith**, 1988
Instructor, Masters Degree, 11 years related experience.

**Alana Josph-Kinzelman**, 1979
Instructor, R.N., B.S.N., 11 years previous clinical experience.

**Carol Klinger**, 1985
Instructor, A.R.T., A.A.S., 5 years related work experience.

**Victoria Knoderer-Cote**, 1984
Instructor, R.N., B.S.N., 14 years previous clinical experience.

**Karen Lewis**, 1988
Instructor, R.R.A., B.S., 20 years related work experience.

**Janet Marshall**, 1984
Instructor, R.N., M.S., 11 years previous clinical experience.

**Lynne Peterson**, 1981
Coordinator, R.N., M.Ed., 12 years previous clinical experience.

**Kathy Potts**, 1986
Instructor, R.D., L.D., B.S., 3 years previous clinical experience.

**Jane Powhida**, 1975
Instructor, R.N., M.S., 1 year previous teaching experience, 7 years clinical experience.

**Rita Preston**, 1985
Instructor, R.N., B.S.N., 8 years previous clinical experience.

**Jennifer Reilly**, 1980
Instructor, R.N., M.Ed., 13 years previous clinical experience.

**Martha Skeeles**, 1986
Instructor, M.S., 4 years teaching experience, 3 years related experience.

**Bonnie Smith**, 1992
Instructor, Masters Degree, 11 years related experience.

**Margaret Sprague**, 1980
Instructor, R.N., M.Ed., M.S., 27 years previous clinical experience.

**Barb Summers**, 1986
Testing Center Monitor.

**Constance Thayer-Wolf**, 1983
Instructor, R.N., B.S.N., 8 years previous clinical experience.

**Nancy Vandervoort**, 1987
Instructor, M.A., 5 years previous teaching experience.

**Molly Weiland**, 1983
Coordinator, R.N., B.S.N., 9 years previous clinical experience.

**Marianne Weiss**, 1977
Instructor, R.N., M.Ed., 12 years previous clinical experience.

**Kathy West**, 1972
Instructor, C.M.A.-C., M.Ed., 2 years related clinical experience.

## Natural Resources Technologies Faculty

**Russell Tippett**, 1975
Dean, M.Ed., 11 years related experience.

**Ronald Black**, 1973
Instructor, M.S., 3 years previous teaching experience, 15 years related experience.

**Jackie Clark**, 1983
Technician, A.A.S.

**Larry Coon**, 1988
Instructor, M.Ed., 8 years previous teaching experience, 4 years related experience.

**David Enterline**, 1968
Instructor, M.S., 2 years previous teaching experience, 4 years related experience.

**Karen Enterline**, 1971
Instructor, M.Ed., 1 year previous teaching experience, 3 years related experience.

**Mark Fick**, 1981
Technician, A.A.S., 9 years related experience.

**Bradford Harter**, 1968
Instructor, B.S., 1 year previous teaching experience, 2 years related experience.

**Ned Maxson**, 1990
Instructor, Masters Degree, 4 years related experience.

**Ralph Moran**, 1981
Instructor, M.Ed., 2 years previous teaching experience, 2 years related experience.

**Tim Murphy**, 1990
Instructor, Bachelors Degree, 13 years related experience.

**Bill Peneston**, 1991
Instructor, Masters Degree, 1 year related experience.

**William Perine**, 1969
Instructor, B.S., 1 year previous teaching experience, 5 years related experience.

**Robert Placier**, 1981
Instructor, B.S., 10 years related experience.

**Dennis Profant**, 1990
Instructor, Masters Degree, 6 years related experience.

**Tina Romine**, 1988
Technician, Certified American Riding Instructor, 7 years related experience.

**Steve Swayne**, 1987
Chief Operations Executive, National Training Institute, A.A.S., 7 years previous teaching experience, 4 years related experience.

**Donna Szuhy**, 1984
Instructor, M.A., 10 years previous teaching experience, 11 years related experience.

**Don Thompson**, 1970
Technician, A.A.S., 1 year related experience.

**David Wakefield**, 1986
Instructor, Certified Tree Surgeon, 18 years related experience.

**Peter Woyar**, 1974
Instructor, M.Ed., 2 years previous teaching experience, 20 years related experience.

**David Ziegler**, 1978
Instructor, M.S., 2 years previous teaching experience, 8 years related experience.

## Public Safety Services Technologies Department

**Nenna Davis-Maurath**, 1986
Department Director, M.A., 4 years previous teaching experience, 6 years previous industry experience.

**Steve Barron**, 1990
Instructor, Associate Degree, 10 years related experience.

**Joel Bitters**, 1980
Instructor, E.M.T.-P., A.A.S., 5 years related experience.

**Becky Fritsche**, 1990
Instructor, Masters Degree, 10 years related experience.

**Lawrence Hatem**, 1989
Instructor, B.S., 25 years related experience.

**John Peters**, 1975
Instructor, E.M.T.-A., 8 years previous teaching experience, 10 years related experience.

**George Petrovay**, 1984
Instructor, A.A.S., 13 years previous teaching experience, 5 years related experience.

**Calvin Price**, 1981
Instructor, E.M.T.-P., A.A.S., 5 years related experience.

**Mark Puhl**, 1974
Instructor, Asssociate Degree.

**Rufus Thomas**, 1991
Instructor, Masters Degree, 10 years related experience.

**Richard Vade Bon Coeur**, 1993
Instructor, Bachelors Degree, 17 years related experience.

## Administrative Support

**Cindy Baden**, 1977
Administrative Assistant, Office of the President.

**Bunnie Begley**, 1985
Administrative Assistant, Business and Public Safety Services Department.

**Sharon Bowers**, 1979
Instructional Scheduling Technician.

**Joyce Cagg**, 1975
Personnel Assistant, Personnel/Staff Development Office.

**Connie Cassady**, 1982
Administrative Assistant, NRTI.

**Carol Dawley**, 1989
Administrative Assistant, Hospitality.

**Cindy Dillinger**, 1986
Secretary, School of Natural and Ecological Sciences.

**Connie Elliott**, 1982
Administrative Assistant, Vice President of Marketing and Development.

**Karon Fick**, 1975
Executive Secretary, Engineering and Science Technologies Department.

**Kathy Freer**, 1987
Executive Secretary, Automotive and Energy Department.

**Carolyn Highland**, 1983
Administrative Assistant, General Studies Department.

**Tanya Howe**, 1984
Administrative Assistant, School of Nursing and Allied Health.

**Alice Howson**, 1988
Personnel Clerk.

**Barb McGhee**, 1986
Word Processing Specialist.

**Connie Mace**, 1993
Secretary/Clerk, Nursing.

**Tonya McCoy**, 1993
Secretary, Intercultural Programs.

**Bill Modzelewski**, 1991
CAI Development Specialist.

**Sharon Perry**, 1974
JTPA Processing Coordinator.

**Gracie Pfaltzgraf**, 1980
Word Processing Specialist.

**Ginny Puhl**, 1975
Administrative Assistant, Academic Affairs.

**Steve Roley**, 1994
Manager, Uniglobe.

**James Simmons**, 1994
Travel Agent, Uniglobe.

**Darlene Tipple**, 1987
Administrative Assistant, Evening College.

**Linda Wineland**, 1975
Executive Secretary, Administrative and Special Services and College Advancement.

## Alternative Education

**Kay Blackburn**, 1994
Education Specialist, Students with Disabilities.

**Mary Ann Kaiser**, 1990
Learning Support Specialist.

**Kim Shaner Powell**, 1987
Education Coordinator, Students with Disabilities.

**Julie Sullivan**, 1990
OPTIONS Coordinator.

**Thelena Turner**, 1995
Secretary/Receptionist, Alternative Education.

## Buildings, Grounds and Maintenance

**Cheryl Carsey**, 1978
Housekeeping.

**Cliff Dearth**, 1990
Groundskeeper.

**Jerry Dexter**, 1992
Housekeeping.

**Chuck Dunlevy**, 1991
Housekeeping, Hocking Heights.

**Brad Graves**, 1975
Superintendant, Buildings and Grounds.

**Scott Hoobler**, 1983
Coordinator, Grounds Department.

**Joe McCollum**, 1992
Maintenance.

**Clara Miller**, 1983
Housekeeping.

**Kevin Moore**, 1993
Housekeeping, Hocking Heights.

**John Phillips**, 1984
Head Housekeeper.

**Jerry Robinette**, 1991
Housekeeping.

**Robert Seel**, 1984
Air Quality and Maintenance Repair Technician.

**Jody Six**, 1987
Maintenance and Housekeeping.

**Bill Whitlatch**, 1993
Housekeeping.

**Brent Williams**, 1994
Housekeeping, Hocking Heights.

## Enrollment Services

**Gary Baldwin**, 1979
Director of High School Relations.

**Susan Eckels**, 1984
Student Loan Coordinator.

**Mary Hanning**, 1980
Assistant Admissions Technician.

**Jan Hartley**, 1983
Financial Aid Counselor.

**Nancy Holcomb**, 1987
Red Carpet Secretary.

**Bruce Keeney**, 1988
Admissions Counselor/Coordinator of Perry County Recruitment.

**Karen Metcalf**, 1980
Red Carpet Specialist.

**David Mingus**, 1970
VA Consultant.

**Julie Murphy**, 1993
Data Entry/Outreach Clerk.

**Eva North**, 1981
Account Clerk.

**Kathy Pitzer**, 1991
Assistant Director of Financial Aid.

**Brian Ralph**, 1993
Assistant Director of Admissions.

**Michele Storer**, 1993
Admissions Technician.

**Diane Wolf**, 1981
Red Carpet Coordinator.

## Fiscal Services

**Jennifer Adams**, 1986
Shipping, Receiving, Inventory Operator.

**Julie Brown**, 1993
Accounting Technician.

**Frank Downhour**, 1966
Facilities Consultant.

**Don Gable**, 1984
Business Manager.

**Linda Gossman**, 1975
Head Cashier.

**Debbie Gyure**, 1983
Clerk, Payroll and Accounts Payable.

**Mary Hoskins**, 1979
Assistant Cashier.

**Mary Hutchison**, 1973
Secretary/Office Coordinator, Fiscal Office.

**Anna Johnson**, 1986
Clerk, Accounting and Accounts Payable.

**Carlena Kreitz**, 1994
Clerk, Cashiers/Records Office.

**Kathy Lauderback**, 1983
Bookstore Manager.

**April Loudner-Maffin**, 1994
Bookstore Clerk.

## Human Services

**Laura Krieder**, 1990
Program Director.

**Beth Bancroft**, 1990
Education Coordinator.

**Betty Dalton**, 1994
Clerical Support.

**Karen Elliott**, 1987
Project Technician.

**Deborah Lax**, 1992
Clerical Support.

**Dick Mitchell**, 1993
Curriculum Specialist.

**Krista Moore**, 1992
Transition Recorder.

**Cindy Noble**, 1993
Teaching Technician.

**Karen Poore**, 1992
Case Recorder.

**Bill Rothman**, 1972
Associate Project Director.

**Norman Singer**, 1992
Staff Training/Curriculum Specialist.

**Tanja Vivo**, 1992
Intake Specialist.

## Intercultural Programs

**Catherine Chapman**, 1994
CASS Program.

**Lyman Montgomery**, 1994
Recruiter/Liaison.

**Ariana Ulloa**, 1990
Daily Project Coordinator.

**Cliff Wasko**, 1983
Foreign Student Advisor.

**Trudy Williams**, 1994
Secretary, CASS Project.

## Library/Educational Technology Services

**Elaine Dabelko**, 1975
Director of Instructional Services.

**Debbie Carter**, 1979
Library Assistant.

**Dorie Gilkey**, 1978
Media Specialist.

**Margy Kramer**, 1971
Library Director.

**Ron Luce**, 1985
Instructional Development Coordinator.

**Jean McCollister**, 1993
Librarian.

**Jose Perez**, 1982
Supervisor of Technical Services.

**Don Shaffer**, 1988
Audio-Visual Technician.

**Wendy Smith**, 1994
Learning Resources Secretary.

**Chris Weibel**, 1985
Manager of Video Services.

**Mark Yanitell**, 1995
Television Operations Technician.

## Management Information Services

**Terry Begley**, 1971
Director of Institutional Computer Services.

**Pete Celaya**, 1980
Computer Programmer/Operator.

**Patty Jo Duffy**, 1991
Records Clerk.

**Brenda Lemity**, 1971
Records Control Clerk.

**Jan Six**, 1991
Computer Operator.

## Perry County Campus

**Chuck Taylor**, 1990
Director.

**Marsha Bowser**, 1990
Service Coordinator.

**Deanna Kinsel**, 1991
Counselor.

**Marie Stedman**, 1979
Secretary.

## Regional Campuses

**Josh Lancaster**, 1974
Dean.

**Sharen Bower**, 1987
Secretary.

**Vincent Branson**, 1985
Prison Coordinator.

**Frank Cain**, 1993
Prison Coordinator.

**Mike Cook**, 1988
Prison Coordinator.

**Shirley Gleich**, 1993
Prison Coordinator.

**Roger Hale**, 1993
Instructor.

**Dick Hatch**, 1993
Instructor.

**Roderic McBroom**, 1993
Prison Coordinator.

**Ralph Newkirk**, 1993
Instructor.

**Dave Smith**, 1988
Prison Coordinator.

**Clarence Steadman**, 1993
Instructor.

**Kristine Williams**, 1992
Prison Coordinator.

## Special Services

**Brenda Adams**, 1991
Customer Service Representative.

**Kim Bonewit**, 1970
Coordinator of Marketing/Customer Service.

**Gary Boyer**, 1975
Special Project Coordinator.

**Terezie Cassels**, 1991
Customer Service Representative.

**Diana Crihfield**, 1989
Printing Technician.

**Deb Fraunfelter**, 1978
Management-Seminar/Special Events.

**Wesley Johnson**, 1994
Bus Driver.

**Rosie Smith**, 1980
Director of Personnel Services.

**Jose Torres**, 1971
Director of Institutional Research.

**Mike Ward**, 1989
Printing Technician.

## Student Affairs

**Kellie Abele**, 1992
Counselor/Coordinator of Transfer Articulation.

**Judy Brady**, 1972
Director of Assessment Services.

**Elaine Bray**, 1991
Supervisor, Security Officer.

**Connie Clemens**, 1990
Coordinator of Student Activities.

**Zelma Coleman**, 1973
College Advising Coordinator.

**Cliff Eckenroad**, 1986
Night Security/Facilities Manager.

**Vickey Haller**, 1995
Health Center Nurse.

**Paul Harper**, 1995
Coordinator of Residence Life/Facilities Management.

**Roxana Herdlitzka**, 1994
Housing Officer, Fiscal Agent.

**Heath Hieronimus**, 1994
Security Shift Supervisor.

**Mark Kollar**, 1994
Security Shift Supervisor.

**Charlotte Lambert**, 1970
Placement Office Coordinator.

**Randy Light**, 1989
Career Planning Counselor.

**Bev Matheny**, 1989
Department Secretary, Student Affairs.

**Chris McDade**, 1984
Coordinator of Recreational Programming.

**Susan McGarvey**, 1993
Administrative Technician.

**Lynn Rouzer**, 1992
Coordinator of Residence Life.

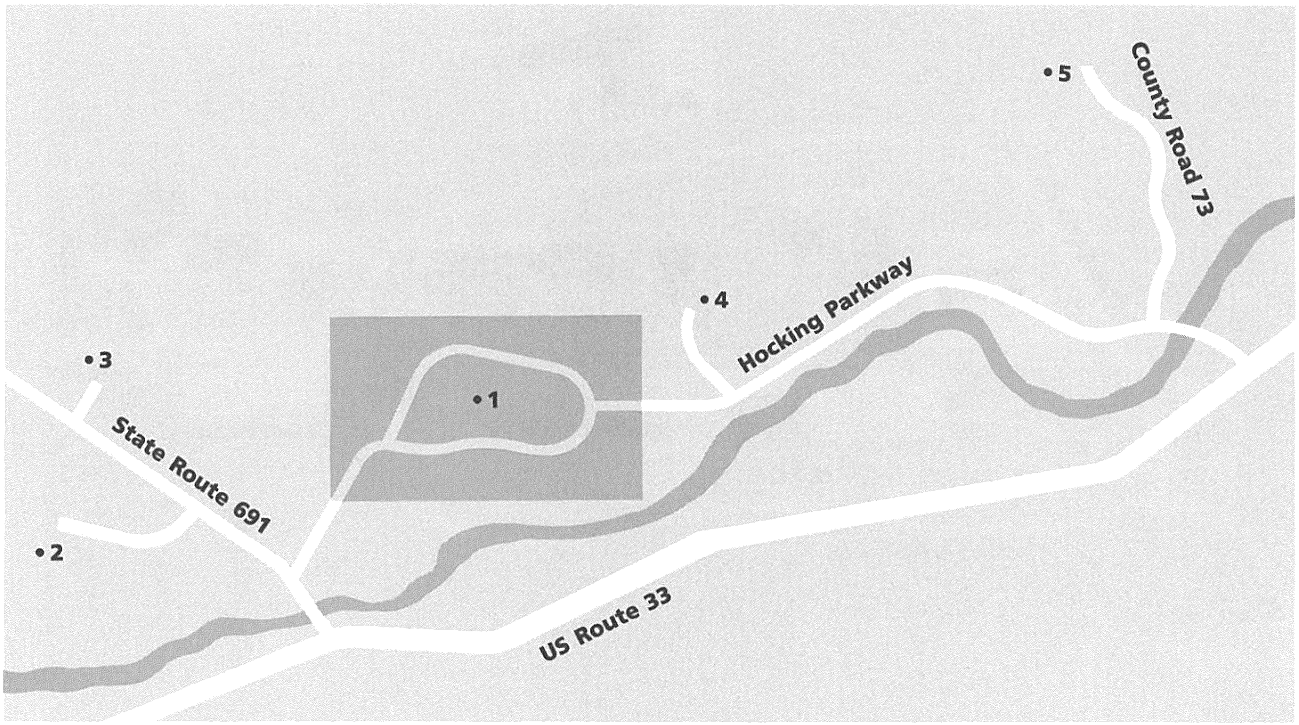
**Bob Stockem**, 1994
Coordinator of Residence Life Programming.

**Dave Valkinburg**, 1994
Campus Security Operations Coordinator/Campus Judiciaries Council.

**Sue Wilkinson**, 1985
Health Center Nurse.

**David Winn**, 1994
Counselor.

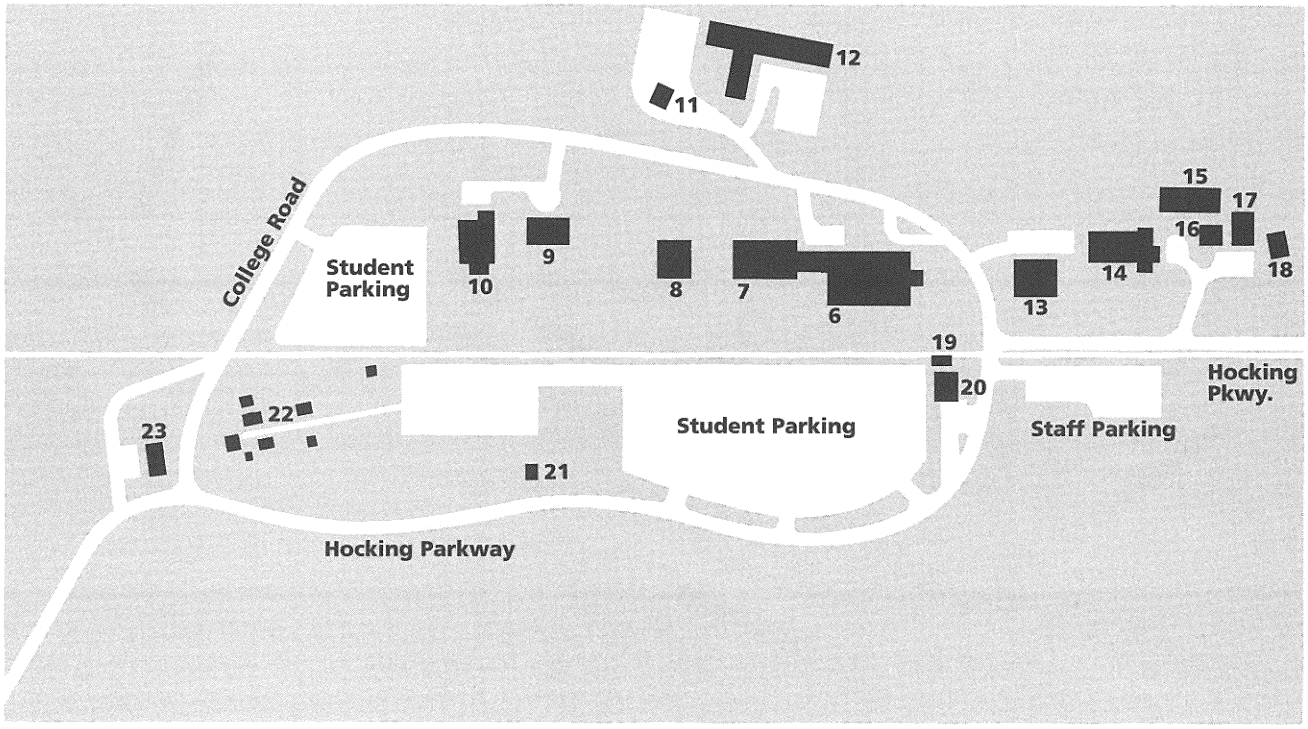
# Area and Campus Maps




Hocking College is located near U.S. 33 and State Route 691 in Nelsonville, Ohio, about 60 miles southeast of Columbus. U.S. 33 can be reached from Ohio's major cities via Interstates 70 and 270 in Columbus. Consult a state highway map for state and county route connections with U.S. 33 in Southeastern Ohio.

The Quality Inn Hocking Valley, owned and operated by Hocking College, is located a quarter of a mile from the HC campus on State Route 691.

1. HC Campus
2. Quality Inn Hocking Valley
3. International Energy Center
4. Hocking Woods Nature Center
5. Hocking Woods Conference Center




6. John J. Light Hall
7. Oakley Hall
8. Recreation Center
9. Shaw Technical Lab
10. Nursing/Allied Health/Learning Resources Center
11. Student Center
12. Hocking Heights Residence Hall
13. Barton A. Holl Lab
14. Natural Resources Center
15. Horse Barn
16. Horse Barn
17. National Ranger Training Institute
18. National Ranger Training Institute
19. Campus Safety
20. Bookstore/Warehouse
21. Picnic Shelter
22. Robbins Crossing and Ohio-Hocking Forestry Museum
23. Day Care Connection

# Course Descriptions

## Accounting

**ACC 100** **PACE**
**Accounting I**
**3 Credits** **Class 2** **Lab 3**
Introduction to the double-entry system of bookkeeping and the basic accounting cycle. The sole proprietorship is presented in the form of a retail establishment. Emphasizes individual effort through the use of a workbook and practice set.

**ACC 100A**
**Accounting I A**
**1 Credit** **Class 1** **Lab 1**
Basic theories and methods behind modern bookkeeping and accounting. Topics include general accounting theory, basic accounting concepts and the accounting cycle.

**ACC 100 B**
**Accounting I B**
**1 Credit** **Class 1** **Lab 0 .5**
Basic theories and methods behind modern bookkeeping and accounting. Topics include end of period procedures and accounting for merchandise. Prerequisite: ACC 100A.

**ACC 100 C**
**Accounting I C**
**1 Credit** **Class 1** **Lab 0 .5**
Basic theories and methods behind modern bookkeeping and accounting. Topics include cash control procedures and payroll accounting. Prerequisites: ACC 100A and ACC 100B.

**ACC 101** **PACE**
**Accounting II**
**3 Credits** **Class 2** **Lab 3**
Basic bookkeeping and general accounting procedures. Includes accrual accounting, inventory methods and accelerated depreciation. Prerequisite: ACC 100.

**ACC 101 A**
**Accounting II A**
**1 Credit** **Class 1** **Lab 1**
Basic bookkeeping and general accounting procedures. Topics include sales and cash receipts, purchase and cash payments, vouchers and internal control, voucher systems and receivables. Prerequisite: ACC 100.

**ACC 101 B**
**Accounting II B**
**1 Credit** **Class 1** **Lab 1**
Basic bookkeeping and general accounting procedures. Topics include end-of-the period accounting for merchandising firms, accounts receivable, and accounting for promissory notes. Prerequisites: ACC 100 and ACC 101A.

**ACC 101C**
**Accounting II C**
**1 Credit** **Class 1** **Lab 0**
Basic bookkeeping and general accounting procedures. Topics include inventory evaluation, accounting for fixed assets, and partnership accounting. Prerequisites: ACC 100, ACC 101A and ACC 101B.

**ACC 102** **PACE**
**Accounting III**
**4 Credits** **Class 3** **Lab 4**
Introduction to accounting with an emphasis on corporate organization. Includes accounting methods for capital stock and corporate bonds and manufacturing from an accounting viewpoint. Prerequisites: ACC 100 and ACC 101.

**ACC 110** **PACE**
**Accounting I Simulation**
**1 Credit** **Class 1** **Lab 1**
A retail store work-simulation for applying concepts covered in ACC 100. Concurrent with ACC 100.

**ACC 111** **PACE**
**Accounting II Simulation**
**1 Credit** **Class 1** **Lab 1**
A wholesale establishment work-simulation for applying concepts covered in ACC 101. Concurrent with ACC 101.

**ACC 120** **PACE**
**Payroll Accounting**
**3 Credits** **Class 2** **Lab 3**
Principles and procedures of payroll record keeping and accounting. Includes taxes, insurance programs, optional deductions and the process of calculating and recording these items.

**ACC 130** **PACE**
**Business and Accounting Machines**
**2 Credits** **Class 2** **Lab 2**
Introduction to the use of an accounting machine and application of basic machine skills to the solution of business and accounting problems. Includes exercises to develop a proficiency on the ten-key adding machine, calculator and electronic calculator.

**ACC 140**
**Individual Taxation**
**3 Credits** **Class 2** **Lab 3**
Study and application of federal income tax law. Emphasis on the preparation of federal income tax returns for individuals.

**ACC 140A**
**Individual Taxation Module**
**0.5 Credit** **Class 0.5** **Lab 0**
Designed for the individual wanting to learn how to file his/her own taxes. Areas of concentration will include forms EZ, 1040A, 1040 with Schedule A. Prerequisite: ACC 100.

**ACC 150** **PACE**
**Business Taxation**
**4 Credits** **Class 3** **Lab 4**
In-depth study of the application of general tax rules and returns for business organizations.

**ACC 162**
**Microcomputer Accounting**
**2 Credits** **Class 1** **Lab 4**
Introduction to software packages available for basic accounting. Application of concepts introduced in introductory accounting courses and mastery of basic microcomputer skills. Prerequisite: ACC 100.

**ACC 200** **PACE**
**Basic Cost Accounting**
**3 Credits** **Class 2** **Lab 3**
Introduction to the bookkeeping system used in job order costing including source of data used and internal control procedures. Prerequisite: ACC 100.

**ACC 201**
**Advanced Cost Accounting**
**4 Credits** **Class 3** **Lab 3**
Continuation of ACC 200. Emphasizes production data and cost flow, budgetary control and manufacturing cost standards. Prerequisites: ACC 100 and ACC 200.

**ACC 210** **PACE**
**Basic Cost Accounting Simulation**
**1 Credit** **Class 0** **Lab 3**
A manufacturing work-simulation covering the job cost system. Application of concepts covered in ACC 200. Prerequisite: ACC 100.

**ACC 220**
**Non-Profit Accounting I**
**4 Credits** **Class 3** **Lab 3**
Fundamentals of accounting for the non-profit field. Covers all levels of local, state and federal government. Principles and practices are related to financial planning and control. Prerequisite: ACC 100.

**ACC 220A**
**Non-Profit Accounting Module**
**1 Credit Class 1 Lab 0**
Basic applied accounting for non-profit entities. Topics include fundamental principles of non-profit accounting and various types of funds. Prerequisite: ACC 100.

**ACC 221**
**Non-Profit Accounting II**
**4 Credits Class 3 Lab 3**
Completes the case study started in ACC 200-the modified accrual basis of accounting for municipalities. Internal service funds, enterprise funds and fiduciary funds are emphasized. General fixed asset group of accounts and general long-term debt group of accounts complete the series. Prerequisites: ACC 100 and ACC 220.

**ACC 230**
**Intermediate Accounting I**
**3 Credits Class 2 Lab 3**
Part one of a two-quarter course introducing principles and objectives of financial accounting and how they evolved. Includes practical present day application to accounts, statements and accounting theory. Prerequisites: ACC 100 and ACC 101.

**ACC 231**
**Intermediate Accounting II**
**4 Credits Class 3 Lab 3**
Advanced financial accounting theory and principles. Emphasizes in-depth comprehension of corporate financial statements. Prerequisites: ACC 101 and ACC 230.

**ACC 250**
**Auditing**
**3 Credits Class 2 Lab 3**
Introduces the advanced accounting student to the duties and scope of operations of the internal auditor. Field trips and practice audits demonstrate the practical aspects of internal control and the function of an auditor. Does not qualify the student to be internal auditors. Prerequisite: ACC 100.

**ACC 290**
**Special Topics in Accounting Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**ACC 291**
**Individual Study in Accounting Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**ACC 292**
**Accounting Field Experience**
**1-3 Credits Class 0 Lab 12-48**
On-the-job training in an accounting facility through special arrangements with an instructor.

**ACC 293**
**Accounting Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and observed and critiqued by the instructor in a repeat performance of that function.

ACC 294
**Accounting Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

ACC 295
**Accounting Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum. Concurrent with ACC 296.

ACC 296
**Accounting Practicum**
**3-5 Credits Class 1-3 Lab 16**
Placement in an actual working environment for a minimum amount of time to gain experience before graduation. Concurrent with ACC 295.

ACC 297
**Accounting Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

ACC 298
**Accounting Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

ACC 299
**Accounting Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Automotive

AU 101 PACE
**Automotive Technical Skills**
**3 Credits Class 2 Lab 3**
For the student with little or no automotive technical skills. Covers automotive service basics of measurements, systems, terms, skills, tools and safety. This course is part of entrance pretesting required to enter the program.

AU 108
**Natural Gas Vehicle Safety**
**1 Credit Class 1 Lab 1**
Vehicle safety relating to safety shut-off valves and placement of components. Also covers refueling safety of natural gas vehicles.

AU 110
**Automotive Engine Measurement and Skills**
**1-5 Credits Class 1-3 Lab 1-6**
Engine rebuilding techniques including proper use of measuring devices such as micrometers, calipers and torque wrenches, documentation of measurements and use of machining tools to bring component hardware into specification.

AU 111
**Service Management Orientation**
**4 Credits Class 3 Lab 3**
Generating estimates and repair orders, shop scheduling, parts ordering and inventory control, dealing with customers, customer history and follow-up, shop business management, state and federal regulations and how to make a profit.

AU 112
**Automotive Electrical Systems**
**1-4 Credits Class 1-3 Lab 1-4**
Service and testing of starters, alternators, lighting systems, batteries and wiring components. Introduces ignition system components and their function.
Prerequisite: AU 101.

**AU 113**
**Automotive Fuel Delivery Systems**
**1-4 Credits Class 1-3 Lab 1-4**
Engine fuels and air/fuel delivery systems. Involves construction, operation and maintenance of system components. Prerequisite: AU 101.

**AU 114**
**Steering, Suspension and Brake Systems**
**5 Credits Class 3 Lab 6**
Diagnosis and repair of problematic chassis functions. Develops basic skills in diagnosis and repair of brake systems, suspension, and steering systems as well as alignment techniques. Application of service management techniques is included. Prerequisites: AU 101 and AU 111.

**AU 115**
**Automotive Heating, Ventilation and Air Conditioning**
**4 Credits Class 3 Lab 4**
Engine cooling systems and passenger compartment comfort controls. Interprets manifold gauge readings and diagnoses and repairs HVAC problems including drivability controls. Knowledge of auto electrical systems is required. Prerequisite: AU 101.

**AU 201**
**Automotive On-Board Electronics**
**0.5-4 Credits Class 0.5-3 Lab 0-4**
Design, principles of operations and construction of automotive ignition systems. Covers mechanical systems including coils, distributors, condensers, advance mechanisms and contact points; electronic systems including ignition timing, wiring and malfunctions; maintenance and troubleshooting. Prerequisites: AU 101, AU 112, AU 113 and AU 217.

**AU 202**
**Brake Systems**
**4 Credits Class 3 Lab 4**
Design, construction, operation, maintenance and troubleshooting of various chassis units and braking systems including power units, basic air units and diagonal braking systems.

**AU 202A**
**Anti-Lock Brake Service Seminar**
**1 Credit Class 1 Lab 0**
Designed for the journeyman technician who is encountering ABS equipped vehicles. Covers ABS operation and component design of popular ABS systems. TEVES, BOSCH, and the Kelsey-Hayes rear wheel anti-lock systems will be included.

**AU 203**
**Standard Transmissions**
**4 Credits Class 3 Lab 4**
Operation, construction and maintenance of selective sliding transmissions and over-drive transmissions. Includes gears, gearing, power flow, drive lines and differentials. Principles of operation, construction, maintenance, repair and troubleshooting for various makes of selective sliding transmissions and the manual transaxle.

**AU 204**
**Suspension Systems**
**4 Credits Class 3 Lab 4**
Wheel alignment, front suspension and rear suspension alignment.

**AU 206**
**Auto Powertrain Component**
**1-5 Credits Class 1-3 Lab 1-6**
Operation, construction and maintenance of automatic transmissions including the study of fluid couplings, torque converters, valve bodies, clutch and band operation and power flow. Automatic transaxle principles of operation, construction, maintenance and repair are also covered. Prerequisite: AU 101.

**AU 207**
**Fleet Management and Supervision**
**3 Credits Class 2 Lab 3**
An advanced course in which the student is responsible for daily shop operations, bookkeeping, profit and loss, inventory control, and customer follow-up. Use of data base systems is included. Prerequisites: AU 101, AU 111.

**AU 215**
**Automotive Diagnostics and Performance Testing**
**5 Credits Class 4 Lab 4**
Advanced course in diagnosing and correcting problems of the internal combustion engine. Instruction and laboratory use of diagnostic test equipment to solve practical drivability problems. Prerequisites: AU 101, AU 113 and AU 201.

**AU 216**
**Alternative Fuels Conversion Systems**
**2-5 Credits Class 1-5 Lab 0-3**
Application of natural gas as a clean burning alternative to traditional fuels. Includes vehicle conversion, fueling and maintenance of natural gas fueled vehicles. Prerequisites: AU 101, AU 112 and AU 113.

**AU 217**
**Automotive Electrical Schematic**
**2 Credits Class 2 Lab 0**
Reading and using electrical wiring diagrams to diagnose and repair electrical system problems. Lays the foundation for studies of on-board electronic components and computer controlled devices. Prerequisite: AU 101.

**AU 218**
**Advanced Automatic Transmissions**
**5 Credits Class 3 Lab 6**
Examination of hi-tech automatic transmissions and transaxles. Includes design, diagnosis, repair and dyno testing of automotive transmissions. Prerequisite: AU 206.

**AU 240**
**Automotive Computers and Control Systems**
**4 Credits Class 3 Lab 3**
Study and diagnosis of engine controlled computers, instrumentation computers and modern computerized devices.

**AU 250**
**Automotive Service Excellence Seminar**
**1 Credit Class 1 Lab 0**
Gives the automotive technician an opportunity to review test taking skills and prepare for the Automotive Service Excellence certification examinations. All automotive test areas and the new alternative fuels test will be covered.

**AU 280**
**Automotive Alternative Fuels**
**2 Credits Class 2 Lab 0**
An overview of automotive fuels, including electricity, natural gas, propane, methanol and ethanol, expected to help with environmental problems.

**AU 290**
**Special Topics in Automotive Service Management Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**AU 291**
**Individual Study in Automotive Service Management Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**AU 292**
**Automotive Field Experience**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in an automotive facility through special arrangement with an instructor.

**AU 293**
**Automotive Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Student in directed practice receives instruction in the performance of a particular function from an assigned instructor, and then is observed and critiqued by the instructor in a repeat performance.

**AU 294**
**Automotive Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member. Includes at least one on-site visit during the quarter. Student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**AU 295**
**Automotive Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**AU 296**
**Automotive Practicum**
**2-4 Credits Class 1-3 Lab 7**
Placement in a working environment for a minimum amount of time to gain experience before graduation. Prerequisite: First year technical courses, concurrent with AU 295.

**AU 297**
**Automotive Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**AU 298**
**Automotive Internship**
**3-6 Credits Class 0 Lab 20-40**
On-the-job training in the workplace of a cooperating agency. Coordinated by an instructor.

**AU 299**
**Automotive Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Basic Skills Development

**BSD 010**
**Basic Skills Development I**
**3 Credits Class 3 Lab 0**
Structured program to prepare for successful completion of the GED test. Exercises include writing skills, social sciences, science, mathematics, literature and the arts.

**BSD 020**
**Basic Skills Development II**
**3 Credits Class 3 Lab 0**
Continued study in writing, social sciences, science, mathematics, literature and the arts to prepare for GED examination.

**BSD 030**
**Basic Skills Development III**
**3 Credits Class 3 Lab 0**
Continued study in writing, social sciences, science, mathematics, literature and the arts to prepare for the GED examination.

## Broadcasting

**BC 108**
**Modern Electronic Media**
**3 Credits Class 2 Lab 3**
History and advancement of modern electronic media including the development of electronic media from the invention of radio to the creation of high definition television. Provides exposure to all aspects of electronic media in today's electronic communication.

**BC 109**
**Media Techniques**
**3 Credits Class 2 Lab 3**
Evaluation of electronic media in education, business and entertainment industries. Includes analyzing work produced by industry professionals and script writing.

**BC 110**
**Studio Production**
**3 Credits Class 2 Lab 3**
Exposure to studio television production through extensive hands-on, practical application of equipment in multi-camera productions. Familiarization with audio and video technology including involvement with production from script to finished product.

**BC 111**
**Applied Audio and Video Technology**
**1 Credit Class 0 Lab 3**
Theory of operation, installation, minor repair and application of the most common audio and video equipment found in a small system audio and video production facility. Equipment availability, selection and purchasing will be addressed as well as small system design and installation. Includes videoconferencing technologies, basic equipment trouble-shooting and audio and video technical theory and production techniques.

**BC 201**
**Audio/Video Systems I**
**4 Credits Class 3 Lab 3**
Theory of operation of audio equipment found in any AM, FM or TV production facility. Practical experience in installation, alignment and repair of equipment such as cassette decks, cart machines, reel-to-reel tape recorders, audio mixing consoles and equalizing, processing and special effects devices. Prerequisite: EE 122.

**BC 209**
**Audio/Video Systems II**
**4 Credits Class 3 Lab 3**
NTSC color television signal. Processes of scanning and synchronization, creation of a compatible color signal and the timing, switching, distribution and transmission of that signal. Also includes video testing and measurement. Prerequisite: BC 201.

**BC 210**
**Audio/Video Production I**
**3 Credits Class 2 Lab 3**
Introduces a working knowledge of studio operations, remote video equipment, basic video editing, camera operation, lighting and audio recording. Provides an opportunity to produce television programs from script to the final edited video program.

**BC 215**
**Audio/Video Production II**
**3 Credits Class 2 Lab 3**
Explores electronic field production, time code editing, multi-track audio recording, and special video and audio effects. The student works as a crew member on college productions.

**BC 216**
**Transmission Systems**
**4 Credits Class 3 Lab 3**
Radio frequency (RF) aspects of broadcasting and telecommunications. Begins with electrical and radio frequency safety precautions and continues with an advanced study of amplitude modulation (AM) and angle modulation. Includes key communication circuits, transmission line theory, antennas and radio wave propagation. Prerequisites: BC 201 and EE 122.

**BC 223**
**Equipment Maintenance**
**4 Credits Class 3 Lab 3**
Design, installation, documentation and maintenance of complete broadcast and production facilities. Studio design, electrical distribution, grounding, shielding, air and power conditioning are all covered. Prerequisites: BC 209 and BC 216.

**BC 230**
**Advanced Post Production**
**3 Credits Class 2 Lab 3**
Extensive hands-on experience in video and audio post production. A/B roll editing, audio sweetening, video graphics and video disc mastering are some of the topics covered. Includes production of a demo videotape of skills for future job interviews. Prerequisite: BC 215.

**BC 280**
**Current Topics and Technology**
**0.25-5 Credits Class 0.25-5 Lab 0-3**
Familiarization with state-of-the-art broadcasting and telecommunications equipment and technologies.

**BC 290**
**Special Topics in Broadcasting**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**BC 291**
**Individual Study in Broadcasting**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**BC 292**
**Field Experience in Broadcasting**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a broadcasting facility through special arrangement with an instructor.

**BC 293**
**Broadcasting Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
The student in directed practice receives instruction in the performance of a particular function from an assigned instructor and then is observed and critiqued by the instructor in a repeat performance of that function.

**BC 294**
**Broadcasting Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week. Prerequisites: BC 209, BC 215 and BC 216.

**BC 295**
**Telecommunications/ Broadcasting Practicum Seminar**
**1-3 Credits Class 1-2 Lab 7-14**
Discussion of job-related concerns and assistance with practicum. Prerequisite: BC 216.

**BC 296**
**Broadcasting Practicum**
**2-4 Credits Class 1-3 Lab 8**
The student is placed in an actual working environment for a minimum amount of time to gain experience before graduation. Prerequisite: BC 209.

**BC 297**
**Broadcasting Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**BC 298**
**Broadcasting Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**BC 299**
**Broadcasting Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Broadcasting /Telecommunications

**BCTC 214**
**Communication Circuits**
**4 Credits Class 3 Lab 3**
Circuits common within the broadcasting technology. Switching systems and arrangements, networking of audio, video, data, signaling, amplifiers, repeaters and impedance matching circuitry are presented from the schematic level. Includes AM, FM and Phase IC applications. IC applications including transmission lines, telephone systems, data communications, television systems, and two-way communications systems. Prerequisites: BC 209, BC 215 and BC 216.

**BCTC 215**
**Fiber Optic Communications**
**4 Credits Class 3 Lab 3**
Introduction to fiber optics and the physics of light, including the principles and characteristics of fiber optics and fiber optic communication. Includes modulation, multiplexing, and the fiber optic components that make up a communication system. Prerequisite: BCTC 221.

**BCTC 221**
**Communication with Computers**
**4 Credits Class 3 Lab 3**
Introduction to communication systems with computers including transmission codes and serial interfacing, the UART, and interfacing the 8085A microprocessor to the 8251A USART. The telephone set and telephone network is taught in regards to digital communications, including modems, protocols, LANs, error detection, error correction, error control and the effects of noise on digital communication systems. Prerequisite: EE 262.

**BCTC 290**
**Special Topics in Telecommunications/ Broadcasting**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.**BCTC 291**
**Individual Study in Broadcast/ Telecommunications**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**BCTC 292**
**Field Experience in Broadcast/ Telecommunications**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a broadcasting/ telecommunication facility through special arrangement with an instructor.

**BCTC 293**
**Broadcast/Telecommunications Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then is observed and critiqued by the instructor in a repeat performance of that function.

**BCTC 294**
**Broadcast/Telecommunications Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**BCTC 295**
**Telecommunications Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum. Concurrent with BC 216.

**BCTC 296**
**Telecommunications Practicum**
**1 Credit Class 0 Lab 7**
The student is placed in a working environment for a minimum amount of time to gain experience before graduation.

**BCTC 297**
**Broadcast/Telecommunications Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**BCTC 298**
**Telecommunications Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**BCTC 299**
**Telecommunications Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Business

**BUS 100 PACE**
**Small Business Management I**
**3 Credits Class 3 Lab 2**
Principles of operating a business from the standpoint of ownership. Covers small business in the U. S., starting a business, problems in starting a business, management functions applied, financing and capital, physical plant, legal considerations, licenses and government regulations.

**BUS 101 PACE**
**Small Business Management II**
**3 Credits Class 3 Lab 2**
Continuation of principles of operating a business focusing on daily operations. Advertising/promotion, marketing, accounting/record keeping, cash flow, employment/payroll, insurance, contracts, purchasing/buying, security, management of time/priorities and handling problems. Prerequisite: BUS 100.

**BUS 102 PACE**
**Principles and Practices of Business Management I**
**3 Credits Class 3 Lab 2**
First in a two part series providing a comprehensive introduction to management theory and practice. Planning and organizing provide the major focus.

**BUS 103** **PACE**
**Principles and Practices of Business Management II**
**3 Credits** **Class 3** **Lab 2**
Second in a two part series continues the examination of management theory and practice with an emphasis on current trends in management. Along with leadership and motivation, the course discusses both the individual and interpersonal processes contributing to this part of management. Prerequisite: BUS 102.

**BUS 105**
**History of American Business**
**3 Credits** **Class 3** **Lab 0**
Origins and development of modern American business. Emphasizes the nature of the economic, social and political environments, the manner in which such environments affect business policy and how lessons from the past relate to present business practices.

**BUS 110**
**Marketing**
**3 Credits** **Class 3** **Lab 2**
Fundamentals of modern marketing. Consumer behavior, marketing strategy, product pricing and promotion and distribution.

**BUS 120** **PACE**
**Personal Finance**
**3 Credits** **Class 3** **Lab 0**
Consumer information on coping with major financial decisions in life including taxes, consumer credit, insurance and savings plans.

**BUS 120 A**
**Personal Financial Planning**
**0.5 Credit** **Class 0.5** **Lab 0**
Designed to assist the student with basic personal budgeting. Topics include investments, budgeting, taxation, credit, loans and insurance.

**BUS 130**
**Sales I**
**3 Credits** **Class 2** **Lab 3**
Introduction to the sales function in the retail sphere of operations including the selling background such as product, customer, competition analysis and the company; the selling process covering planning, the sales presentation, handling objections and questions, and closing the sale; the differences between industrial and retail selling with emphasis on retail selling; and sales management including construction of sales forces and program planning.

**BUS 132**
**Sales II**
**3 Credits** **Class 2** **Lab 3**
Practical aspects of selling including aspects of a sales presentation and preparation of sales planners. Prerequisite: BUS 130.

**BUS 170** **PACE**
**Fundamentals of Business I**
**3 Credits** **Class 3** **Lab 2**
Basic areas involved in modern business. Overview of economics, business organization, marketing, production administration and personnel management. Topics include comparative economic systems, legal forms of business, promotion and distribution of goods and services and labor relations.

**BUS 171** **PACE**
**Fundamentals of Business II**
**3 Credits** **Class 3** **Lab 2**
Overview of marketing channels and promotion. Includes examination of money and banking, financial management, securities, risk management, international business and entrepreneurship. Prerequisite: BUS 170.

**BUS 175**
**Business Word Processing**
**2 Credits Class 1 Lab 4**
Instruction to the alphanumerical keyboard including operation of a word processing software package.

**BUS 180**
**Business Ethics**
**3 Credits Class 3 Lab 2**
Ethical problems encountered in the business world through discussion of contemporary social issues facing business. Topics include individual work habits, employee responsibilities and community involvement.

**BUS 200**
**Business Law**
**3 Credits Class 3 Lab 0**
Legal limitations and other considerations faced by the business world. Areas covered include contract sales, business organizations and bailments.

**BUS 201**
**Advanced Business Law**
**4 Credits Class 4 Lab 0**
Real property, negotiable instruments, security transactions, insurance, bailments, wills and estates, trusts, agency and employment partnerships, private corporations and bankruptcy. Prerequisite: BUS 200.

**BUS 210**
**Human Resources Management**
**3 Credits Class 3 Lab 2**
Techniques of managing people and rules and laws regulating employment. The student should have an understanding of the principles of management prior to entering the course. Prerequisite: BUS 103.

**BUS 211**
**Advanced Marketing**
**3 Credits Class 3 Lab 2**
Examines complex applications of marketing theory. Emphasizes actual cases involving many well-know names and organizations. Prerequisite: Bus 110.

**BUS 212**
**Human Resource Development**
**1-3 Credits Class 1-3 Lab 0**
Approaches for developing skills of employees to match organizational needs. Includes assisting employees in making professional development plans; recognizing the relationship between employee careers and an organization mission, culture and operational goals; and techniques for making staff assignments, training, coaching and correcting the ineffective employee.

**BUS 220**
**Industrial Marketing**
**3 Credits Class 3 Lab 1**
Marketing strategy in industrial companies, key elements of strategy and the marketing of various industrial products. Emphasizes particular aspects of industrial buying behavior, market selection, product planning, pricing and distribution. Prerequisite: BUS 110.

**BUS 230**
**Labor-Management Relations**
**3 Credits Class 3 Lab 2**
Labor and management relations and the roles of management and unions in our society. The course is objective in its context and avoids being judgmental in presenting the parts currently played by labor and management in their struggle for progress in the work area.

**BUS 240**
**Managerial Accounting**
**3 Credits Class 2 Lab 3**
Managerial control and decision-making through the use of accounting methods. Emphasizes cost control, accounting for overhead, capital budgeting and inventory control. Prerequisite: ACC 100.

**BUS 243**
**Business Systems Control**
**3 Credits Class 2 Lab 3**
Operation and function of internal control in the modern business. Topics include auditing procedures, asset maintenance and special problems relating to security. Prerequisite: ACC 101 and BUS 240.

**BUS 245**
**Lotus 1-2-3 for Business**
**3 Credits Class 2 Lab 3**
Practical business and accounting applications of popular commercial software used to compile spreadsheets and data bases.

**BUS 246**
**Advanced Lotus 1-2-3 for Business**
**3 Credits Class 2 Lab 3**
Commercial software for specific business and accounting functions. Areas covered include decision-making, income taxes, financial calculations, personnel management and inventory control. Prerequisite: BUS 245.

**BUS 250**
**Events Planning and Operations I**
**2 Credits Class 1 Lab 3**
Development of public relation skills and distribute literature at information centers.

**BUS 251**
**Events Planning and Operations II**
**2 Credits Class 1 Lab 3**
Utilizing acquired skills while supervising, scheduling and managing a visitor information center.

**BUS 260**
**Business Planning**
**2 Credits Class 1 Lab 3**
Functions necessary to develop and start a business. Culminates in the submission of a business prospectus by each student. Prerequisite: Bus 101.

**BUS 261**
**Emerging Organization Models**
**0.5-3 Credits Class 0.5-3 Lab 0**
Perspectives on models for managing organizations. Standard management designs, plus an overview of emerging models including TOM, Japanese management, flexible manufacturing networks, virtual organizations, quality circles, worker teams, and others.

**BUS 261A**
**Emerging Organization Models: Overview**
**0.5-1 Credit Class 0.5-1 Lab 0**
Perspectives on models for managing organizations. Standard management designs, plus an overview of emerging models including TOM, Japanese management, flexible manufacturing networks, virtual organizations, quality circles, worker teams, and others.

**BUS 261B**
**Emerging Organization Model: Applications**
**0.5-1 Credit Class 0.5-1 Lab 0**
Application and examples of models for managing organizations, using one or more topics from BUS 261A.

**BUS 261C**
**Emerging Organization Models: Project**
**1 Credit Class 1 Lab 0**
Examination of topics in BUS 261A. Development of a project through research, interviews, travel, community or work site investigation, or other development initiative. Participant creates a final product or activity.

**BUS 262**
**Changing Organization Contexts**
**0.5-3 Credits Class 0.5-3 Lab 0**
Overview of the changing contexts in which modern organizations function: legal, ethical, political, economic, legislative, environmental, social, international, new demographics, technological, and new professional certification standards.

**BUS 262A**
**Changing Organization Contexts: Overview**
**0.5-1 Credit Class 0.5-1 Lab 0**
Overview of the changing contexts in which modern organizations function: legal, ethical, political, economic, legislative, environmental, social, international, new demographics, technological, and new professional certification standards.

**BUS 262B**
**Changing Organization Contexts: Applications**
**0.5-1 Credit Class 0.5-1 Lab 0**
Application and examples of models for managing organizations, using one or more topics from BUS 262A.

**BUS 262C**
**Changing Organization Contexts: Project**
**1 Credit Class 1 Lab 0**
Detailed examination of topics in BUS 262A. Development of a project through research, interviews, travel, community or work site investigation, or other development initiative. Participant creates a final product or activity.

**BUS 263**
**Managing External Relations**
**0.5-3 Credits Class 0.5-3 Lab 0**
Organization interface with external groups. Includes marketing and promotion, client/customer service, public relations and image, media relationships, community service and inter-organizational contracts and agreements.

**BUS 263A**
**Managing External Relations: Overview**
**0.5-1 Credit Class 0.5-1 Lab 0**
Organization interface with external groups. Includes marketing and promotion, client/customer service, public relations and image, media relationships, community service and inter-organizational contracts and agreements.

**BUS 263B**
**Managing External Relations: Applications**
**0.5-1 Credit Class 0.5-1 Lab 0**
Application and examples of models for managing organizations, using one or more topics from 263A.

**BUS 263C**
**Managing External Relations: Project**
**1 Credit Class 1 Lab 0**
Examination of topics in BUS 263A. Development of a project through research, interviews, travel, community or work site investigation, or other development initiative. Participant creates a final product or activity.

**BUS 264**
**Evolving Techniques for Organizations**
**0.5-3 Credits Class 0.5-3 Lab 0**
Overview of technologies that affect organizational functions such as communication, information storage and processing, transportation and production.

**BUS 264A**
**Evolving Organization Techniques: Overview**
**0.5-1 Credit Class 0.5-1 Lab 0**
Overview of technologies that affect organizational functions such as communication, information storage and processing, transportation and production including how emerging technologies work, their impact on organizational systems, clients and employees and methods to avoid technological obsolescence.

**BUS 264B**
**Evolving Organization Techniques: Applications**
**0.5-1 Credit Class 0.5-1 Lab 0**
Application and examples of models for managing organizations, using one or more topics from BUS 264A.

**BUS 264C**
**Evolving Organization Techniques: Project**
**1 Credit Class 1 Lab 0**
Detailed examination of topics in 264A. Development of a project through research, interviews, travel, community or work site investigation, or other development initiative. Participant creates a final product or activity.

**BUS 265**
**Problem Solving for Managers**
**0.5-3 Credits Class 0.5-3 Lab 0**
Methods for solving problems in organizations. Includes defining the problem; identifying weaknesses, strengths, and issues; analyzing the economics of the problem; researching and reviewing alternatives; approaches to problem solving; developing goals for change; selecting a solution; and measuring impacts of the solution.

**BUS 265A**
**Problem Solving for Managers: Overview**
**1 Credit Class 1 Lab 0**
Methods for solving problems in organizations. Includes defining the problem; identifying weaknesses, strengths, and issues; analyzing the economics of the problem; researching and reviewing alternatives; approaches to problem solving; selecting a solution; and measuring impacts of the solution.

**BUS 265B**
**Problem Solving for Managers: Applications**
**0.5-1 Credit Class 0.5-1 Lab 0**
Step-by-step techniques for determining, analyzing and solving organizational problems using applications and examples from both for-profit and nonprofit organizations.

**BUS 265C**
**Problem Solving for Managers: Project**
**1 Credit Class 1 Lab 0**
Development of problem-solving techniques relevant to management. Participant creates a final product or activity.

**BUS 266**
**Entrepreneurship**
**0.5-3 Credits Class 0.5-3 Lab 0**
Methods for starting one's own business. Includes a general understanding of products, services and markets; the business plan; capital and other assets; the marketing plan; and legal and financial considerations.

**BUS 266A**
**Entrepreneurship: Overview**
**1 Credit Class 1 Lab 0**
Overview of methods for starting one's own business. Includes a general understanding of products, services and markets; the business plan; capital and other assets; the marketing plan; and legal and financial considerations.

**BUS 266B**
**Entrepreneurship: Applications**
**0.5-1 Credit Class 0.5-1 Lab 0**
Techniques and processes for starting one's own business, including identifying products, services and markets; developing a business plan; securing capital and other assets; developing a marketing plan; addressing legal and financial issues; and getting started.

**BUS 266C**
**Entrepreneurship: Project**
**1 Credit Class 1 Lab 0**
Development of entrepreneurship methods and techniques. Participant creates a final product or activity.

**BUS 267**
**Project Management**
**0.5-3 Credits Class 0.5-3 Lab 0**
Developing and managing projects within organizations. Includes defining the project, goals and objectives, budgeting, scheduling, building the team, activity management, developing milestones, and evaluating outcomes. Examination of use of grants, contracts, computers and other technical assistance as components of a project.

**BUS 267A**
**Project Management: Overview**
**1 Credit Class 1 Lab 0**
Developing and managing projects within organizations. Includes defining the project, goals and objectives, budgeting, scheduling, building the team, activity management, developing milestones, and evaluating outcomes. Examination of use of grants, contracts, computers and other technical assistance as components of a project.

**BUS 267B**
**Project Management: Applications**
**0.5-1 Credit Class 0.5-1 Lab 0**
Step-by-step techniques for project management, using applications and examples of projects in both for-profit and non-profit organizations. Steps and topics listed in BUS 267A will be reviewed.

**BUS 267C**
**Project Management: Project**
**1 Credit Class 1 Lab 0**
Development of a project using project management methods. Under instructor guidance, participants learn project management skills by developing a project or activity.**BUS 268**
**Quantitative Concepts for Managers**
**0.5-3 Credits Class 0.5-3 Lab 0**
Quantitative concepts relevant to managing and supervising, including budgeting, scheduling, staff and facility planning, demographic projections and market development. Tools and techniques to build and analyze organizational data, such as computer spreadsheets, data bases and graphs; basic calculations and statistics; external resources for monitoring and evaluating trends in population, economics and legislative changes will be reviewed.

**BUS 268A**
**Quantitative Concepts for Managers: Overview**
**1 Credit Class 1 Lab 0**
Overview of quantitative concepts relevant to managing and supervising, including budgeting, scheduling, staff and facility planning, demographic projections and market development. Reviewed will be tools and techniques to build and analyze organizational data, such as computer spreadsheets, data bases and graphs; basic calculations and statistics; external resources for monitoring and evaluating trends in population, economics and legislative changes.

**BUS 268B**
**Quantitative Concepts for Managers: Applications**
**0.5-1 Credit Class 0.5-1 Lab 0**
Step-by-step techniques for determining and analyzing functional organizational information that requires quantitative methods using applications and examples from both for-profit and non-profit organizations.

**BUS 268C**
**Quantitative Concepts for Managers: Project**
**1 Credit Class 1 Lab 0**
Development of management methods using quantitative concepts. Under the instructor guidance, participants learn quantitative skills relevant to management by developing a project relevant to their own organization.

**BUS 270**
**Purchasing Management**
**3 Credits Class 2 Lab 3**
Procedures and policies relative to contract negotiations. Vendor-buyer relationships, make or buy decisions, inventory control, buyer training, materials handling, records and budgets.

**BUS 285**
**Human Resources Policy**
**3 Credits Class 3 Lab 1**
Case studies and research in modern personnel techniques and higher-level functions such as policy formation, job satisfaction, problems, motivation, performance appraisal and evolving and expanding employee service demands.

**BUS 290**
**Special Topics in Business Management Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**BUS 291**
**Individual Study in Business Management Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged with instructor permission on an individual basis.

**BUS 292**
**Field Experience in Business Management**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a business management facility through special arrangement with an instructor.

**BUS 293**
**Business Management Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued in a repeat performance of that function by the instructor.

**BUS 294**
**Business Management Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**BUS 295**
**Business Practicum Seminar**
**1-3 Credit Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**BUS 296**
**Business Practicum**
**2-4 Credits Class 1-3 Lab 7**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**BUS 297**
**Business Management Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**BUS 298**
**Business Internship**
**3-6 Credits Class 0 Lab 20-40**
On-the-job training in the workplace of a cooperating agency. Coordinated by an instructor.

**BUS 299**
**Business Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Ceramic

**CER 101**
**Ceramic Mineral Systems: Development and Procurement Methods**
**3 Credits Class 3 Lab 2**
Geology and mineralogy terms, structures and classification. Laboratory work and field trips provide firsthand contact.

**CER 102**
**Ceramic Materials and Processes I**
**4 Credits Class 3 Lab 4**
Crystal structure and properties of clays and other ceramic materials, clay-water systems, deflocculation, particle size reduction, screening, weighing, blending, mold making, slip casting, extrusion and dry pressing.

**CER 103**
**Ceramic Materials and Processes II**
**3 Credits Class 3 Lab 2**
Principles and delfocculation of ceramic forming, drying and firing including psychrometer charts and calculations.

**CER 104**
**Combustion I**
**3 Credits Class 3 Lab 2**
Fundamentals of combustion including flame patterns, fuels, combustion analysis and metering. Prerequisites: CHEM 120 and MATH 201.

**CER 201**
**Combustion II**
**4 Credits Class 3 Lab 3**
Examines fuel burning systems, burner equipment controls, piping, combustion analysis, heat transfer and the use of kilns and furnaces to manufacture products. Prerequisites: CER 104 and CHEM 120.

**CER 203**
**Statistical Quality and Process Control**
**1-4 Credits Class 1-3 Lab 0-3**
Theory of quality control in manufacturing processes, profitable systems and customer satisfaction. The organization of quality control departments, the role of the technician in quality control and the implementation of basic quality control methods are discussed.

**CER 205**
**Current Topics and Technology**
**0.5-3 Credits Class 0.5-3 Lab 0**
Introduction to new developments in the field of ceramic materials.

**CER 206**
**Ceramic Industry Practices**
**3 Credits Class 1 Lab 6**
Visits to ceramic plants provide insight into methods, processes and procedures for producing ceramic products.

**CER 207**
**Standard Procedures**
**3 Credits Class 3 Lab 2**
Refractories, whiteware, glass and structural clay products. Includes discussions of manufacturing processes from raw material to finished product. Prerequisites: CER 103 and CHEM 100.

**CER 208**
**Technical Laboratory**
**3 Credits Class 2 Lab 3**
Use of precision equipment used for analysis, investigation and determination of material properties in the ceramic industry. Prerequisite: CER 103.

**CER 209**
**Industrial Projects**
**2 Credits Class 1 Lab 3**
Processing of problems submitted by industrial companies. Problems are defined and solution procedures are determined by students in collaboration with the faculty and industrial technical personnel. Prerequisites: CER 102 and CER 103.

**CER 210**
**Glasses, Glazes and Enamels**
**4 Credits Class 3 Lab 3**
Raw material composition, physical properties and manufacturing processes of glass as well as the use of glassy coating for ceramics and metals. Includes exercises in batch calculating, application, testing and decorating techniques. Prerequisite: CHEM 120.

**CER 290**
**Special Topics in Ceramic Engineering Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**CER 291**
**Individual Study in Ceramic Engineering Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**CER 292**
**Field Experience in Ceramics**
**1-4 Credits Class 1-5 Lab 12-48**
On-the-job training in a ceramic facility through special arrangement with an instructor.

**CER 293**
**Ceramics Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued in a repeat performance of that function by the instructor.

**CER 294**
**Cooperative Work Experience in Ceramics**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must also be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**CER 295**
**Ceramic Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**CER 296**
**Ceramic Practicum**
**1-2 Credits Class 0 Lab 7-14**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**CER 297**
**Ceramics Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**CER 298**
**Ceramic Internship**
**3-6 Credits Class 0 Lab 20-40**
On-the-job training in the workplace of a cooperating agency. Coordinated by an instructor.

**CER 299**
**Ceramic Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Chemistry

**CHEM 100**
**Introduction to Chemistry**
**3 Credits Class 3 Lab 2**
Chemical principles as related to fundamental concepts as well as everyday experiences. Basic chemical concepts, structure of matter, nature of elements, bonding and naming of compounds.

**CHEM 110**
**Chemistry for Petroleum Production**
**3 Credits Class 3 Lab 2**
Builds on the introductory engineering chemistry principles and applications to oil and gas drilling and production such as acids, inhibitors, solvents, surfactants and polymers. Prerequisite: CHEM 100.

**CHEM 120**
**Chemistry for Ceramics**
**3 Credits Class 3 Lab 2**
Basic stoichiometry applied to ceramic batch of calculation and fuels, the gas laws as applied to furnace flue gas and combustion air, properties of solutions and electrolytes as applied to slip casting, chemical reactions and chemical equilibrium. Prerequisite: CHEM 100.

**CHEM 130**
**Fundamentals of Chemistry**
**4 Credits Class 3 Lab 3**
Atomic and molecular structure, periodic table and states of matter.

**CHEM 140**
**Chemistry for Materials**
**3 Credits Class 3 Lab 2**
Stoichiometry, gas laws, properties of solutions, basic organic chemistry and the chemistry of representative and transition elements. Prerequisite: CHEM 100.

**CHEM 290**
**Special Topics in Chemistry**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**CHEM 291**
**Individual Study in Chemistry**
**1 - 5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Communications

**COMM 050**
**Fundamentals of Communications**
**3 Credits Class 3 Lab 1**
Development of basic writing skills for the student with demonstrated need. Focus on paragraph writing with emphasis on sentence structure, parts of speech, punctuation, spelling, grammar and proofreading, Does not apply toward graduation requirements.

**COMM 051 PACE**
**Fundamentals of Reading**
**3 Credits Class 3 Lab 1**
Review of the fundamentals of general reading. Class work is individualized. Emphasis on word attack, comprehension and vocabulary skills. Does not apply toward graduation requirements.

**COMM 053**
**Verbal Professionalism**
**3 Credits Class 3 Lab 0**
Presenting a positive professional appearance through use of the language. Focus includes basic rules of grammar, usage and spoken English.

**COMM 100**
**Communications Tutor**
**3 Credits Class 3 Lab 0**
Individualized instruction tailored to student need. Skills covered correspond to those required in Communications I and II including paragraph development, short essay composition, organizational techniques, methods of proofreading, vocabulary development, spelling skills, grammar skills. Writing as a process will be stressed with emphasis on prewriting and revision.

**COMM 101**
**Spelling Skills**
**1 Credit Class 1 Lab 0**
Designed to identify and correct individual spelling weaknesses.

**COMM 102**
**Vocabulary Skills**
**1 Credit Class 1 Lab 0**
Recognition and word usage. Pre- and post-tests are used to show level of achievement.

**COMM 104**
**Job Search Techniques**
**1 Credit Class 1 Lab 1**
Provides information related to the job search. Strategies involved in identifying and defining a suitable position, designing a resume, preparing related correspondence, applying for the position and interviewing in person or by telephone. Prerequisite: COMM 121.

**COMM 105**
**Research Skills**
**1 Credit Class 1 Lab 0**
Identifies types of research needed for both on-the-job and classroom research presentations including primary and secondary research skills and approaching the process through a step-by-step method.

**COMM 110 PACE**
**Reading Communications**
**3 Credits Class 3 Lab 0**
Individualized, self-paced instruction in reading comprehension and vocabulary development. Students weak in reading skills, as determined by tests, is required to enroll in this course prior to enrolling in Communications I and II.

**COMM 121 PACE**
**Communications I**
**3 Credits Class 3 Lab 1**
Paragraph development and short essay composition. Writing as a process stressed with emphasis on prewriting and revision. The student required to take Communications I must successfully complete the course before enrolling in Communications II.

**COMM 122 PACE**
**Communications II**
**3 Credits Class 3 Lab 0**
Development of writing skills through medium-length writing assignments, concentrating on organizing and unifying essay components, studying various methods of development for different communications purposes, supporting and defending ideas in writing and showing evidence of creative and critical thinking in writing. Emphasizes writing as a process, prewriting and revision.

**COMM 123** **PACE**
**Communications III**
**3 Credits** **Class 3** **Lab 0**
The student may select from several variations of the course, each designed to increase awareness and applications of specific written communications techniques. Each course includes a short research-based project. Communications III/IV course are interchangeable, not sequential. Prerequisite: COMM 122.

**COMM 123A** **PACE**
**Communications III: Job Communications**
**3 Credits** **Class 3** **Lab 0**
Emphasizes skills necessary to write effectively in an office, industry, government or service. Basic principles and formats used in writing letters, memos, and informal reports. Prerequisite: COMM 122.

**COMM 123 B** **PACE**
**Communications III: Contemporary Issues**
**3 Credits** **Class 3** **Lab 0**
Developing critical thinking skills through reading, thinking, analyzing, discussing, and writing about issues that are of current interest on local, state, national and international levels. Prerequisite: COMM 122.

**COMM 123 C** **PACE**
**Communications III: Creative Writing**
**3 Credits** **Class 3** **Lab 0**
Designed to introduce contemporary poetry, fiction, and creative essays through actual writing, reading, and discussion. The emphasis of the course will be writing, pre-writing activities, brainstorming, and evaluation and analysis of others' writings. Prerequisite: COMM 122.

**COMM 123D** **PACE**
**Communications III: Community Service**
**3 Credits** **Class 3** **Lab 0**
Exploration of the need for community volunteers, identification of types of community service, determining personal and professional value of volunteerism and discussing potential pitfalls. Prerequisite: COMM 122.

**COMM 123E** **PACE**
**Communications III: Introduction to Literature**
**3 Credits** **Class 3** **Lab 0**
Short story as a form of written communication, focusing primarily on content, theme, and style. Through reading assignments, a variety of essays and class discussions, students develop critical thinking skills and sharpen awareness of the range and potential of written English. Prerequisite: COMM 122.

**COMM 123F** **PACE**
**Communications III: Sports Readings**
**3 Credits** **Class 3** **Lab 0**
Promote the improvement of composition skills through personal narratives, journals and various analytical modes of expression. Defines sports in broad terms to distinguish between professional, amateur and recreational sports. Prerequisite: COMM 122.

**COMM 123G**
**Communications III: Issues in Media**
**3 Credits** **Class 3** **Lab 0**
Explores critical media issues including effects of the mass media and how to deal with them. Development of critical thinking and writing skills. Prerequisite: COMM 122.

**COMM 123H** **PACE**
**Communications III: Nature Readings**
**3 Credits** **Class 3** **Lab 0**
Investigation of man's relationship with nature in the practical, spiritual, and aesthetic sense. Students are encouraged to explore, identify, and cultivate their own feelings about and perceptions of nature. Prerequisite: COMM 122.

**COMM 123J** **PACE**
**Communications III: The American West**
**3 Credits** **Class 3** **Lab 0**
Designed to acquaint students with the American West. Examines a variety of topics which lead to a fuller understanding of and appreciation for the Western United States. Prerequisite: COMM 122.

**COMM 123K** **PACE**
**Communications III: Portfolio Development**
**3 Credits** **Class 3** **Lab 0**
Documentation of skills and knowledge acquired from experience on the job, in the community, in the military, through travel, or through personal development. In cooperation with the instructor, the student creates a collection of written materials which provide background information related to the objectives of the course(s) being requested. The student may seek credit for a number of courses. Prerequisite: COMM 122.

**COMM 123L** **PACE**
**Communications III: Science Fiction**
**3 Credits** **Class 3** **Lab 0**
Develop writing and thinking skills in science fiction. Focuses on a chronological selection of short stories and science fiction films. Ideas and issues presented, as well as the manner of presentation, will be discussed. Prerequisite: COMM 122.

**COMM 123M**
**Communications III: Children's Literature**
**3 Credits** **Class 3** **Lab 0**
Survey of children's literature, including poetry, fiction and tales. Children's classics and current literature will be included. Prerequisite: Comm 122.

**COMM 124** **PACE**
**Communications IV**
**3 Credits** **Class 3** **Lab 0**
Several variations of the course, each designed to increase awareness and applications of specific written communications techniques. Each course includes a short research-based project. Communications III and IV courses are interchangeable, not sequential. Prerequisite: COMM 123.

**COMM 124A** **PACE**
**Communications IV: Job Communications**
**3 Credits** **Class 3** **Lab 0**
Writing effectively in an office, industry, government or service. Basic principles and formats used in writing letters, memos, and informal reports will be covered. Prerequisite: COMM 123.

**COMM 124B** **PACE**
**Communications IV: Contemporary Issues**
**3 Credits** **Class 3** **Lab 0**
Developing critical thinking skills through reading, thinking, analyzing, discussing and writing about issues that are of current interest on local, state, national and international levels. Students keep a journal, write essays, and complete a research paper. Prerequisite: COMM 123.

**COMM 124C** **PACE**
**Communications IV: Creative Writing**
**3 Credits** **Class 3** **Lab 0**
Introduction to contemporary poetry, fiction, and creative essays through actual writing, reading, and discussion with an emphasis on writing, pre-writing activities, brainstorming, evaluation and analysis. Prerequisite: COMM 123.

**COMM 124D** **PACE**
**Communications IV: Community Service**
**3 Credits** **Class 3** **Lab 0**
Exploration of the need for community volunteers, identification of types of community service, determining the personal and professional value of volunteerism and potential pitfalls. Prerequisite: COMM 123.

**COMM 124 E** **PACE**
**Communications IV: Introduction to Literature**
**3 Credits** **Class 3** **Lab 0**
Exploration of the short story as a form of written communication, focusing primarily on content, theme, and style. Students develop critical thinking skills and sharpen awareness of the range and potential of written English. Prerequisite: COMM 123.

**COMM 124F** **PACE**
**Communications IV: Sports Reading**
**3 Credits** **Class 3** **Lab 0**
Defines sports in broad terms to distinguish between professional, amateur and recreational sports. Analysis of sports from varying perspectives of active participants, spectators, the media and detractors of athletics. Prerequisite: COMM 123.

**COMM 124G** **PACE**
**Communications IV: Issues in Media**
**3 Credits** **Class 3** **Lab 0**
Exploration of critical media issues including effects of the mass media and how we view and deal with them. Prerequisite: COMM 123.

**COMM 124H** **PACE**
**Communications IV: Nature Readings**
**3 Credits** **Class 3** **Lab 0**
Investigation of man's relationship with nature in the practical, spiritual and aesthetic sense. Students are encouraged to explore, identify, and cultivate their own feelings about and perceptions of nature. Prerequisite: COMM 123.

**COMM 124J** **PACE**
**Communications IV: The American West**
**3 Credits** **Class 3** **Lab 0**
Examines a variety of topics which lead to a fuller understanding of, and appreciation for, the Western United States. Students have the opportunity to explore the West in diverse contexts - cultural, geographic, historic, and aesthetic. Prerequisite: COMM 123.

**COMM 124K** **PACE**
**Communications IV: Portfolio Development**
**3 Credits** **Class 3** **Lab 0**
Documentation of skills and knowledge acquired from experience on the job, in the community, in the military, through travel, or through personal development. In cooperation with the instructor, the student creates a collection of written materials which provide background information related to the objectives of the course(s) being requested. The student may seek credit for a number of courses. Prerequisite: COMM 123.

**COMM 124L**
**Communications IV: Science Fiction**
**3 Credits** **Class 3** **Lab 0**
Develop writing and thinking skills in science fiction. Focuses on a chronological selection of short stories and science fiction films. Ideas and issues presented, as well as the manner of presentation, will be discussed. Prerequisite: COMM 123.

COMM 124M
**Communications IV: Children's Literature**
**3 Credits Class 3 Lab 0**
Survey of children's literature, including poetry, fiction and tales. Children's classics and current literature will be included. Prerequisite: Comm 123.

COMM 130
**Speech**
**3 Credits Class 3 Lab 0**
Extemporaneous speaking skills through informative, demonstrative and persuasive speeches. The student learns to analyze audiences, choose and narrow topics, develop content through library and other resources, clearly organize speech material and effectively deliver finished speech to class audience. Prerequisite: COMM 121.

COMM 131
**Effective Speaking for Effective Leadership**
**0.5-3 Credits Class 0.5-3 Lab 0**
Effective speaking for those in leadership positions. Emphasizes the expression of ideas at meeting, group discussions and informal speaking engagements. Proper support of ideas and observations through research is stressed.

COMM 135
**Verbal Career Skills**
**3 Credits Class 3 Lab 0**
Develops the oral communication skills used in business offices through discussion, role-playing and reading about such topics as interviewing, practicing accepted office etiquette and handling various communications situations.

COMM 150
**Punctuation and Grammar**
**2 Credits Class 2 Lab 0**
Rules governing English grammar, punctuation and mechanics. Focuses on troublesome areas of grammar: pronoun usage, subject/verb agreement, verb forms and sentence fragments; punctuation: commas, semicolons, apostrophes, quotation marks, hyphens, dashes, brackets and parentheses; and mechanics: capitalization, spelling rules, the use of numerals, abbreviation rules.

COMM 223
**Promotional Writing**
**3 Credits Class 3 Lab 0**
Planning and submitting copy for news releases, sales oriented articles and brochures/pamphlets. Familiarization with the thinking processes involved and exploration of writing effective promotional prose. Prerequisite: COMM 122.

COMM 225 **PACE**
**Technical Writing**
**3 Credits Class 3 Lab 0**
Organizing and presenting written data with an emphasis on clear, precise, objective thinking and writing as demonstrated through a series of written reports. Prerequisite: COMM 122.

COMM 228
**Grant and Proposal Writing**
**0.5-3 Credits Class 0.5-3 Lab 0**
Examination of strategies, resources and techniques for writing grant proposals, including locating funding sources, grant formats, grant writing style and processes to organize grant writing.

COMM 228A
**Grants and Proposal Writing: Overview**
**0.5-1 Credits Class 0.5-1 Lab 0**
Examination of strategies, resources and techniques for writing grant proposals, including locating funding sources, grant formats, grant writing style and processes to organize grant writing.

COMM 228B
**Grants and Proposal Writing : Applications**
**0.5-1 Credits Class 0.5-1 Lab 0**
Applications and examples for grant proposal writing. Practice and exchange of techniques of grant writing. May include the use of the participant's own organization as a model for proposal writing.

COMM 228C
**Grants and Proposal Writing: Project**
**0.5-1 Credits Class 0.5-1 Lab 0**
Development of a grant proposal or a strategic plan for extended grant-seeking activities. Participants develop a project through research, interviews, data collection, community or work site investigation, or other development initiative.

COMM 290
**Special Topics in Communications**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

COMM 291
**Individual Study in Communications**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individualized basis with instructor permission.

COMM 292
**Field Experience in Communications**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a facility through special arrangement with an instructor.

COMM 294
**Communications Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

COMM 295
**Seminar in Community Service**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

COMM 296
**Practicum in Community Service**
**1 Credit Class 0 Lab 7**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

COMM 297
**Communications Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

## Compressor

CAGS 100
**Precision Instruments**
**3 Credits Class 1 Lab 6**
In-depth study of precision instruments. Bore calipers, vernier calipers, micrometers and other commonly used devices. Fits and tolerances are discussed as well as the use of factor manuals.

**CAGS 101**
**Introduction to Compressed Air Systems**
**3 Credits Class 3 Lab 0**
Introduction to the compressor technology. Provides an overview of various types of compressors and conditioning equipment utilized by industry. Theory of gas compression, compression ratios and gas laws.

**CAGS 102**
**Compressed Air Applications**
**3 Credits Class 3 Lab 0**
Various applications for compressed air. Includes everything from air tools to air powered drilling equipment. Emphasizes the various requirements placed upon the air supply to meet these applications.

**CAGS 110**
**Reciprocating Compressors I**
**4 Credits Class 2 Lab 6**
Introduction to compressors widely used by industry. Instruction in tear down and reassembly of smaller types of reciprocating compressors typically found in the work place.

**CAGS 111**
**Compressor Lubricants**
**2 Credits Class 2 Lab 0**
Types of lubricating demands required by all types of compressors. Lubrication qualities of various types and grades of oil including studies in viscosity, flash points and synthetic lubricants.

**CAGS 112**
**Air and Gas Condition**
**3 Credits Class 1 Lab 6**
Auxiliary equipment used in a compressed air system to provide the quality of air required for specific process applications. Maintenance and repair of filtering devices, refrigerative dryers, after coolers and other associated equipment.

**CAGS 116**
**Reciprocating Compressors II**
**4 Credits Class 2 Lab 6**
Continuation of CAGS 110. Training on large industrial and multistage compressors.

**CAGS 117**
**Hydraulics and Pneumatics**
**3 Credits Class 2 Lab 3**
Hydraulic and pneumatic controls utilized by compressed air systems. Schematic interpretation, valve and cylinder repair.

**CAGS 118**
**Processor Gas Compressors/Booster**
**3 Credits Class 2 Lab 3**
Requirements placed on compressors when specialized process gases are being utilized. Seal requirements, filtration and an overview of the conditions encountered when compressing with a pressurized inlet.

**CAGS 200**
**Rotary Screw Compressors**
**4 Credits Class 2 Lab 6**
Maintaining and repairing rotary screw compressors. Tear down and reassembly of various types of rotary screw compressors. Includes staging, lubrication, filtration and cooling requirements.

**CAGS 201**
**Compressor Installations**
**3 Credits Class 2 Lab 3**
Requirements for a compressor installation. Foundation and grouting, piping, commissioning and start-up.

**CAGS 202**
**Compressor Controls I**
**3 Credits Class 2 Lab 3**
Electrical controls utilized by compressed air systems. Functional control panels and interpretation of electrical ladder diagrams. Volt-ohm meters, amp meters and other associated electrical test equipment.

CAGS 203
**Rotary Lube Compressors**
**4 Credits Class 2 Lab 6**
Knowledge and skills required to maintain and repair rotary lube compressors. Hands-on instruction in tear down and reassembly.

CAGS 204
**Compressed Air System Troubleshooting**
**3 Credits Class 2 Lab 3**
Logic and skills required for effective troubleshooting. Hands-on training on a totally functional air system allows students to sharpen skills learned in preceding courses and to apply these skills in a logical progression to resolve a fault in the system.

CAGS 205
**Compressor Controls II**
**3 Credits Class 2 Lab 3**
Continuation of CAGS 204. Proficiency in electrical troubleshooting. Maintenance and repair of large three-phase electrical motors. Reinforcement of associated compressed air control circuits.

CAGS 206
**Centrifugal Compressors**
**4 Credits Class 2 Lab 6**
Knowledge and skills required to maintain and repair centrifugal compressors. Competency-based, hands-on instruction in tear down and reassembly.

CAGS 207
**Air System Design**
**3 Credits Class 2 Lab 3**
Practical application of all knowledge obtained in the compressor technology. The student designs an air system to meet a particular application. Includes sizing, installation, controls, safeties, auxiliary conditioning equipment and all other variables required for a trouble-free system.

CAGS 208
**Basic Refrigeration**
**4 Credits Class 3 Lab 3**
Introduction to types of systems available in the industry. Covers topics of heat: quantity, type, intensity; gas laws and properties; system component analysis and selection; piping layout and system capacity control.

CAGS 209
**NGV Fill Station Repair and Maintenance**
**2 Credits Class 2 Lab 0**
Proper maintenance and troubleshooting procedures needed to operate an NGV refueling station. Special emphasis is given to the topics of safety, preventive maintenance, and electrical-mechanical diagnostic procedures.

CAGS 280
**Refrigerant Technician Certification Seminar**
**1 Credit Class 1 Lab 0**
Completion of this course provides certification, as required by The Clean Air Act Amendment of 1990, for technicians who service, install, and maintain air conditioning and refrigeration equipment.

CAGS 290
**Special Topics in Compressor Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

CAGS 291
**Individual Study in Compressor Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

CAGS 292
**Field Experience in Compressor Technology**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a compressor facility through special arrangements with an instructor.

CAGS 293
**Compressor Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function.

CAGS 294
**Cooperative Work Experience in Compressor Technology**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

CAGS 295
**Compressor Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

CAGS 296
**Compressor Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

CAGS 297
**Compressor Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

CAGS 298
**Compressor Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

CAGS 299
**Compressor Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Ceramic

CER 101
**Ceramic Mineral Systems: Development and Procurement Methods**
**3 Credits Class 3 Lab 2**
Geology and mineralogy terms, structures and classification. Laboratory work and field trips provide firsthand contact.

CER 102
**Ceramic Materials and Processes I**
**4 Credits Class 3 Lab 4**
Crystal structure and properties of clays and other ceramic materials, clay-water systems, deflocculation, particle size reduction, screening, weighing, blending, mold making, slip casting, extrusion and dry pressing.

CER 103
**Ceramic Materials and Processes II**
**3 Credits Class 3 Lab 2**
Principles and delfocculation of ceramic forming, drying and firing including psychrometer charts and calculation.

CER 104
**Combustion I**
**3 Credits Class 3 Lab 2**
Fundamentals of combustion including flame patterns, fuels, combustion analysis and metering. Prerequisites: CHEM 120 and MATH 201.

**CER 201**
**Combustion II**
**4 Credits Class 3 Lab 3**
Examines fuel burning systems, burner equipment controls, piping, combustion analysis, heat transfer and the use of kilns and furnaces to manufacture products. Prerequisites: CER 104 and CHEM 120.

**CER 203**
**Statistical Quality and Process Control**
**1-4 Credits Class 1-3 Lab 0-3**
Theory of quality control in manufacturing processes, profitable systems and customer satisfaction. The organization of quality control departments, the role of the technician in quality control and the implementation of basic quality control methods are discussed.

**CER 205**
**Current Topics and Technology**
**0.5-3 Credits Class 0.5-3 Lab 0**
Introduction to new developments in the field of ceramic materials.

**CER 206**
**Ceramic Industry Practices**
**3 Credits Class 1 Lab 6**
Visits to ceramic plants provide insight into methods, processes and procedures for producing ceramic products.

**CER 207**
**Standard Procedures**
**3 Credits Class 3 Lab 2**
Refractories, whiteware, glass and structural clay products. Includes discussions of manufacturing processes from raw material to finished product. Prerequisites: CER 103 and CHEM 100.

**CER 208**
**Technical Laboratory**
**3 Credits Class 2 Lab 3**
Use of precision equipment used for analysis, investigation and determination of material properties in the ceramic industry. Prerequisite: CER 103.

**CER 209**
**Industrial Projects**
**2 Credits Class 1 Lab 3**
Processing of problems submitted by industrial companies. Problems are defined and solution procedures are determined by students in collaboration with the faculty and industrial technical personnel. Prerequisites: CER 102 and CER 103.

**CER 210**
**Glasses, Glazes and Enamels**
**4 Credits Class 3 Lab 3**
Raw material composition, physical properties and manufacturing processes of glass as well as the use of glassy coating for ceramics and metals. Includes exercises in batch calculating, application, testing and decorating techniques. Prerequisite: CHEM 120.

**CER 290**
**Special Topics in Ceramic Engineering Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**CER 291**
**Individual Study in Ceramic Engineering Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**CER 292**
**Field Experience in Ceramics**
**1-4 Credits Class 1-5 Lab 12-48**
On-the-job training in a ceramic facility through special arrangement with an instructor.

**CER 293**
**Ceramics Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued in a repeat performance of that function by the instructor.

**CER 294**
**Cooperative Work Experience in Ceramics**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must also be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**CER 295**
**Ceramic Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**CER 296**
**Ceramic Practicum**
**1-2 Credits Class 0 Lab 7-14**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**CER 297**
**Ceramics Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**CER 298**
**Ceramic Internship**
**3-6 Credits Class 0 Lab 20-40**
On-the-job training in the workplace of a cooperating agency. Coordinated by an instructor.

**CER 299**
**Ceramic Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Chemistry

**CHEM 100**
**Introduction to Chemistry**
**3 Credits Class 3 Lab 2**
Chemical principles as related to fundamental concepts as well as everyday experiences. Basic chemical concepts, structure of matter, nature of elements, bonding and naming of compounds.

**CHEM 110**
**Chemistry for Petroleum Production**
**3 Credits Class 3 Lab 2**
Builds on the introductory engineering chemistry principles and applications to oil and gas drilling and production such as acids, inhibitors, solvents, surfactants and polymers. Prerequisite: CHEM 100.

**CHEM 120**
**Chemistry for Ceramics**
**3 Credits Class 3 Lab 2**
Basic stoichiometry applied to ceramic batch of calculation and fuels, the gas laws as applied to furnace flue gas and combustion air, properties of solutions and electrolytes as applied to slip casting, chemical reactions and chemical equilibrium. Prerequisite: CHEM 100.

**CHEM 130**
**Fundamentals of Chemistry**
**4 Credits Class 3 Lab 3**
Atomic and molecular structure, periodic table and states of matter.

**CHEM 140**
**Chemistry for Materials**
**3 Credits Class 3 Lab 2**
Stoichiometry, gas laws, properties of solutions, basic organic chemistry and the chemistry of representative and transition elements. Prerequisite: CHEM 100.

**CHEM 290**
**Special Topics in Chemistry**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**CHEM 291**
**Individual Study in Chemistry**
**1 - 5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Communications

**COMM 050**
**Fundamentals of Communications**
**3 Credits Class 3 Lab 1**
Development of basic writing skills for the student with demonstrated need. Focus on paragraph writing with emphasis on sentence structure, parts of speech, punctuation, spelling, grammar and proofreading, Does not apply toward graduation requirements.

**COMM 051 PACE**
**Fundamentals of Reading**
**3 Credits Class 3 Lab 1**
Review of the fundamentals of general reading. Class work is individualized. Emphasis on word attack, comprehension and vocabulary skills. Does not apply toward graduation requirements.

**COMM 053**
**Verbal Professionalism**
**3 Credits Class 3 Lab 0**
Presenting a positive professional appearance through use of the language. Focus includes basic rules of grammar, usage and spoken English.

**COMM 100**
**Communications Tutor**
**3 Credits Class 3 Lab 0**
Individualized instruction tailored to student need. Skills covered correspond to those required in Communications I and II including paragraph development, short essay composition, organizational techniques, methods of proofreading, vocabulary development, spelling skills, grammar skills. Writing as a process will be stressed with emphasis on prewriting and revision.

**COMM 101**
**Spelling Skills**
**1 Credit Class 1 Lab 0**
Designed to identify and correct individual spelling weaknesses.

**COMM 102**
**Vocabulary Skills**
**1 Credit Class 1 Lab 0**
Recognition and word usage. Pre- and post-tests are used to show level of achievement.

**COMM 104**
**Job Search Techniques**
**1 Credit Class 1 Lab 1**
Provides information related to the job search. Strategies involved in identifying and defining a suitable position, designing a resume, preparing related correspondence, applying for the position and interviewing in person or by telephone. Prerequisite: COMM 121.

**COMM 105**
**Research Skills**
**1 Credit Class 1 Lab 0**
Identifies types of research needed for both on-the-job and classroom research presentations including primary and secondary research skills and approaching the process through a step-by-step method.

**COMM 110 PACE**
**Reading Communications**
**3 Credits Class 3 Lab 0**
Individualized, self-paced instruction in reading comprehension and vocabulary development. Students weak in reading skills, as determined by tests, is required to enroll in this course prior to enrolling in Communications I and II.

**COMM 121 PACE**
**Communications I**
**3 Credits Class 3 Lab 1**
Paragraph development and short essay composition. Writing as a process stressed with emphasis on prewriting and revision. The student required to take Communications I must successfully complete the course before enrolling in Communications II.

**COMM 122 PACE**
**Communications II**
**3 Credits Class 3 Lab 0**
Development of writing skills through medium-length writing assignments, concentrating on organizing and unifying essay components, studying various methods of development for different communications purposes, supporting and defending ideas in writing and showing evidence of creative and critical thinking in writing. Emphasizes writing as a process, prewriting and revision.

**COMM 123 PACE**
**Communications III**
**3 Credits Class 3 Lab 0**
The student may select from several variations of the course, each designed to increase awareness and applications of specific written communications techniques. Each course includes a short research-based project. Communications III/IV course are interchangeable, not sequential.
Prerequisite: COMM 122.

**COMM 123A PACE**
**Communications III: Job Communications**
**3 Credits Class 3 Lab 0**
Emphasizes skills necessary to write effectively in an office, industry, government or service. Basic principles and formats used in writing letters, memos, and informal reports. Prerequisite: COMM 122.

**COMM 123 B PACE**
**Communications III: Contemporary Issues**
**3 Credits Class 3 Lab 0**
Developing critical thinking skills through reading, thinking, analyzing, discussing, and writing about issues that are of current interest on local, state, national and international levels. Prerequisite: COMM 122.

**COMM 123 C PACE**
**Communications III: Creative Writing**
**3 Credits Class 3 Lab 0**
Designed to introduce contemporary poetry, fiction, and creative essays through actual writing, reading, and discussion. The emphasis of the course will be writing, pre-writing activities, brainstorming, and evaluation and analysis of others' writings.
Prerequisite: COMM 122.

**COMM 123D PACE**
**Communications III: Community Service**
**3 Credits Class 3 Lab 0**
Exploration of the need for community volunteers, identification of types of community service, determining personal and professional value of volunteerism and discussing potential pitfalls. Prerequisite: COMM 122

**COMM 123E PACE**
**Communications III: Introduction to Literature**
**3 Credits Class 3 Lab 0**
Short story as a form of written communication, focusing primarily on content, theme, and style. Through reading assignments, a variety of essays and class discussions, students develop critical thinking skills and sharpen awareness of the range and potential of written English. Prerequisite: COMM 122.

**COMM 123F PACE**
**Communications III: Sports Readings**
**3 Credits Class 3 Lab 0**
Promote the improvement of composition skills through personal narratives, journals and various analytical modes of expression. Defines sports in broad terms to distinguish between professional, amateur and recreational sports. Prerequisite: COMM 122.

**COMM 123G**
**Communications III: Issues in Media**
**3 Credits Class 3 Lab 0**
Explores critical media issues including effects of the mass media and how to deal with them. Development of critical thinking and writing skills. Prerequisite: COMM 122.

**COMM 123H PACE**
**Communications III: Nature Readings**
**3 Credits Class 3 Lab 0**
Investigation of man's relationship with nature in the practical, spiritual, and aesthetic sense. Students are encouraged to explore, identify, and cultivate their own feelings about and perceptions of nature. Prerequisite: COMM 122.

**COMM 123J PACE**
**Communications III: The American West**
**3 Credits Class 3 Lab 0**
Designed to acquaint students with the American West. Examines a variety of topics which lead to a fuller understanding of and appreciation for the Western United States. Prerequisite: COMM 122.

**COMM 123K PACE**
**Communications III: Portfolio Development**
**3 Credits Class 3 Lab 0**
Documentation of skills and knowledge acquired from experience on the job, in the community, in the military, through travel, or through personal development. In cooperation with the instructor, the student creates a collection of written materials which provide background information related to the objectives of the course(s) being requested. The student may seek credit for a number of courses. Prerequisite: COMM 122.

**COMM 123L PACE**
**Communications III: Science Fiction**
**3 Credits Class 3 Lab 0**
Develop writing and thinking skills in science fiction. Focuses on a chronological selection of short stories and science fiction films. Ideas and issues presented, as well as the manner of presentation, will be discussed. Prerequisite: COMM 122.

**COMM 123M**
**Communications III: Children's Literature**
**3 Credits Class 3 Lab 0**
Survey of children's literature, including poetry, fiction and tales. Children's classics and current literature will be included. Prerequisite: Comm 122.

**COMM 124 PACE**
**Communications IV**
**3 Credits Class 3 Lab 0**
Several variations of the course, each designed to increase awareness and applications of specific written communications techniques. Each course includes a short research-based project. Communications III and IV courses are interchangeable, not sequential. Prerequisite: COMM 123.

**COMM 124A PACE**
**Communications IV: Job Communications**
**3 Credits Class 3 Lab 0**
Writing effectively in an office, industry, government or service. Basic principles and formats used in writing letters, memos, and informal reports will be covered. Prerequisite: COMM 123.

**COMM 124B PACE**
**Communications IV: Contemporary Issues**
**3 Credits Class 3 Lab 0**
Developing critical thinking skills through reading, thinking, analyzing, discussing and writing about issues that are of current interest on local, state, national and international levels. Students keep a journal, write essays, and complete a research paper. Prerequisite: COMM 123.

**COMM 124C PACE**
**Communications IV: Creative Writing**
**3 Credits Class 3 Lab 0**
Introduction to contemporary poetry, fiction, and creative essays through actual writing, reading, and discussion with an emphasis on writing, pre-writing activities, brainstorming, evaluation and analysis. Prerequisite: COMM 123.

**COMM 124D PACE**
**Communications IV: Community Service**
**3 Credits Class 3 Lab 0**
Exploration of the need for community volunteers, identification of types of community service, determining the personal and professional value of volunteerism and potential pitfalls. Prerequisite: COMM 123.

**COMM 124 E PACE**
**Communications IV: Introduction to Literature**
**3 Credits Class 3 Lab 0**
Exploration of the short story as a form of written communication, focusing primarily on content, theme, and style. Students develop critical thinking skills and sharpen awareness of the range and potential of written English. Prerequisite: COMM 123.

**COMM 124F PACE**
**Communications IV: Sports Reading**
**3 Credits Class 3 Lab 0**
Defines sports in broad terms to distinguish between professional, amateur and recreational sports. Analysis of sports from varying perspectives of active participants, spectators, the media and detractors of athletics. Prerequisite: COMM 123.

**COMM 124G PACE**
**Communications IV: Issues in Media**
**3 Credits Class 3 Lab 0**
Exploration of critical media issues including effects of the mass media and how we view and deal with them. Prerequisite: COMM 123.

**COMM 124H PACE**
**Communications IV: Nature Readings**
**3 Credits Class 3 Lab 0**
Investigatation of man's relationship with nature in the practical, spiritual and aesthetic sense. Students are encouraged to explore, identify, and cultivate their own feelings about and perceptions of nature. Prerequisite: COMM 123.

**COMM 124J PACE**
**Communications IV: The American West**
**3 Credits Class 3 Lab 0**
Examines a variety of topics which lead to a fuller understanding of, and appreciation for, the Western United States. Students have the opportunity to explore the West in diverse contexts - cultural, geographic, historic, and aesthetic. Prerequisite: COMM 123.

**COMM 124K PACE**
**Communications IV: Portfolio Development**
**3 Credits Class 3 Lab 0**
Documentation of skills and knowledge acquired from experience on the job, in the community, in the military, through travel, or through personal development. In cooperation with the instructor, the student creates a collection of written materials which provide background information related to the objectives of the course(s) being requested. The student may seek credit for a number of courses. Prerequisite: COMM 123.

**COMM 124L**
**Communications IV: Science Fiction**
**3 Credits Class 3 Lab 0**
Develop writing and thinking skills in science fiction. Focuses on a chronological selection of short stories and science fiction films. Ideas and issues presented, as well as the manner of presentation, will be discussed. Prerequisite: COMM 123.

**COMM 124M**
**Communications IV: Children's Literature**
**3 Credits Class 3 Lab 0**
Survey of children's literature, including poetry, fiction and tales. Children's classics and current literature will be included. Prerequisite: Comm 123.

**COMM 130**
**Speech**
**3 Credits Class 3 Lab 0**
Extemporaneous speaking skills through informative, demonstrative and persuasive speeches. The student learns to analyze audiences, choose and narrow topics, develop content through library and other resources, clearly organize speech material and effectively deliver finished speech to class audience. Prerequisite: COMM 121.

**COMM 131**
**Effective Speaking for Effective Leadership**
**0.5-3 Credits Class 0.5-3 Lab 0**
Effective speaking for those in leadership positions. Emphasizes the expression of ideas at meeting, group discussions and informal speaking engagements. Proper support of ideas and observations through research is stressed.

**COMM 135**
**Verbal Career Skills**
**3 Credits Class 3 Lab 0**
Develops the oral communication skills used in business offices through discussion, role-playing and reading about such topics as interviewing, practicing accepted office etiquette and handling various communications situations.

**COMM 150**
**Punctuation and Grammar**
**2 Credits Class 2 Lab 0**
Rules governing English grammar, punctuation and mechanics. Focuses on troublesome areas of grammar: pronoun usage, subject/verb agreement, verb forms and sentence fragments; punctuation: commas, semicolons, apostrophes, quotation marks, hyphens, dashes, brackets and parentheses; and mechanics: capitalization, spelling rules, the use of numerals, abbreviation rules.

COMM 228B
**Grants and Proposal Writing : Applications**
**0.5-1 Credits Class 0.5-1 Lab 0**
Applications and examples for grant proposal writing. Practice and exchange of techniques of grant writing. May include the use of the participant's own organization as a model for proposal writing.

COMM 228C
**Grants and Proposal Writing: Project**
**0.5-1 Credits Class 0.5-1 Lab 0**
Development of a grant proposal or a strategic plan for extended grant-seeking activities. Participants develop a project through research, interviews, data collection, community or work site investigation, or other development initiative.

COMM 290
**Special Topics in Communications**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

COMM 291
**Individual Study in Communications**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individualized basis with instructor permission.

COMM 292
**Field Experience in Communications**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a facility through special arrangement with an instructor.

COMM 294
**Communications Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

COMM 295
**Seminar in Community Service**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

COMM 296
**Practicum in Community Service**
**1 Credit Class 0 Lab 7**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

COMM 297
**Communications Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

## Compressor

CAGS 100
**Precision Instruments**
**3 Credits Class 1 Lab 6**
In-depth study of precision instruments. Bore calipers, vernier calipers, micrometers and other commonly used devices. Fits and tolerances are discussed as well as the use of factor manuals.

**CAGS 101**
**Introduction to Compressed Air Systems**
**3 Credits Class 3 Lab 0**
Introduction to the compressor technology. Provides an overview of various types of compressors and conditioning equipment utilized by industry. Theory of gas compression, compression ratios and gas laws.

**CAGS 102**
**Compressed Air Applications**
**3 Credits Class 3 Lab 0**
Various applications for compressed air. Includes everything from air tools to air powered drilling equipment. Emphasizes the various requirements placed upon the air supply to meet these applications.

**CAGS 110**
**Reciprocating Compressors I**
**4 Credits Class 2 Lab 6**
Introduction to compressors widely used by industry. Instruction in tear down and reassembly of smaller types of reciprocating compressors typically found in the work place.

**CAGS 111**
**Compressor Lubricants**
**2 Credits Class 2 Lab 0**
Types of lubricating demands required by all types of compressors. Lubrication qualities of various types and grades of oil including studies in viscosity, flash points and synthetic lubricants.

**CAGS 112**
**Air and Gas Condition**
**3 Credits Class 1 Lab 6**
Auxiliary equipment used in a compressed air system to provide the quality of air required for specific process applications. Maintenance and repair of filtering devices, refrigerative dryers, after coolers and other associated equipment.

**CAGS 116**
**Reciprocating Compressors II**
**4 Credits Class 2 Lab 6**
Continuation of CAGS 110. Training on large industrial and multi-stage compressors.

**CAGS 117**
**Hydraulics and Pneumatics**
**3 Credits Class 2 Lab 3**
Hydraulic and pneumatic controls utilized by compressed air systems. Schematic interpretation, valve and cylinder repair.

**CAGS 118**
**Processor Gas Compressors/Booster**
**3 Credits Class 2 Lab 3**
Requirements placed on compressors when specialized process gases are being utilized. Seal requirements, filtration and an overview of the conditions encountered when compressing with a pressurized inlet.

**CAGS 200**
**Rotary Screw Compressors**
**4 Credits Class 2 Lab 6**
Maintaining and repairing rotary screw compressors. Tear down and reassembly of various types of rotary screw compressors. Includes staging, lubrication, filtration and cooling requirements.

**CAGS 201**
**Compressor Installations**
**3 Credits Class 2 Lab 3**
Requirements for a compressor installation. Foundation and grouting, piping, commissioning and start-up.

**CAGS 202**
**Compressor Controls I**
**3 Credits Class 2 Lab 3**
Electrical controls utilized by compressed air systems. Functional control panels and interpretation of electrical ladder diagrams. Volt-ohm meters, amp meters and other associated electrical test equipment.

**CAGS 203**
**Rotary Lube Compressors**
**4 Credits Class 2 Lab 6**
Knowledge and skills required to maintain and repair rotary lube compressors. Hands-on instruction in tear down and reassembly.

**CAGS 204**
**Compressed Air System Troubleshooting**
**3 Credits Class 2 Lab 3**
Logic and skills required for effective troubleshooting. Hands-on training on a totally functional air system allows students to sharpen skills learned in preceding courses and to apply these skills in a logical progression to resolve a fault in the system.

**CAGS 205**
**Compressor Controls II**
**3 Credits Class 2 Lab 3**
Continuation of CAGS 204. Proficiency in electrical troubleshooting. Maintenance and repair of large three-phase electrical motors. Reinforcement of associated compressed air control circuits.

**CAGS 206**
**Centrifugal Compressors**
**4 Credits Class 2 Lab 6**
Knowledge and skills required to maintain and repair centrifugal compressors. Competency-based, hands-on instruction in tear down and reassembly.

**CAGS 207**
**Air System Design**
**3 Credits Class 2 Lab 3**
Practical application of all knowledge obtained in the compressor technology. The student designs an air system to meet a particular application. Includes sizing, installation, controls, safeties, auxiliary conditioning equipment and all other variables required for a trouble-free system.

**CAGS 208**
**Basic Refrigeration**
**4 Credits Class 3 Lab 3**
Introduction to types of systems available in the industry. Covers topics of heat: quantity, type, intensity; gas laws and properties; system component analysis and selection; piping layout and system capacity control.

**CAGS 209**
**NGV Fill Station Repair and Maintenance**
**2 Credits Class 2 Lab 0**
Proper maintenance and troubleshooting procedures needed to operate an NGV refueling station. Special emphasis is given to the topics of safety, preventive maintenance, and electrical-mechanical diagnostic procedures.

**CAGS 280**
**Refrigerant Technician Certification Seminar**
**1 Credit Class 1 Lab 0**
Completion of this course provides certification, as required by The Clean Air Act Amendment of 1990, for technicians who service, install, and maintain air conditioning and refrigeration equipment.

**CAGS 290**
**Special Topics in Compressor Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**CAGS 291**
**Individual Study in Compressor Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**CAGS 292**
**Field Experience in Compressor Technology**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a compressor facility through special arrangements with an instructor.

**CAGS 293**
**Compressor Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function.

**CAGS 294**
**Cooperative Work Experience in Compressor Technology**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**CAGS 295**
**Compressor Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**CAGS 296**
**Compressor Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**CAGS 297**
**Compressor Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**CAGS 298**
**Compressor Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**CAGS 299**
**Compressor Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Computer Science

**CS 100**
**Program Analysis I**
**3 Credits Class 3 Lab 2**
Program logic using the flowchart as a tool to diagram the solution to a written problem. Includes programming terminology, hierarchy of evaluation for arithmetic assignment statements, decision making, counter and accumulator concepts, flowcharting given problems and evaluation of flowcharts.

**CS 101**
**Program Analysis II**
**3 Credits Class 3 Lab 2**
Sequel to CS 100 with emphasis on program efficiency and economy. The flowchart is used as the primary tool to diagram problem solutions. Emphasizes structured design in flowcharting the solution to problems containing counters, accumulators, control breaks and arrays. Prerequisite: CS 100.

**CS 110**
**Introduction to COBOL**
**5 Credits Class 4 Lab 5**
COBOL language (American National Standard, 1985) and its implementation in the business environment. Topics include the basic structure of a COBOL program, finding and correcting syntax errors, imperative, arithmetic and conditional statements, editing and truncation rules, performs, redefines, and techniques for management of single dimension arrays. Prerequisite: CS 100.

**CS 111**
**Advanced COBOL**
**5 Credits Class 4 Lab 5**
Advanced programming techniques. Includes two and three dimensional arrays; sequential indexed, and relative file processing; sorting techniques; subprograms; and modular design. Prerequisites: CS 101 and CS 110.

**CS 120**
**Introduction to Data Processing**
**3 Credits Class 3 Lab 2**
Introduction to the college's computer system. Lecture and hands-on laboratory experience covers the main operating system commands, the on-line text editor and the file copier utility.**CS 125**
**Computer Numbering System**
**1 Credit Class 1 Lab 0**
Introduction to the principles of numbering systems. Includes binary, octal and hexadecimal conversions and arithmetic operations, byte organization, and ASCII and EBCDIC coding schemes.

**CS 135**
**Computer Center Operations**
**1 Credit Class 1 Lab 3**
Provides experience in a computer center. Students will be responsible for hardware monitoring, distribution of output, daily account backups, user assistance and other day to day operations.

**CS 140**
**Job Control and Utilities**
**3 Credits Class 3 Lab 2**
Current computer operating system including accounting structure, the syntax and operation of system and console operator commands and available system utility programs. Prerequisite: CS 120.

**CS 155**
**Applied Statistical Packages**
**3 Credits Class 3 Lab 2**
Computer statistical packages used to analyze classical decision theory (hypothesis testing) problems. Analysis of marketing information and questionnaire data are emphasized.

**CS 200**
**Introduction to Networking**
**4 Credits Class 3 Lab 3**
Concepts and components involved in networking computers for hardware and software resource sharing. Prerequisite: MICS 110.
**CS 210**
**Programming in C**
**4 Credits Class 4 Lab 2**
Assembly language C including basic elements of the C programming language which include program elements, program structure, functions and function structure, input and output operations, control statements, data types and declarations, and arithmetic operators and expressions. Prerequisites: CS 101 and MICS 110.

**CS 213**
**Applications in Structured COBOL**
**4 Credits Class 4 Lab 2**
Advanced business applications using structured programming, documentation techniques and forms management software. Prerequisites: CS 111, CS 240 and CS 271.

**CS 220**
**Programming in RPG**
**5 Credits Class 4 Lab 3**
Principles, logic and coding formats of the RPG II (Report Program Generator II) computer programming language. Writing RPG II programs using sequential and indexed sequential files, tables and arrays. Includes using the external sort utility, XSORT, to perform file maintenance and to produce a variety of reports. Prerequisites: CS 100 and CS 120.

**CS 240**
**Database Management**
**3 Credits Class 3 Lab 2**
Structure, function and use of database processing and management. Students create and access a typical business database using the current database management software, Turbo Image and application programming COBOL. Prerequisite: CS 111.

**CS 250**
**Basic Assembler Language**
**3 Credits Class 3 Lab 2**
Principles of programming in 360/370 ASSEMBLER language. Topics covered include machine code, instruction execution, addressing techniques and various formats of data representation. Computer programming projects are assigned to illustrate programming techniques of the machine language using an IBM 370. Prerequisite: CS 125.

**CS 270**
**Technical Manuals Usage**
**2 Credits Class 2 Lab 1**
Experience in reading and interpreting technical manuals. Prerequisite: CS 111.

**CS 271**
**Forms Management Systems**
**2 Credits Class 2 Lab 2**
Design, implementation and control of electronic forms for data entry and retrieval through a stand-alone data entry program and programmatically through applications programs written in COBOL. Instruction also in VPLUS, a comprehensive software system for HP computer systems. Prerequisite: CS 111.

**CS 275**
**Fourth Generation Language and Prototyping**
**4 Credits Class 4 Lab 2**
Structure and use of a fourth generation computer language to design and implement information systems through prototyping. The student creates, maintains and designs data dictionaries, data entry and retrieval screens, report generators and transaction processing techniques. The software system used is Powerhouse. Prerequisites: CS 111 and CS 240.**CS 290**
**Special Topics in Computer Science Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**CS 291**
**Individual Study in Computer Science Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**CS 292**
**Field Experience in Computer Science**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a computer science facility through special arrangement with an instructor.

**CS 294**
**Cooperative Work Experience in Computer Science**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must also be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**CS 295**
**Computer Science Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**CS 296**
**Computer Science Practicum**
**1-2 Credits Class 0 Lab 7-14**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**CS 297**
**Observation Hour in Computer Science**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**CS 298**
**Computer Science Internship**
**3-6 Credits Class 0 Lab 20-40**
On-the-job training in the workplace of a cooperating agency. Coordinated by an instructor.

**CS 299**
**Computer Science Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Corrections

**CORR 100**
**Orientation to Corrections**
**2 Credits Class 2 Lab 2**
Introduction to the field of corrections including an overview and history of both private and public, adult and juvenile corrections, community-based correctional programs, probation, institutions and parole.

**CORR 105**
**Adult Residential Services**
**4 Credits Class 3 Lab 4**
Correctional institutions, their history, functions, sociology, programs and effectiveness. Emphasizes direct, practical observation and learning experiences through visitations, instructional materials and guest lectures.

**CORR 106**
**Probation and Parole**
**3 Credits Class 3 Lab 2**
Probation, parole and community-based correction programs. Legal considerations, detention processes, community treatment programs, social investigations, the use of community resources, the role of the probation and parole officer in community service and the supervision of offenders.

**CORR 122**
**Correctional Law**
**3 Credits Class 2 Lab 3**
Cases, statutory and constitutional law specifically applied to the field of corrections. Overview of the development of correctional law with an emphasis on general principles applied to cases in corrections. Includes study of landmark cases and their influence on correctional personnel, agencies and clientele. Prerequisite: CJ 100.

**CORR 151**
**Unarmed Self-Defense**
**2 Credits Class 1 Lab 4**
Unarmed self-defense tactics are studied and practiced to prepare the student for defensive maneuvers required in correctional work. The student receives the same training as provided by the Department of Rehabilitation and Correction in-service.

**CORR 160**
**Group Work Techniques**
**3 Credits Class 2 Lab 3**
Use of short and long-term group counseling in human services programs. Introduction to team building and problem-solving as they apply to correctional unit management as well as group counseling theories and practices.

**CORR 161**
**Reality Therapy**
**3 Credits Class 3 Lab 2**
In-depth study of reality therapy, the most commonly used treatment modality in corrections. Through learning how the brain works to achieve control and desired results, the student comes to understand how to live a more effective life and how to help others to do the same.

**CORR 216**
**Correctional Firearms**
**3 Credits Class 2 Lab 4**
Introduction to modern correctional firearms. Topics include nomenclature; weapons care, proper use; restrictions and liability; transporting arms; and home/office safety procedures. Range practice of both the pistol and shotgun are included. Prerequisite: Instructor permission.

**CORR 235**
**Correctional Report Writing**
**3 Credits Class 2 Lab 3**
Practical experience in preparing the diverse forms, reports and logs that accompany correctional work. Emphasis on intake, home studies, presentence and investigative report writing and case recording. Routine shift logs, incident reports, and risk assessment forms are also covered. Prerequisite: COMM 122.

**CORR 250**
**Correctional Officer Training**
**12 Credits Class 10 Lab 6**
Laws, policies, procedures and self-defense techniques used in a jail facility. Students will be certified upon completion of this program through the Ohio Peace Officer Training Council to work in jail facilities.

**CORR 260**
**Interviewing Techniques**
**4 Credits Class 3 Lab 3**
Theory and practice of interviewing. Emphasis on the development of good attending skills, responding to specific feelings and thoughts and the importance of self-awareness. Introduces the use of audio and video tapes as learning tools.

**CORR 261**
**Approaches to Counseling**
**4 Credits Class 3 Lab 3**
A comparative study of counseling theories. Development of an eclectic personal style of counseling through studying the philosophy, key concepts, goals, techniques and procedures of each approach.

**CORR 262**
**Counseling Techniques**
**3 Credits Class 2 Lab 4**
Development of an individualized approach to counseling. Fundamental counseling techniques and procedures are practiced within the framework of their approach in a variety of video lab simulations. Prerequisite: CORR 261.

**CORR 265**
**Case Analysis**
**3 Credits Class 3 Lab 2**
Evaluation of adjudicated persons by probation, parole agencies and correctional institutions. Emphasizes accurate and objective reporting techniques and developing treatment for rehabilitation. Prerequisites: CORR 261 and CORR 262.

**CORR 280**
**Current Topics in Corrections**
**0.25-5 Credits Class .25-5 Lab 0**
Current topics and issues as well as new development in the field of corrections are reviewed, studied and discussed.

**CORR 290**
**Special Topics in Corrections Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**CORR 291**
**Individual Study in Corrections Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**CORR 292**
**Field Experience in Corrections Technology**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a corrections facility through special arrangement with an instructor.

**CORR 294**
**Corrections Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**CORR 295**
**Corrections Practicum Seminar**
**1-3 Credits Class 1-3 Lab 1-2**
Discussion of job-related concerns and assistance with practicum.

**CORR 295A**
**Corrections Practicum Seminar**
**1 Credit Class 1 Lab 1**
Discussion of job-related concerns and assistance with Practicum. Concurrent with CORR 296A. Prerequisites: Instructor permission and CORR 298.

**CORR 295B**
**Corrections Practicum Seminar**
**1 Credit Class 1 Lab 1**
Discussion of job-related concerns and assistance with practicum. Concurrent with CORR 296B. Prerequisites: Instructor permission and CORR 298.

**CORR 296**
**Corrections Practicum**
**1-5 Credits Class 0 Lab 7-35**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**CORR 296A**
**Corrections Practicum**
**3 Credits Class 2 Lab 8**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation. Prerequisites: Instructor permission and CORR 298.

**CORR 296B**
**Corrections Practicum**
**3 Credits Class 2 Lab 8**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation. Prerequisites: Instructor permission and CORR 298.

**CORR 297**
**Corrections Observation Hour**
**0.5-3 Credits Class 0 Lab 8-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**CORR 298**
**Corrections Practicum Orientation**
**1 Credit Class 1 Lab 2**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**CORR 299**
**Corrections Field Experience**
**3-4 Credits Class 2 Lab 36-45**
An alternative to the practicum experience offered to the second year student. The student will be placed with and work in an agency at least half-time (280 hours) during the quarter. The agency where the student is placed must be an agency within the student's career choice and be able to provide experience that supplements classroom experience. This is a special arrangement course offered at faculty discretion. Prerequisite: CORR 298.

## Criminal Justice

**CJ 100**
**Criminal Justice Systems**
**3 Credits Class 3 Lab 2**
Introduction to law enforcement, prosecution, courts and corrections components of the system of justice in the U.S. Considers the history, philosophy and functions of these components as well as current problems and issues.

**CJ 101**
**Orientation to Law Enforcement**
**1 Credit Class 1 Lab 1**
Introduction to the law enforcement officer and exploration of various career choices available in the law enforcement technology.

**CJ 105**
**Sign Language**
**1 Credit Class 1 Lab 1**
Introduction to communication needs of the deaf community. The student learns and practices conversational sign language skills that will facilitate the provision of services to signing clients and their families.

**CJ 106**
**Advanced Sign Language**
**1 Credit Class 1 Lab 1**
Advanced course in sign language expands vocabulary and allows the student to become more proficient in signing. Prerequisite
requisite: CJ 105.

**CJ 120**
**Criminal Law**
**4 Credits Class 4 Lab 0**
History, philosophy and function of criminal law in the U.S. Common law, elements of offenses and basic legal concepts that characterize American justice.

**CJ 121**
**Ohio Criminal Law**
**4 Credits Class 4 Lab 0**
Comprehensive study of the Ohio Revised Code. Elements of offenses are identified and applied to hypothetical situations enabling the student to apply the law and determine appropriate charges. A consideration of the laws that govern the operation of Ohio's criminal justice system.

**CJ 127**
**Victim Awareness**
**3 Credits Class 3 Lab 0**
Impact of victimization and its relevance in the treatment of the offender. Impact of criminal behavior on the victim; how the offender convinces others that he is the victim; and how criminal thinking and rehabilitation. Role-playing as a technique and its use in victim awareness programs.

**CJ 129**
**Law Enforcement Photography Seminar**
**0.5 Credits Class 0.5 Lab 0**
Basic theories and principles of law enforcement photography. Instruction on using the Spectra Camera, close-up lens and copy stand. Using alternate light sources and crime and accident scenes will be covered.

**CJ 130**
**Photography**
**2 Credits Class 2 Lab 2**
Practice in the fundamentals of photography. Handling a camera with ease, determining correct exposure and producing satisfactory prints by contact enlargement. Use of filters, proper light techniques, photographing under low light conditions and the arrangement of subjects.

**CJ 132**
**Evidentiary Photography**
**3 Credits Class 2 Lab 3**
Photographic techniques for recording evidence and presenting photographic evidence in court. Emphasizes photographing of evidence as a component of investigations. Prerequisite: CJ 130.

**CJ 143**
**Police Mounts**
**2 Credits Class 1 Lab 3**
Use of the horse in mounted patrol. Rural and urban police use of mounts and mounted patrol for park service.

**CJ 150**
**Juvenile Delinquency and Procedures**
**4 Credits Class 4 Lab 0**
Juvenile procedures and delinquency. Causes and prevention of delinquency and the rules governing the disposition of juveniles from intake to the final adjudication.

**CJ 160**
**Kubotan/Persuader Impact Instrument**
**0.5 Credit Class 0 Lab 1.5**
Successful completion of this non-lethal defensive weapons course earns nationally recognized certification with the Kubotan /Persuader Impact Instrument from Monanock Lifetime Products, Inc. Includes basic grips, blocks, counter-strikes, wrist control techniques, arm bar takedowns, car removal techniques and defense against attacks. Fulfills National Park Service initial basic and annual refresher training with the mini-baton, 5 1/2 inch long, 5/8 inch diameter, as required by Law Enforcement Policy and Guideline, NPS-9, dated April 1984.

**CJ 161**
**Impact Weapons**
**0.5 Credit Class 0 Lab 1.5**
Instruction and training in joint manipulation and relative positions. Investigates techniques of strong side take-downs from relative position 3 and running arm locks from relative position 2 1/2, hooks, drags, escort holds, take-downs and handcuffing positions. Includes evaluation of physical weaknesses in order to compensate techniques into viable options.

**CJ 165**
**Semi-Automatic Handgun**
**2 Credits Class 2 Lab 0**
Safe and effective deployment of single action and double action semi-automatic handguns. Range practice is included for the development of various motor skills and will conclude with the firing of the NRTI Duty Pistol Proficiency Test and the API General Pistol Proficiency Test. Reactionary targets and the Duelatron Targeting System will be used for their instructional value. Participant must supply a duty handgun and suitable holster. Appropriate duty specific ammunition is provided. Prerequisite: Instructor permission.

**CJ 166**
**NPS SIG Transitional Handgun**
**1 Credit Class 0.5 Lab 2.5**
Transitional pistol course specifically limited to the SIG-Sauer family of handguns. Range practice included for the development of various psychomotor skills. Will conclude with the firing of the National Park Service Semi-Auto Proficiency Test and with the firing of the NRTI duty Pistol Evaluation Course. Prerequisite: NR 280.

**CJ 180**
**Basic Self Defense Techniques**
**1 Credit Class 0 Lab 3**
Awareness, preparedness and realistic tactics/techniques of self defense and how to defend against physical attack and aggressive behavior.

**CJ 181**
**Aikido Self Defense**
**1 Credit Class 1 Lab 2**
Aikido based self-defense study of the use of force and defensive tactics. Focuses on joint lock and joint manipulation of the wrist, elbow and shoulder. Each student should be in sound physical condition prior to participation.

**CJ 182**
**ASP Tactical Baton Basic Course**
**0.5 Credit Class 0 Lab 1.5**
Handling and proper application of the ASP Tactical Baton. ASP certification will be given for successful completion.

**CJ 183**
**PPCT Defensive Tactics**
**1 Credit Class 1 Lab 2**
Dealing with passive or resistive subjects with methods that are tactically, medically and legally proven. Specific methods include pressure points, joint locking techniques, active counter measures, baton techniques, and lateral vascular neck restraint.

**CJ 184**
**CQPC Defensive Techniques**
**1 Credit Class 1 Lab 1**
Defensive tactics system designed for law enforcement officers provides verbal and psychological communication skills to deescalate conflict in conjunction with physical techniques to ensure control. CQPC includes the use of simple, effective physical counter measures needed to control hostile suspects.

**CJ 185**
**Advanced Self Defense**
**1 Credit Class 0 Lab 3**
Includes the last five Aikido based defensive tactics and techniques for the law enforcement and corrections professional. Emphasis will be placed upon realistic "street" application in an outdoor setting.
Prerequisite: CJ 180.

**CJ 190**
**Chemical Abuse and Dependency**
**3 Credits Class 3 Lab 2**
Topics pertinent to drug and alcohol abuse in the U.S. Effects of stimulants, depressants and hallucinogens, identification of drugs and drug users, drug offenses, the history of drug laws, law enforcement strategies, alcoholism and treatment and prevention methods.

**CJ 191**
**Detection of the Alcohol Impaired**
**1 Credit Class 1 Lab 0**
Detecting the alcohol impaired motor vehicle operator. Recognizing and identifying clues available when contacting a potential violator. Topics include alcohol's affects on the human body, administering and interpreting various field sobriety tests, recognizing and interpreting evidence of alcohol related violations and case preparation and presentation.

**CJ 192**
**Controlled Substances**
**1-3 Credits Class 1-3 Lab 0**
Controlled substance abuse and issues surrounding their misuse. Discussion of the affects of chemical abuse on society.

**CJ 210**
**Defensive Pistolcraft**
**0.5 Credit Class 0.5 Lab 0**
Modern techniques of the handgun including proper grip, stance and position, sighting, and trigger control. Emphasis on proper technique of the presentation stroke. Proper weapon handling including administrative loading, down loading, immediate actions and tactical manipulation of the handgun are discussed, demonstrated and drilled. Develops skill, knowledge, and a practical experience necessary to become safe, responsible, and effective in the use of the handgun for self defense.

**CJ 211**
**Intermediate Defensive Pistolcraft**
**1 Credit Class 1 Lab 0**
Defensive application of the handgun. Evaluation and development of skills including live-fire steel plate precision shooting, discretionary shooting and tactical drills employing the Duelatron Electronic Targeting System and Action Target's Mover. Emphasis is placed on low-light shooting. Mental conditioning for combat, tactics, target identification and the principles of personal defense are also discussed. Prerequisite: CJ 210.

**CJ 212**
**Advanced Defensive Pistolcraft**
**1 Credit Class 1 Lab 0**
Defensive application of the handgun, shotgun and urban rifle. Evaluation and development of handgun and shotgun skills including live-fire steel plate precision shooting, discretionary shooting and tactical drills. Prerequisites: CJ 210 and CJ 211.

**CJ 215**
**Beginning Firearms**
**1 Credit Class 1 Lab 1**
Close range defensive shooting, handgun familiarization and safe handling practices. Safety, legal issues, psychological aspects of shooting and equipment selection. On the firing range the student progresses from short range single shot to rapid fire, multiple targets and low light shooting.

**CJ 217**
**Side-Handle Baton**
**1 Credit Class 1 Lab 0**
Successful completion of this non-lethal weapons course earns national certification with the side-handle baton (PR-24) from Monanock Lifetime Products, Inc. Fulfills National Park Service initial basic training and annual refresher training with the side-handle baton as required by Law Enforcement Policy and Guideline NPS-9, April 1984.

**CJ 218**
**Intermediate Handgun**
**1 Credit Class 1 Lab 0**
Development of proficiency in speed and accuracy. Reactive Targets, the Dueletron Targeting System and the Mover Target System are used in practical application of techniques developed.

**CJ 222**
**Laws of Arrest, Search and Seizure**
**3 Credits Class 3 Lab 0**
Procedural law relating to the powers of government in the areas of arrest, search and seizure. Constitutional law, which provides the basis for these restrictions, is the major area of study. Major Supreme Court decisions in each area are examined to determine the rationale behind procedural restrictions.

**CJ 225**
**Basic River Rescue**
**2 Credits Class 1 Lab 3**
Theory and practical applications of moving water rescue techniques. Emphasizes laboratory activities. Active participation in organized teams which perform mock river rescues of trapped people in hazardous water situations.

**CJ 250**
**Criminology**
**3 Credits Class 3 Lab 0**
Introduces concerns that constitute criminology as a science. Terminology, the nature and extent of crime, the causes of crime and criminality, and the impact of crime on social change.

**CJ 251**
**Readings in Crime and Criminality**
**3 Credits Class 3 Lab 0**
Understanding the nature of crime and criminality through a non-textbook approach. Selected readings from fictional and/or non-fictional works demonstrate how writers and essayists have perceived crime and criminals in society. The student compares these interpretations to theories advanced by criminologists.

**CJ 263**
**Crisis Recognition and Referral**
**3 Credits Class 3 Lab 0**
Developed for paraprofessionals who work in helping relationships. Creates an awareness of crises that develop or occur suddenly in the lives of people and identifies helping behaviors used until professional help is obtained or referral is completed. Various community resources are identified.

**CJ 290**
**Special Topics in Public Safety Service**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**CJ 291**
**Security Issues and Techniques**
**2 Credits Class 2 Lab 2**
Issues and practices of maintaining security in a criminal justice setting. The relationship between security and treatment functions, the security role of the treatment specialist and security technology. Security practices include clothed body searches, restraint devices, prisoner transport and cell searches.

**CJ 292**
**Field Experience in Criminal Justice**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a criminal justice facility through special arrangement with an instructor.

**CJ 294**
**Criminal Justice Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**CJ 295**
**Criminal Justice Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**CJ 296**
**Practicum in Criminal Justice**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**CJ 297**
**Criminal Justice Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

## Culinary Arts

**CULA 100**
**Overview of Culinary Arts in Institutions**
**3 Credits Class 3 Lab 0**
Overview of the field of culinary arts. Topics include history of food service, safety and sanitation, equipment identification and usage, cooking methods, recipes, menus and presentation of food products.

**CULA 101**
**Introduction to Culinary Arts**
**2 Credits Class 2 Lab 0**
Introduction to the field of culinary arts includes study of culinary history, the role of the chef, kitchen organization, tools and equipment, cooking methods, and basic knife handling and sharpening skills.

**CULA 105**
**Pastries and Desserts**
**1-3 Credits Class 1-2 Lab 2-3**
Preparation of Danish pastries, croissants, puff pastry, choux paste and tortes. Includes introduction to marzipan, gum paste, chocolate molding and pulled sugar. Prerequisite: HRCA 115.

**CULA 106**
**Meat, Poultry and Seafood Procedures**
**3 Credits Class 2 Lab 3**
Meats, poultry and seafood used by the food service industry. Includes identification, grading, yield and portion control. The student participates in cutting various products.

**CULA 107Basic Garde Manger**
**3 Credits Class 2 Lab 3**
Creation of buffet table arrangements and displays using cold food materials with emphasis on the use of tools, ice, vegetables, butter and fruit in the preparation.

**CULA 108**
**Advanced Garde Manger**
**3 Credits Class 2 Lab 3**
Production of various forced meat products, marinades and brines. Includes procedures for curing and smoking products and working with aspic and chaud froid. Prerequisite: CULA 107.

**CULA 130**
**Introduction to the Baking Industry**
**2 Credits Class 2 Lab 0**
Baking history, terminology and organization. Includes study of heat transfer, baking procedures, tools and equipment. Baking careers and professional organizations are also presented.

**CULA 131**
**Baking Technology**
**3 Credits Class 2 Lab 3**
The science of baking with a concentration on food nutrition and food chemistry. Develops a basic understanding of baking concepts such as gluten development and the use of leavening agents. Prerequisites: CULA 130 and HRCA 115.

**CULA 132**
**Baking Lab I**
**5 Credits Class 1 Lab 12**
Introduces to the commercial bakeshop and provides hands-on experience for the beginning baker. Each student is required to complete 132 hours of production in the Quality Inn kitchen. Prerequisites: CULA 130 and HRCA 115.

**CULA 133**
**Baking Lab II**
**5 Credits Class 1 Lab 12**
Supervision, production, organization, and advanced baking techniques. Students will log a total of 132 hours in a baking facility and one hour weekly with the instructor for orientation.

**CULA 134**
**Baking Lab III**
**5 Credits Class 1 Lab 12**
Students will log a total of 132 hours of high volume production baking in a baking facility. Students will meet weekly with instructor for one hour of orientation.

**CULA 136**
**Yeast Dough Production**
**3 Credits Class 2 Lab 3**
Concentration on yeast fermentation, retarding and gluten development. The student will produce a wide variety of yeast dough and yeast products. Prerequisites: CULA 130 and HRCA 115.

**CULA 137**
**Cake Production**
**3 Credits Class 2 Lab 3**
Baking and decorating various types of cakes and tortes. Provides hands-on baking and advanced decorating techniques for all occasions. Prerequisites: CULA 130 and HRCA 115.

**CULA 138**
**Classical Pastries**
**3 Credits Class 2 Lab 3**
Introduction to classical pastries and sugarwork including puff pastry products, choux paste products and classical desserts, advanced decorating techniques and edible display pieces. Prerequisites: CULA 130 and HRCA 115.

**CULA 139**
**Cookie Development**
**3 Credits Class 2 Lab 3**
Techniques of producing a variety of cookies stressing ingredients and their functions. Hands-on experience baking and decorating cookies. Prerequisite: HRCA 115.

**CULA 150**
**Nutrition in Community Food Service Operations**
**3 Credits Class 3 Lab 0**
Elements of hospitality menu design incorporating current nutritional guidelines.

**CULA 201**
**Culinary Arts Lab I**
**7 Credits Class 1 Lab 18**
Introduction to the kitchen environment through on-the-job training in various kitchen positions at the Quality Inn Hocking Valley. Hours include weekends, evenings, days and holidays.

**CULA 212**
**Culinary Arts Lab II**
**7 Credits Class 1 Lab 18**
Assignment of specific work duties at the Quality Inn Hocking Valley for an average of 20 hours per week. During the quarter, students are instructed in and will perform basic tasks associated with kitchen and dining room operations. Work days include morning, afternoons, evenings, weekends and holidays.

**CULA 213**
**Culinary Arts Lab III**
**7 Credits Class 1 Lab 18**
Scheduled for an average 20 hours per week at the Quality Inn Hocking Valley, the student assumes a leadership role in all areas of the kitchen with an emphasis on supervisory techniques. Hours include weekends, mornings, nights and holidays.

**CULA 217**
**Classical and International Cuisine**
**1-3 Credits Class 1-2 Lab 2-3**
An opportunity for the student skilled in cookery to expand knowledge of food preparation into the area of world-respected traditional dishes. Includes conventional methods of preparation for gourmet recipes and convenience foods. Prerequisites: HRCA 111, HRCA 112.

**CULA 217A**
**Italian Cookery**
**1 Credit Class 1 Lab 1**

**CULA 217B**
**Greek Cookery**
**1 Credit Class 1 Lab 1**

**CULA 217C**
**French Cookery**
**1 Credit Class 1 Lab 1**

**CULA 218**
**American Regional Cuisine**
**3 Credits Class 2 Lab 3**
Introduction to American cuisines with an emphasis on volume food production of American regional cuisines through plating, garnishing and time management. Cuisines are studied, and menus are planned, prepared and served. Prerequisites: HRCA 111 and HRCA 112.

**CULA 218A**
**Spicy Southern Foods**
**1 Credit Class 1 Lab 1**
Spicy foods from the southwest, creative cajun cooking and Caribbean food. Wild game will be featured from the Southwest Region.

**CULA 218B**
**Comfort Foods**
**1 Credit Class 1 Lab 1**
Traditional methods of cooking with an emphasis on making meat and potatoes lighter and more interesting.

**CULA 218C**
**Lean Cuisine**
**1 Credit Class 1 Lab 1**
The west coast has been the major motivator in the areas of low calorie foods while creating new methods to reserve flavor. This class will discuss the oriental influence of this region and the influence of the wealth of seafood available. Wines which are a major influence on the food of the region will be covered.

**CULA 228**
**Delicatessen Operations**
**2 Credits Class 2 Lab 1**
Delicatessen operations including deli foods, products and materials, display case set-up, gift baskets, organization and management.

**CULA 229**
**Culinary Arts Salon**
**0.5-1 Credits Class 0.5 Lab 1.5-2.5**
Preparation for the challenges of hot and cold culinary salons. Show pieces, buffet set-up, materials and equipment flow, and team organization.

**CULA 262**
**Candy and Confections**
**3 Credits Class 2 Lab 3**
Candy making techniques with an emphasis on chocolate molding, dipping and enrobing, hard candies, marzipan work and specialty desserts.

**CULA 263**
**Bakeshop Operations**
**2 Credits Class 2 Lab 1**
Development, management and organization of wholesale, retail and in-house bake and pastry shops.

**CULA 270**
**Catering**
**2 Credits Class 2 Lab 1**
Review and discussion of special equipment and laws regarding the movement and serving of food. Includes planning an off premise catering function and determining the profitability of the function.

**CULA 281**
**Food Lab I**
**3 Credits Class 2 Lab 3**
The student, assigned to specific work groups in an institutional setting of Hocking College, practices basic techniques of food preparation, sanitation and dining room operation. The development of behaviors which demonstrate cooperative work habits are emphasized.

**CULA 282**
**Food Lab II**
**3 Credits Class 2 Lab 3**
The student, assigned to specific work groups in an institutional setting of Hocking College, practices techniques of food preparation, sanitation, plate and multiple course presentation and dining room operation. Emphasis is placed on the behavior which demonstrates cooperative work habits and food production techniques.

**CULA 283**
**Food Lab III**
**3 Credits Class 2 Lab 3**
The student, assigned to specific work groups in an institutional setting of Hocking College, practices advanced food preparation skills, kitchen and dining room management skills, advanced table service, sanitation and critical analysis of operation efficiency.

**CULA 284**
**Food Lab IV**
**3 Credits Class 2 Lab 3**
Food preparation lab experience in an institutional setting.

**CULA 285**
**Food Lab V**
**3 Credits Class 2 Lab 3**
Food preparation lab experience in an institutional setting.

**CULA 286**
**Food Lab VI**
**3 Credits Class 2 Lab 3**
Food preparation lab experience in an institutional setting.

**CULA 290**
**Special Topics in Culinary Arts**
**1-5 Credits Class 1-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**CULA 291**
**Individual Study in Culinary Arts**
**0.25-5 Credits Class 0.25-5 Lab 0**
Individual study or research. Topics are arranged with instructor permission on an individual basis.

**CULA 292**
**Field Experience in Culinary Arts**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a culinary arts facility through special arrangement with an instructor.

**CULA 293**
**Culinary Arts Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function.

**CULA 294**
**Cooperative Work Experience in Culinary Arts**
**1-5 Credits Class 0 Lab 10-50**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**CULA 295**
**Culinary Arts Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**CULA 296**
**Practicum in Culinary Arts**
**1-6 Credits Class 7-42 Lab 0**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**CULA 297**
**Culinary Arts Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**CULA 298**
**Culinary Arts Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**CULA 299**
**Culinary Arts Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Dietetic

**DT 100 PACE**
**Survey of Dietetics**
**1 Credit Class 1 Lab 0**
Survey of the dietetics profession and the educational requirements and responsibilities of dietary managers, technicians and registered dietitians in a variety of health care facilities and professional levels.

**DT 101**
**Dietetic Directed Practice I**
**2 Credits Class 1 Lab 7**
Provides opportunities for the student to practice material taught in course work offered during the first quarter.
Prerequisites: DT 102, HRCA 110.

**DT 102 PACE**
**Basic Nutrition**
**4 Credits Class 4 Lab 0**
Effect of nutritional status on health, detailing specific nutrient requirements of adults to maintain good health. Topics include nutrient sources and functions, energy needs, digestion and metabolism, food guide pyramid, dietary guidelines, provision of good nutrition to low income families, food and nutrition misconceptions and food labeling laws.

**DT 103**
**Food Preparation Principles**
**3 Credits Class 2 Lab 4**
Principles of food preparation of eggs and dairy products, breads, fruits, vegetables, soups and sauces, meat, poultry and fish. Emphasis on proper techniques to prepare palatable foods while retaining nutritional value.

**DT 104**
**Food Preparation Principles for the Child**
**2 Credits Class 1 Lab 3**
Food preparation principles appropriate for infants and children. Topics include food safety, food sanitation, food-borne illness, applications of menu planning and for preparation techniques.

**DT 106**
**Food Production Management**
**3 Credits Class 3 Lab 0**
Planning, organizing, controlling and evaluating a food service operation in a health care institution. Topics include recipe standardization, portion control, inventory control, production scheduling, equipment use and maintenance, food service methods and quality assurance.

**DT 110 PACE**
**Applied Nutrition**
**3 Credits Class 3 Lab 0**
Description of the particular nutritional concerns of people throughout the lifespan: pregnancy, childhood, adolescence, maturity, dental health, physical exercise, weight maintenance and the interpretation of nutrition information and diet fads. Prerequisite: DT 102.

**DT 110A PACE**
**Nutrition in Growth and Development**
**1 Credit Class 1 Lab 0**
Nutritional needs during growth such as pregnancy, lactation, infancy and childhood. Includes menu planning for such individuals as well as special needs of each population group. Prerequisite: DT 102 or NT 103.

**DT 110B PACE**
**Adult Nutrition**
**1 Credit Class 1 Lab 0**
Nutritional needs of the adult and elderly. Weight control theories and interventions are also addressed. Prerequisite: DT 102 or NT 103.

**DT 110C PACE**
**Nutrition and Lifestyles**
**1 Credit Class 1 Lab 0**
Discussion of sports nutrition, vegetarianism and food quackery. Includes menu planning for special needs of athletes and vegetarians.

**DT 111**
**Dietetic Directed Practice II**
**2 Credits Class 1 Lab 7**
Practice of material taught in course work offered during the second quarter. Assign-ment to a hospital or long term care facility one day per week and meets with an instructor once a week. Assignments include diet histories, food production and office procedures. Prerequisites: DT 101, DT 102 and HRCA 110. Concurrent with DT 103, DT 106, DT 120, HC 100, HC 102 and coordinator permission.

**DT 119**
**Food Purchasing for Health Care Institutions**
**3 Credits Class 3 Lab 0**
Food purchasing function of a health care institution. Government regulations and controls, development and use of forms to aid in the purchasing operation, writing specifications to insure standards in food commodities, exploring the varieties and purchase forms of major food categories and determining amounts of food to purchase for number and size of portions.

**DT 120 PACE**
**Normal and Modified Menu Planning**
**3 Credits Class 3 Lab 0**
Individual and institutional menu planning. Practice in using the diet manual to plan basic modified diets for persons in health care facilities including modifications of sodium, diabetic, fiber, bland, protein, fat and liquid diets. Prerequisite: DT 102.

**DT 121**
**Dietetic Directed Practice III**
**2 Credits Class 1 Lab 7**
An opportunity to practice material taught in the course work offered during the third quarter. Concurrent with DT 119, DT 122 and HC 101. Prerequisites: DT 111 and coordinator permission.

**DT 122**
**Supervision in Dietetics**
**3 Credits Class 3 Lab 0**
Leadership and supervision characteristics of people who supervise employees in a dietary department. Employee needs, leadership characteristics and styles, motivation, direction and control, dealing with personnel problems, interviewing, training, counseling and evaluation employees and effective communications at work.

**DT 200 PACE**
**Diet Therapy I**
**3 Credits Class 3 Lab 0**
Nutritional intervention used in diseases of the endocrine, cardiovascular and renal systems. Concurrent with HC 110. Prerequisites: DT 110 and DT 120.

**DT 202 PACE**
**Nutrition Care Process**
**2 Credit Class 2 Lab 0**
Assessment, planning, implementation, evaluation and documentation responsibilities of the dietetic technician. Nutrition care process is reviewed including charting, nutrition care plans, diet histories and the clinical, biochemical and anthropometric indices of nutritional status. Concurrent with DT 200, HC 110. Prerequisites: DT 110 and HC 100.

**DT 205**
**Dietetic Directed Practice IV**
**2 Credits Class 0 Lab 8**
Practice of nutrition care procedures and food service management principles in health care settings. Work with patients who require therapeutic management of endocrine, cardiovascular or renal disease through diet modification. Includes purchasing, tray line supervision, cleaning and sanitizing procedures, quality assurance and developing a product information file. Concurrent with DT 200, DT 202, HRCA 223, MICS 110 or MICS 200. Prerequisites: DT 121 and coordinator permission

**DT 210 PACE**
**Diet Therapy II**
**3 Credits Class 3 Lab 0**
Nutritional intervention used in febrile illness, diseases of the gastrointestinal, musculoskeletal and biliary systems, surgical and stressed patients, neoplastic diseases, allergies, food medication interactions and childhood illnesses. Concurrent with DT 120. Prerequisites: DT 200.

**DT 212 PACE**
**Nutrition Education Methods**
**2 Credits Class 2 Lab 0**
Development of skills in the teaching-learning process in nutrition education with individuals and groups. The student develops and uses lesson plans, teaching materials and audiovisual aids in nutrition education. Prerequisites: DT 110 and DT 200.

**DT 215**
**Dietetic Directed Practice V**
**2 Credits Class 0 Lab 8**
Practice of nutrition care procedures and food service management in a health care setting. The student works with patients who require dietary management of gastrointestinal, biliary, and neoplastic diseases, with surgical patients, and with patients who are physically stressed and require nutrition supplementation. Assignments also include employee training and evaluation, safety engineering and training, and planning production schedules. Concurrent with DT 212 and HC 120. Prerequisites: DT 205, DT 210, DT 230 and coordinator permission.

**DT 220**
**Current Topics in Dietetics**
**2 Credits Class 2 Lab 0**
An opportunity to explore topics of professional interest in greater depth and to present nutrition literature findings. Prerequisite: DT 200.

**DT 225**
**Dietetic Directed Practice VI**
**3 Credits Class 0 Lab 12**
Practice of nutrition care in the hospital dietary department, community nutrition education program, school food service and in long-term care facilities. The student assesses dietary habits and nutritional needs, writes care plans, performs dietary department activities, evaluates modified recipes and instructs patients as assigned. Concurrent with DT 220 and HC 106. Prerequisites: DT 215 and coordinator permission.

**DT 230**
**Management of Quantity Food Systems**
**3 Credits Class 3 Lab 0**
Overview of institutional food services. Management organization, menu planning, material control, personnel methods, equipment and facilities are discussed from an institutional perspective. Prerequisites: DT 120 and DT 122.

**DT 290**
**Special Topics in Dietetics**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**DT 291**
**Individual Study in Dietetics**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**DT 292**
**Field Experience in Dietetics**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a dietetics facility through special arrangement with an instructor.

**DT 293**
**Dietetic Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function.

**DT 294**
**Dietetic Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**DT 295**
**Dietetic Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**DT 296**
**Practicum in Dietetics**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**DT 297**
**Dietetic Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**DT 298**
**Dietetic Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**DT 299**
**Dietetic Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Drafting and Design

**DD 100**
**Blueprint Reading**
**0.5-3 Credits Class 0.5-3 Lab 0**
Reading and comprehension of blueprints ranging from simple to complex machine parts and/or simple to complex architectural structures.

**DD 101 PACE**
**Engineering Drawing I**
**3 Credits Class 2 Lab 4**
Provides a basic understanding and interpretation of the language of drawing for the beginning engineering student. Includes an introduction to the language of drawing, use and care of drafting instruments, lettering, geometric construction, sketching, multi-view drawing and dimensioning.

**DD 102 PACE**
**Engineering Drawing II**
**3 Credits Class 2 Lab 4**
Intermediate drafting concepts including sectioning, auxiliary views, parallel line pictorial drawings, working drawings and piping drawings. Prerequisite: DD 101.

**DD 103 PACE**
**Engineering Drawing III**
**3 Credits Class 2 Lab 4**
Specialized mechanical drafting concepts and detailing. Includes sheet metal layouts, gearing, cam calculations and specification, threads, fasteners, springs, introductory geometric tolerancing and true positioning, and presentation graphics. Prerequisites: DD 101 and DD 102.

**DD 104 PACE**
**Introduction to AutoCAD**
**1 Credit Class 1 Lab 1**
Introduction to personal computer based drafting. Explanation of computer drawing and computer drawing applications. Includes an overview of MS-DOS, highlighting the common features used in AutoCAD.

**DD 105 PACE**
**AutoCAD Applications**
**2 Credits Class 1 Lab 3**
Utilization of drafting software including commands and techniques necessary to complete orthographic mechanical drawings. Prerequisite: DD 101.

**DD 200** **PACE**
**Architecture I**
**4 Credits** **Class 3** **Lab 3**
Terms, symbols and details of an architectural set of working drawings as applied to the design of residential buildings. Prerequisites: DD 101 and DD 102.

**DD 201** **PACE**
**Architecture II**
**3 Credits** **Class 2** **Lab 3**
Terms, symbols, details and codes of an architectural set of working drawings as applied to the design of commercial buildings. Prerequisites: DD 101, DD 102 and DD 200.

**DD 202** **PACE**
**Advanced Drafting/CAD**
**4 Credits** **Class 3** **Lab 3**
Technical drafting representation as applied to industrial products and process. Computer-aided and traditional drafting used in the study of advanced dimensioning practices, tolerancing, design drawings, working drawings and welding drawings. Prerequisites: DD 101, DD 102 and DD 103.

**DD 203**
**Electrical Drawing**
**3 Credits** **Class 2** **Lab 3**
Electrical drawing standards, graphic symbols, diagram layouts and part identification through construction of schematic drawings, block diagrams and printed circuit board layout. Prerequisite: DD 101.

**DD 204** **PACE**
**Descriptive Geometry**
**3 Credits** **Class 2** **Lab 4**
Graphic solutions to problems relating to points, lines, planes and solids. Includes space measurements and visualization, first auxiliary views and measurements, line definition and description, second auxiliary views, plane definition and description, perpendiculars, skew lines and solids. Prerequisites: DD 101 and DD 102.

**DD 205** **PACE**
**Die Design**
**3 Credits** **Class 2** **Lab 4**
Introduction to the design and detailing of typical industrial die sets. Topics include die calculation, blanking dies, piercing dies and bending dies. Prerequisites: DD 101, DD 102, DD 103 and DD 202.

**DD 206**
**Graphics**
**4 Credits** **Class 3** **Lab 3**
Further investigation of the computer-aided drafting software AutoCAD. Advanced procedures and techniques used to automate and customize drafting on the computer. Prerequisites: DD 101 and DD 102.

**DD 207** **PACE**
**Electronic Drawing**
**3 Credits** **Class 2** **Lab 4**
Non-major course introducing drafting concepts and procedures as related to the production of various types of drawings used in electronic technologies. Topics include electrical drawing standards, electronic symbology, diagram layouts and parts identification.

**DD 208** **PACE**
**Introduction to CAD**
**1 Credit** **Class 1** **Lab 1**
Basic concepts of computer-aided drafting. Includes discussion and operation of personal computer based CAD systems.

**DD 210**
**Geometric Tolerancing and Dimensioning**
**2 Credits** **Class 2** **Lab 0**
Methods of indicating geometric tolerances by means of geometric characteristic symbols are discussed and applied to specific situations. Prerequisites: DD 101, DD 102 and DD 103.

**DD 290**
**Special Topics in Drafting and Design**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**DD 291**
**Individual Study in Drafting and Design**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged with instructor permission on an individual basis.

**DD 292**
**Field Experience in Drafting and Design**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a drafting and design facility through special arrangement with an instructor.

**DD 294**
**Drafting Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**DD 295**
**Drafting and Design Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**DD 296**
**Drafting Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**DD 297**
**Observation Hour in Drafting**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**DD 298**
**Drafting Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**DD 299**
**Drafting Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Economics

**ECON 140**
**Principles of Microeconomics**
**4 Credits Class 4 Lab 0**
Introduction to major principles and issues of American economics. Measuring the economy, income distribution, unemployment, inflation, profit, taxes and current economic issues and trends affecting the student's technical field.

**ECON 240**
**Principles of Macroeconomics**
**4 Credits Class 4 Lab 0**
Study of economics in terms of whole systems and the interrelationship among sectors of the economy.

**ECON 290**
**Special Topics in Economics**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**ECON 291**
**Individual Study in Economics**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Electrical Engineering

**EE 109**
**Electronics I**
**4 Credits Class 3 Lab 3**
Study of electronic fundamentals. Covers series and parallel resonant circuits, low pass, high pass, band pass, band stop filters, diode rectification, power supply filtering, transistor fundamentals, power amplifiers and common amplifier configurations. Prerequisite: EE 118.

**EE 115**
**Electronics II**
**4 Credits Class 3 Lab 3**
Operation and application of field effect transistors and thrustors, amplifier operation and configurations, oscillators and wave shaping circuits, and schematic interpretation including DC biasing and signal flow. Lab will utilize Lab-Volt and Digicomm equipment in addition to circuit construction with individual components. Prerequisite: EE 109.

**EE 118**
**Electricity for Engineers**
**4 Credits Class 3 Lab 3**
Fundamental components of electronics (current, voltage, and resistance). Direct current and alternating current circuits presented in detail. Inductance, transformers, and capacitance also covered. Basic test equipment operation and the construction of basic DC and AC series, parallel and series-parallel circuits.

**EE 119**
**Electronic Communication I**
**4 Credits Class 3 Lab 3**
Introduction to electronic communications. Basic operation of the telephone, a central office, private branched exchanges, mobile communications and cellular telephones, transmission line theory, radio and television systems. Introduction to audio and video tape recorders, color television cameras and monitors. Laboratory exercises will use Lab Volt and Digicomm equipment.

**EE 120**
**Electronic Communication II**
**4 Credits Class 3 Lab 3**
Digital communication systems and techniques. Includes analog and digital pulse modulation procedures, frequency and time division multiplexing and data communications to the public telephone network. Laboratory exercises use the digital Lab Volt and Digicomm modulation trainer equipment. Prerequisite: EE 119.

**EE 122**
**Electronic Communication III**
**4 Credits Class 3 Lab 3**
Radio frequency (RF) aspects of broadcasting and telecommunication including electrical and radio frequency safety precautions, amplitude modulation (AM), angle modulation, key communication circuits, transmission line theory, antennas and radio wave propagation. Prerequisites: EE 119 and EE 120.

**EE 123**
**Electronic Applications**
**2 Credits Class 1 Lab 3**
Use of solid state devices in practical applications by apply knowledge gained during lecture to perform experiments relating to the current class topic. As a practical test each student will assemble, test and demonstrate a line tracer robot. Prerequisites: EE 109 and EGR 209.

**EE 211**
**Communication Systems II**
**4 Credits Class 4 Lab 2**
Microwave frequency range and use of microwaves. Use of test equipment including attenuators, frequency meters, couplers, tuners, detectors, slotted line and loads. Prerequisites: EE 105, EE 106 and EE 210.

**EE 215**
**Fundamentals of Microprocessors**
**4 Credits Class 3 Lab 3**
Fundamentals of microprocessors and microcomputers including the structure of microprocessor hardware, microcomputer application and fundamental concepts of computer programming. Prerequisites: EE 115 and EE 262.

**EE 225**
**Industrial Electronics I**
**4 Credits Class 3 Lab 3**
Electronic equipment, circuits and technologies used by industry for machine control. Includes visits to manufacturing facilities for observation of electronic equipment in an industrial setting. The student will build, test and troubleshoot industrial control circuits using sensors, motors and relays. Prerequisites: EE 115 and EE 262.

**EE 226**
**Electronic Certification**
**3 Credits Class 3 Lab 2**
Preparation for the Certified Electronics Technician test from ISCET. Includes a review of fundamental electronic principles, math, AC and DC circuits, transistors, troubleshooting and repair techniques. The student is not required to take the CET exam at the end of the course.

**EE 227**
**Current Topics and Technologies**
**0.25-5 Credits Class 0.25-5 Lab 0**
Concepts relevant to the field of electronics through the exposure to state-of-the-art electronic equipment and technology.

**EE 228**
**Industrial Electronics II**
**4 Credits Class 3 Lab 3**
Industrial electrical and electronic control circuits including interfacing electronic and high power circuits, control logic and fundamental concepts of programmable logic controllers. Prerequisite: EE 225.

**EE 230**
**Linear IC's**
**4 Credits Class 3 Lab 3**
Application of operational amplifiers, comparators, phase locked loops, voltage regulators and other linear integrated circuits. Linear and switching power supplies are also discussed. Prerequisite: EE 115.

**EE 258**
**Robotics and Computers**
**3 Credits Class 2 Lab 3**
Robotics hardware, software and associated equipment. Includes a program using a five-axis robot in a simulated work-cell. Computer interfacing and control applications are also discussed. Prerequisites: EE 215 and MICS 110.

**EE 262**
**Digital Logic II**
**4 Credits Class 3 Lab 3**
Flip-flops, one shots, asynchronous counters, synchronous counters, IC up/down counters and troubleshooting techniques. The student builds digital circuits using both digital IC's and a digital logic trainer. Prerequisite: EGR 209.

**EE 290**
**Special Topics in Electronic Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**EE 291**
**Individual Study in Electronic Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**EE 292**
**Field Experience in Electronics**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in an electronics facility through special arrangement with an instructor.

**EE 294**
**Electronics Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- and off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must also be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**EE 295**
**Electronics Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**EE 296**
**Electronics Practicum**
**2-6 Credits Class 1-3 Lab 8-24**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**EE 297**
**Observation Hour in Electronics**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**EE 298**
**Electronics Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**EE 299**
**Electronics Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Emergency Medical

**EM 100**
**Emergency Victim Care (EMT-A)**
**6 Credits Class 4 Lab 7**
Medical injuries and illness encountered in emergency situations. The student learns to recognize symptoms and apply treatment for stabilizing the patient at the emergency scene, while moving a victim to or from the emergency vehicle and while enroute to definitive care. Includes hospital clinical experience. Meets the requirements for certification of emergency medical technician-ambulance (EMT-A), according to Section 4731.84 of the Ohio Revised Code. Prerequisite: See instructor.

**EM 101**
**EMT Clinical Experience I**
**2 Credits Class 0 Lab 8**
Introduction to the hospital environment, medical procedures and the complex interrelationship of total patient care. Includes observation time for learning the functions of the members of the patient care team. Experience with rescue squads arranged on an individual basis. Prerequisite: See instructor.

**EM 103**
**Orientation to Emergency Services**
**2 Credits Class 2 Lab 2**
Introduction to duties, responsibilities and concerns of emergency personnel. Emphasizes the legal and ethical aspects of all levels of training in the emergency field. Training methods and simulated application of skills will be introduced.

**EM 105**
**Pediatric Advanced Life Support**
**1 Credit Class 1 Lab 1**
Emergency assessment and treatment for pediatric patients in trauma and cardiac situations.

**EM 106**
**EKG Interpretation**
**1 Credit Class 1 Lab 0**
Basic knowledge and skills needed to read and interpret monitor lead electrocardiograms. Included are basic anatomy and physiology of the heart with emphasis on the conduction system, electromechanical response, use of EKG monitors and electrode placement and interpretation of both static and dynamic EKG rhythms.

**EM 109**
**Emergency Victim Care Refresher Course**
**2 Credits Class 2 Lab 0**
U.S. Department of Transportation approved refresher course for the student who has completed the basic Emergency Victim Care course. Meets the requirements for recertification of EMT-A's, according to Section 4731.86 of the Ohio Revised Code.

**EM 110**
**EMT Paramedic I**
**7 Credits Class 6 Lab 4**
Begins the study of the Department of Transportation National Standards Curriculum. Includes the role of the paramedic, patient assessment, fluids and shock, general pharmacology and administration of epinephrine, respiratory, cardiovascular, central nervous system and soft tissue. Procedures necessary for the care of patients with selected conditions, subcutaneous and intramuscular injections, venipuncture and intravenous therapy, EOA and endotracheal intubation, cardiac dysrhythmias, defibrillation and neurological examination. Prerequisites: EM 100 and EM 119.

**EM 111**
**EMT Clinical Experience II**
**2 Credits Class 0 Lab 8**
Practical hospital experience in a variety of patient care areas. Emphasizes cardiac and respiratory care and treatment of the acutely-ill patient. Prerequisites: EM 100, EM 101, EM 103, EM 119, HC 106 and quarter one technical courses.

**EM 113**
**EMT Squad Experience I**
**2 Credits Class 0 Lab 8**
Practical vehicle-clinical observation and experience including assisting with procedures within the scope of the paramedic under the direct supervision of a squad paramedic preceptor. Prerequisites: EM 100, EM 101 and EM 103.

**EM 114**
**EMT Squad Experience II**
**2 Credits Class 0 Lab 8**
Practical vehicle-clinical observation and experience. Training includes assisting with procedures within the scope of the paramedic under the direct supervision of a squad paramedic preceptor. Prerequisites: EM 100, EM 101, EM 102, EM 103, EM 119, HC 106 and quarter one technical courses.

**EM 116**
**Introduction to Aeromedical Evac**
**1 Credit Class 1 Lab 0**
Setup of landing zone, proper approach to the aircraft, loading and unloading patients and procedures needed before aircraft arrival. Prerequisites: EM 100 and EM 103.

**EM 118**
**Advanced EMT-A Clinical**
**1 Credit Class 0 Lab 5**
Practical hospital experience in a variety of patient care areas. Emphasizes intravenous therapy, drawing blood and subcutaneous injections of epinephrine. Prerequisite: See instructor.

**EM 119**
**Advanced EMT-Ambulance**
**4 Credits Class 3 Lab 3**
Begins the study of the Department of Transportation (DOT) National Standards Curriculum. Includes the study of pathophysiology, symptomatology and treatment of select medical/surgical conditions. Emphasizes transition from EMT to EMT-Advanced and includes patient body systems, patient assessment, recognition of acute medical emergencies and single or multiple traumas. The laboratory component includes procedures necessary for the care of patients requiring invasive therapy techniques, esophageal obturator airway, and use of MAST anti-shock trousers. Prerequisite: See instructor.

**EM 120**
**EMT Paramedic II**
**7 Credits Class 6 Lab 4**
Continues the objectives of the DOT National Standards Curriculum for EMT-Paramedics. Includes training in the areas of musculoskeletal medical emergencies, obstetrics, pediatrics, emotionally disturbed patients, telemetry and communications and multi-trauma. The lab includes pediatric assessment, criothyrotomy, advanced dysrhythmia recognition and treatment, radio communication and integration of previously learned skills. Prerequisite: EM 110.

**EM 121**
**EMT Clinical Experience III**
**2 Credits Class 0 Lab 8**
Experience in clinical areas needed by each student to complete the objectives of the DOT National Standards Curriculum for EMT-Paramedics. Commonly used clinical areas include coronary care units, intensive care units, emergency rooms, obstetrics, pediatrics, operating rooms and selected specialties. Prerequisites: EM 110, EM 111, EM 114, EM 119 and completion of quarter one and two technical courses.

**EM 123**
**Rappelling and Rope Techniques**
**1.5 Credits Class 0.75 Lab 2.25**
Familiarization with the principles of rappelling. Includes lab experience.

**EM 125**
**Rescue and Rappelling**
**1 Credit Class 1 Lab 2**
Principles of extrication and patient handling. Laboratory experience and simulation in using light rescue equipment appropriate for a variety of crisis situations. Includes transportation of the injured. Prerequisites: EM 100 and EM 101.

**EM 126**
**Search and Rescue Introduction**
**1.5 Credits Class 1 Lab 1.5**
Designed and approved by the National Association of Search and Rescue (NASAR). The successful participant receives a certificate from NASAR. Information and training for use by local search and rescue personnel in the search for persons lost, injured or killed in the outdoors and for missing aircraft or watercraft. Includes two-way radio equipment, use of map and compass, the three types of searches, lost person questionnaires, necessary equipment/ clothing, victim evacuation techniques and crime scene procedures. Participants are required to provide a 24-hour ready pack for use during the program.

**EM 127**
**Basic Trauma Life Support (BTLS)**
**1 Credit Class 1 Lab 1**
Designed for paramedics established by the American College of Emergency Physicians in the latest technology of rapid trauma assessment, treatment and transport. Prerequisites: EM 100 and EM 119.

**EM 140**
**EMT Paramedic III**
**7 Credits Class 6 Lab 4**
Completes the objectives of the DOT National Standards Curriculum for EMT Paramedics. Includes training in the areas of obstetrics, pediatrics and emotionally disturbed patients. Includes psychiatric assessment, urinary catheterization, 12 lead EKG, advanced dysrhythmia recognition and treatment.

**EM 142**
**Defensive Driving & Emergency Vehicle Operation Refresher**
**0.5-1 Credit Class 0.5-1 Lab 0**
Refresher of the principles and skills necessary for defensive driving, particularly emergency vehicles operating under emergency, high stress conditions. Prerequisite: EM 102.

**EM 150**
**EMT Paramedic Refresher**
**2 Credits Class 2 Lab 2**
Covers all DOT modules with emphasis on practical skills.

**EM 160**
**EMT Self Defense Tactics**
**2 Credits Class 1 Lab 4**
Designed for the Emergency Medical Technician emphasizing a combination of techniques derived from Aikido based defensive tactics, close quarters personal control and pressure point control techniques. Prerequisite: EM 100.

**EM 200**
**Physical Assessment and Emergency Room Techniques**
**3 Credits Class 3 Lab 0**
Advanced paramedic diagnostic and management skills. Data collection and physical assessment techniques and development of organizational and management styles. Prerequisites: EM 112, EM 115, EM 120, EM 121, EM 125, EM 202 and first year technical courses.

**EM 201**
**Paramedic Supervision Practicum**
**3 Credits Class 1 Lab 6**
Provides an understanding of the EMS environment and responsibilities. Task performance and coping with problems related to an EMS service including leadership attitude, morale, motivation and communication. Prerequisites: EM 112, EM 115, EM 120, EM 121, EM 125, EM 202 and first year technical courses.

**EM 202**
**Advanced Cardiac Life Support (ACLS)**
**1 Credit Class 1 Lab 1**
Designed to meet the needs of practicing coronary care nurses, paramedics or doctors who wish to advance or assess their skills in cardiac life support. Taught by American Heart Association instructors and approved by the Central Ohio Heart Chapter. Prerequisite: Instructor permission.

**EM 203**
**Emergency Rescue Operations**
**4 Credits Class 3 Lab 3**
Emergency rescue operations including the heavy rescue unit. Includes the use of special extrication tools and study and practice of rescue operations on water, highways and industrial locations.

**EM 203A**
**Preparation for Emergency Rescue Operations**
**0.5-1 Credit Class 0.5-1 Lab 0**
Introduction to emergency rescue operations with suggested procedures and techniques used in emergency situations. Includes planning for emergency operations, patient care and handling techniques and structure search and rescue.

**EM 203B**
**Technical Rope Rescue**
**0.5 Credit Class 0 Lab 1.5**
A step-by-step course, creating in effect a series of building blocks in high angle techniques, where the most critical skills, such as knowledge of rope and equipment are taught initially, followed by skills such as belaying and rappelling, until they are put together for team rescue skills.

**EM 203C**
**Special Rescue Operations**
**1 Credit Class 1 Lab 1**
Theory and practical applications of special rescue techniques. Students are active participants in organized rescues such as confined space, elevator rescue, trench rescue and search methods.

**EM 203D**
**Auto/Farm/Industry Extrication**
**0.5 Credit Class 0.5 Lab 1**
Designed to familiarize fire department and EMS personnel with farm accidents they may encounter. The course will include machinery upset, rollover, and victim extrication.

**EM 204**
**Introduction to Hazardous Materials**
**1 Credit Class 1 Lab 0**
Training and emergency response information for dealing safely and effectively with chemical spills, leaks, derailments, or transportation emergencies. Includes assessment of destructive potentials.

**EM 204A**
**Hazardous Materials-First Responder Awareness**
**0.5 Credits Class 0.5 Lab 0**
Designed to prepare individuals who arrive first on the scene of a hazardous materials incident. Defines hazardous materials and their associated risks; provides explanation of roles and responsibilities; implementing behaviors before, during, and after an incident; identifying local, state, and federal resources appropriate to emergency and non-emergency situations; description of basic concepts and techniques of scene management and scene setup, to include the proper use of personal protective equipment and decontamination. This course meets or exceeds the requirements of NFPA 472 for First Responder-Awareness Level, with the exception of local jurisdiction specific objectives.

**EM 204B**
**Hazardous Materials-EMS Responder**
**0.5 Credit Class 0.5 Lab 0**
Designed for those BLS and ALS personnel who respond to incidents that may involve hazardous materials. Meets the proposed NFPA 473 standard for EMS Responders to Hazardous Materials Incidents. Prerequisites: EM 204A or equivalent, EMT-A certification.

**EM 213**
**Public Administration, Relations and Education**
**4 Credits Class 3 Lab 3**
Provides the emergency medical service and fire command officer with a better understanding of fire and EMS safety problems and accepted administrative methods. Management problems are approached from the point of view of the fire or EMS chief, fire command officer and the chief administrator.

**EM 214**
**Paramedic Externship I**
**2 Credits Class 0 Lab 8**
Directed practice consisting of practical paramedic clinical experiences in hospitals, clinics and physicians' offices. Emphasizes physical assessment and emergency care procedures. Prerequisites: EM 112, EM 115, EM 120, EM 121, EM 125, EM 202 and first year technical courses.

**EM 215**
**Paramedic Externship II**
**2 Credits Class 0 Lab 8**
Directed practice consisting of practical paramedic clinical experiences in hospitals, clinics and physicians' offices. Emphasizes physical assessment and emergency care procedures. Prerequisites: EM 112, EM 115, EM 120, EM 121, EM 125, EM 202, EM 214 and first year technical courses.

**EM 217**
**Wilderness EMT**
**3 Credits Class 2 Lab 3**
Special problems associated with prolonged patient care, severe environments, and limited equipment will addressed. This is the definitive medical training course for all rural EMSD providers and wilderness rescue team members. Includes emergency rescue simulations.

**EM 221**
**In-Service Education Clinical Experience for EMT's**
**3 Credits Class 1 Lab 6**
Experience in classroom and laboratory teaching and evaluation of EMT-Paramedic level skills. Emphasizes programmatic planning for in-service education. Includes an overview of teaching methods, learning styles, writing performance objectives, test construction and clinical performance evaluation techniques. Prerequisites: EM 112, EM 115, EM 120, EM 121, EM 125, EM 202 and first year technical courses.

**EM 223**
**Managing the Lost Person Incident**
**3 Credits Class 3 Lab 1**
This National Association for Search and Rescue, Managing the Search Function course was commissioned by the National Park Service. Includes an introduction to search manager job responsibilities, philosophy and concepts of effective search management, an example search mission, preplanning, search and rescue resources, planning data and searching data, first notice, investigation, interviewing, determining the search urgency, lost subject behavior, introduction to the theory of search probabilities, search strategy, establishing the probability of area, clue orientation, applying SAR resources, search tactics, the probability of detection, summary of search theory, call-out procedures, organization, base camp administration, briefing and debriefing, documentation, dealing with outside influences, rescue/recovery, suspending the mission, demobilization, post mission, SAR statistics, preventative SAR education and map problems/compass reading exercises.

**EM 226**
**Vertical Rope Rescue**
**1.25 Credits Class 0.75 Lab 1.5**
Examination of training exercises in rope rescue techniques. Covers rescue of persons injured and/or stranded on ledges, over cliffs, etc. Emphasizes teamwork, proper use, care and storage of equipment and safety procedures. Includes Z drags, high lines and tyrolean traverses for the raising and lowering of victims, equipment and the rescuer. Prerequisite: EM 123.

**EM 227**
**Emergency Response to Hazardous Materials**
**4 Credits Class 3 Lab 3**
Analysis of chemical reaction as it relates to fire. Hazards of radioactive materials, poisonous gases and LP gases. Methods of transportation of hazardous materials, DOT regulations and markings are included.

**EM 227A**
**Incident Analysis**
**1 Credit Class 1 Lab 0**
Developed by the National Fire Academy, designed for all emergency response personnel. Introduces a systematic method for analyzing and assessing the potential effect of hazardous materials involvement in fire and other emergencies. Topics include hazardous materials classifications; labeling, packaging, recognition, identification, standards, and regulations.

**EM 227B**
**Pesticide Challenge**
**1 Credit Class 1 Lab 0**
For fire, law enforcement, and emergency medical personnel to explore the hazards of 35,000 agricultural products. Participants will practice skills necessary when dealing with an agricultural chemical incident. Label recognition, signs and symptoms of chemical exposure and emergency medical procedure will be covered.

EM 227C
**First Response Operations**
**1 Credit Class 1 Lab 1**
Designed for fire departments and other public safety forces to meet or exceed the student accomplishment objectives in accordance with NFPA 472 for First Responder-Operations Level, with the exception of local jurisdiction specific objectives. Personal safety and self-defense, first responder roles in emergency response systems, and the diverse nature of hazardous materials incidents and related defensive measures. Topics include applying a systematic process (the GEDAPER process) for safety and appropriate response to hazardous materials incidents; utilizing safe and appropriate strategies and tactics within the realm of the first responder operations.

EM 227D
**Incident Command System**
**1 Credit Class 1 Lab 0**
Offers tools for students who are responsible for serving as an incident commander at hazardous materials incidents. Topics include direction and coordination of the incident from initial response to stabilization; operation within the scope of an integrated emergency management plan; operation with clear procedures for notification and utilization of non-local resources; direction of resources; management overview, technical review, and logistical support to private and government sector personnel; proper documentation; reporting requirements of federal, state, and local agencies and conducting of incident critiques. This course meets the requirements of NFPA 471 for Hazardous Materials Incident Commander, with the exception of local jurisdiction specific objectives.

EM 228
**Hazardous Materials Tactics and Skills**
**4 Credits Class 3 Lab 3**
Safe handling of fires and spills involving hazardous materials for emergency response personnel. Practical application of fire and spill tactics and skills.

EM 275
**EMT Seminar**
**1 Credit Class 1 Lab 0**
Discussion of experiences in the hospital and EMS station. Critical thinking applications and simulating run reviews are emphasized.

EM 285
**Care of Trauma Patient**
**0.5-3 Credits Class 0.5-3 Lab 0**
Utilizing scenarios, skymed personnel focus on skills that play a significant role in patient survival. Includes primary survey, secondary survey, airway maintenance, shock states and complications associated with traumatic injuries.

EM 290
**Special Topics in Emergency Medical Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

EM 291
**Individual Study in Emergency Medical Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

EM 292
**Field Experience in Emergency Medical Technology**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in an emergency medical facility through special arrangement with an instructor.

**EM 293**
**Emergency Medical Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function.

**EM 294**
**Emergency Medical Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**EM 296**
**Practicum in Emergency Medical Technology**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**EM 297**
**Emergency Medical Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**EM 298**
**EMT Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**EM 299**
**EMT Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Engineering

**EGR 102 PACE**
**Physics M**
**3 Credits Class 3 Lab 2**
Introduction to physics for engineering technologies. Covers the study of forces, Newton's laws of force and motion; harmonic motion; work, energy and power; basic machines; properties of gases, liquids and solids. Prerequisite: MATH 201.

**EGR 103 PACE**
**Physics HLS**
**3 Credits Class 3 Lab 2**
Heat transfer, energy transformation, heat engines, air conditioning, wave motion and vibration, sound and hearing, light wave motion, mirrors and lenses, reflections, refraction, absorption and dispersion of light, diffraction and interference and optical instruments. Prerequisite: MATH 201.

**EGR 106**
**Introduction to Electricity**
**4 Credits Class 3 Lab 3**
Fundamentals of electricity and the function and operation of electrical test equipment. Includes multimeters, oscilloscopes, and AC and DC signal generators. The function of basic electrical components is studied and used in the analysis of AC and DC series and parallel circuits. Voltage, current, resistance and power are analyzed mathematically and through practical application in the laboratory. Prerequisite: MATH 202.

**EGR 108**
**Manufacturing Process I**
**3 Credits Class 3 Lab 2**
Introduction to industrial materials and their properties and how these properties relate to product design.

**EGR 109**
**Manufacturing Process II**
**3 Credits Class 3 Lab 2**
Non-ferrous materials, nonmetallic materials, material selection, casting and deformation processing.

**EGR 110**
**Manufacturing Process III**
**3 Credits Class 2 Lab 4**
Processes that reshape existing material in the solid state and assembly procedures.

**EGR 115**
**Environmental and Safety Fundamentals**
**3 Credits Class 3 Lab 0**
Standard safety practices for use in the laboratory and industry. Requirements for the safe handling, storage and proper disposal procedures for chemical and hazardous materials. The legal aspects of OSHA and EPA requirements as they affect employees and employers.

**EGR 116**
**Industrial Electricity**
**1-4 Credits Class 1-4 Lab 0-3**
Introduction to electrical concepts as they apply to industrial elasticity. Emphasis on safety of both personnel and equipment. Includes discussion and application of the National Electric Code (NEC) as it applies in an industrial setting.

**EGR 117**
**Computation Applications for Industry**
**1-3 Credits Class 1-3 Lab 0-1**
Principles and methods of applying mathematics to the needs of modern factories and machines. Includes the use of scientific calculators in problem solving from basic arithmetic through basic algebra.

**EGR 118**
**Synchronous Manufacturing**
**1-3 Credits Class 1-3 Lab 4**
Strategies for developing manufacturing processes including identifying and reducing waste, improving product flow and the actual production of products, packaging and shipping. Involves observing different types of workplace organizations with different methods of quality assurance.

**EGR 119**
**Access to Technology**
**3 Credits Class 2 Lab 4**
Associate of Applied Science degree programs in the engineering and sciences technologies are investigated and studied to allow a student to make informed career decisions. Technologies investigated include automotive service management, broadcast engineering and production, ceramic engineering, compressor, computer science, drafting and design, electronic and materials.

**EGR 201**
**Occupational Safety**
**3 Credits Class 3 Lab 0**
Ohio safety codes and accepted safety practices and procedures pertaining to employees and employers. Workman's compensation, safety design, inspection, personal protective equipment, safety analysis and responsibility.

**EGR 209**
**Digital Logic I**
**4 Credits Class 3 Lab 3**
Fundamentals of digital logic including classification of analog and digital signals, fundamental logic gates, Boolean algebra, combinational logic, latches and flip-flops. The student will learn and apply the principles of digital logic by building and troubleshooting digital circuits in the laboratory.

**EGR 210**
**Control Systems I**
**3 Credits Class 3 Lab 2**
Basic theory and instrument function, measurement and response limitations, calibration of instruments and an analysis of industrial process instrumentation and operations. Pneumatic, hydraulic, electrical, electronic, electromechanical and other combinations of instruments are used. Prerequisite: MATH 202.

**EGR 212**
**Industrial Supervision**
**3 Credits Class 3 Lab 0**
Working relationships among personnel involved in production areas of manufacturing including qualifications and characteristics expected for various positions.

**EGR 213**
**Control Systems II**
**3 Credits Class 3 Lab 2**
Digital and analog controllers, off/on, proportional, proportional-reset and proportional-reset-rate. Feedback control systems are studied along with methods for finding the actual value of parameter to be set on the controller for best control. Computer operations are studied (MS-DOS and BASIC) as they apply to supervisory and direct digital control. Prerequisite: MATH 203.

**EGR 214**
**Introduction to Robotics**
**3 Credits Class 3 Lab 2**
Introduction to automated manufacturing with emphasis on robotics. Topics include robotic hands, sensing devices, brains, thought patterns and internal working mechanisms.

**EGR 220**
**Work Measurements**
**1-3 Credits Class 1-3 Lab 4**
Methods for preparing and conducting motion and time analysis which emphasize cost improvement through scientific methodology. Classroom and laboratory experience aid in developing skills for measuring performance, workplace layout, job analysis and allowances for standard times.

**EGR 221**
**Industrial Engineering Cost Analysis**
**1-3 Credits Class 1-3 Lab 2**
Economic analysis and control as applied to manufacturing. Topics include overhead, estimating, break-even, cost-volume, profit relationships and cash flow.

**EGR 222**
**Plant Layout and Materials Handling**
**1-3 Credits Class 1-3 Lab 4**
Facility layout, path handling systems, equipment arrangement and workplace design for production efficiency. Experience in both conventional and computer drafting for solving manufacturing facilities layout problems.

**EGR 223**
**Production Planning and Inventory Management**
**1-4 Credits Class 1-3 Lab 3**
Production planning and inventory management as applied to small and medium businesses. Methods of forecasting, production planning, financial analysis, order quantities and scheduling are included. Inventory management concepts are applied to production considerations.

**EGR 224**
**Tool and Die Design**
**3 Credits Class 2 Lab 4**
Introduction to the design and use of jigs and fixtures. Includes determining the type of jig and/or fixture used in specific cases and what factors should be considered in the application of the tool.

**EGR 225**
**Engineering Industrial Projects**
**2 Credits Class 2 Lab 2**
Involves the student with specific problems submitted by industrial companies. These problems are defined and solution procedures are determined by the student in collaboration with the faculty and the industrial technical personnel.

**EGR 226**
**Industrial Environmental Issues**
**3 Credits Class 3 Lab 0**
Federal compliance requirements resulting from the Clean Air Act, Water Quality Act and Hazardous Material Transportation Act are examined for specific metal, ceramic and plastic industries. Proper procedures to work with hazardous materials in manufacturing operations are identified. New regulations pertaining to CFC production, nuclear waste disposal, and nonionizing radiation limits in the workplace are also examined.
Prerequisites: CHEM 100 and EGR 115.

**EGR 227**
**Statistical Applications in Industry**
**3 Credits Class 3 Lab 2**
Statistical methods used in industry to improve product quality and manufacturing yields. Industrial processes are analyzed through design of experiments, small sampling techniques, correlation theory and statistical decision theory.
Prerequisites: CER 203 and MATH 203.

**EGR 290**
**Special Topics in Engineering**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**EGR 291**
**Individual Study in Engineering**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## English Support

**ES 051**
**English Support Conversation: Fundamentals**
**3 Credits Class 3 Lab 2**
Introductory course for the student for whom English is a second language. Emphasizes survival oral/aural communication skills through the study and practice of common and emergency vocabulary, conversation, and pronunciation of spoken American English.

**ES 052**
**English Support Reading Fundamentals**
**5 Credits Class 5 Lab 0**
Introductory course for the student for whom English is a second language. Strongly emphasizes survival recognition and understanding of textual material by study and practice of common and emergency vocabulary through the use of selected reading materials.

**ES 053**
**English Support Writing and Grammar: Fundamentals**
**5 Credits Class 5 Lab 0**
Introductory course for the student for whom English is a second language. Strongly emphasizes basic writing skills through the use and practice of basic English grammatical structures.

**ES 054**
**English Support Integrated Skills: Fundamentals**
**3 Credits Class 2 Lab 3**
Introductory course for the student for whom English is a second language. Integrates and extends conversation, reading, and writing skills through supervised practice distributed among the Transitions Center, the Media Center, and other available media sources.

**ES 061**
**English Support Conversation: Beginning I**
**1-3 Credits Class 1-3 Lab 1-2**
Beginning course for the student for whom English is a second language. Strongly emphasizes the strengthening of oral/aural conversation abilities and listening comprehension through the study and practice of common vocabulary, conversational forms and the pronunciation of spoken American English.

**ES 062**
**English Support Reading: Beginning I**
**5 Credits Class 5 Lab 0**
Beginning course for the student for whom English is a second language. Strongly emphasizes the development and strengthening of reading comprehension through the use of selected basic reading materials.

**ES 063**
**English Support Writing and Grammar: Beginning I**
**8 Credits Class 8 Lab 0**
Beginning course for the student for whom English is a second a language. Strongly emphasizes the development and strengthening of writing skills through the use and practice of basic English grammatical structures derived from selected texts.

**ES 064**
**English Support Integrated Skills: Beginning I**
**3 Credits Class 2 Lab 3**
Beginning course for the student for whom English is a second language. Integrates and extends conversation, reading and writing skills through supervised practice distributed among the Transitions Center, the Media Center and other available media sources.

**ES 071**
**English Support Conversation: Beginning II**
**1-3 Credits Class 1-3 Lab 1-2**
Continuing course for the student whom English is a second language. Strongly emphasizes the strengthening of oral/aural conversation abilities and listening comprehension through the study and practice of common vocabulary, conversational forms and the pronunciation of spoken American English.

**ES 072**
**English Support Reading: Beginning II**
**1-5 Credits Class 1-5 Lab 0**
Continuing beginning course for the student for whom English is a second language. Strongly emphasizes the development and strengthening of reading comprehension through the use of selected basic reading materials.

**ES 073**
**English Support Writing and Grammar: Beginning II**
**1-8 Credits Class 1-8 Lab 0**
Continuing beginning course for the student for whom English is a second language. Strongly emphasizes the development and strengthening of writing skills through the use and practice of basic English grammatical structures derived from selected texts.

**ES 074**
**English Support Integrated Skills: Beginning II**
**1-3 Credits Class 1-3 Lab 0**
Continuing beginning course for the student for whom English is a second language. Integrates and extends conversation, reading and writing skills through supervised practice distributed among the Transitions Center, the Media Center and other available media sources.

**ES 081**
**English Support Conversation: Intermediate I**
**1-5 Credits Class 1-5 Lab 0**
Developmental course on the beginning intermediate level for the student for whom English is a second language. Strongly emphasizes the strengthening of oral/aural conversational abilities and listening comprehension through the study and practice of common vocabulary, conversational forms, and the pronunciation of spoken American English.

**ES 082**
**English Support Reading: Intermediate I**
**1-5 Credits Class 1-5 Lab 0**
Developmental course on the beginning intermediate level for the student for whom English is a second language. Strongly emphasizes the strengthening of reading comprehension through the use of selected basic reading text.

**ES 083**
**English Support Writing and Grammar: Intermediate I**
**1-8 Credits Class 1-8 Lab 0**
Developmental course on the beginning intermediate level for the student for whom English is a second language. Strongly emphasizes the development and strengthening of writing skills through the use and practice of basic English grammatical structures derived from selected texts.

**ES 084**
**English Support Integrated Skills: Intermediate I**
**1-5 Credits Class 1-5 Lab 0**
Developmental course on the beginning intermediate level for the student for whom English is a second language. Integrates and extends conversation, reading, and writing skills through supervised practice distributed among the Transition Center, the Media Center, and other available media sources.

**ES 091**
**English Support Conversation: Intermediate II**
**1-5 Credits Class 1-5 Lab 0**
Continuing developmental course on the upper intermediate level for the student for whom English is a second language. Strongly emphasizes the strengthening of oral/aural conversational abilities and listening comprehension through the study and practice of common vocabulary, conversational forms and the pronunciation of spoken American English. Includes an increasing focus on academic types of listening - speaking tasks and note-taking.

**ES 092**
**English Support Reading: Intermediate II**
**1-5 Credits Class 1-5 Lab 0**
Continuing developmental course on the upper intermediate level for the student for whom English is a second language. Strongly emphasizes the strengthening of reading comprehension and critical analysis through the use of selected reading texts. Includes an increasing focus on academic types of reading.

**ES 093**
**English Support Writing and Grammar: Intermediate II**
**1-8 Credits Class 1-8 Lab 0**
Continuing developmental course on the upper intermediate level for the student for whom English is a second language. Strongly emphasizes the expansion and strengthening of writing and grammar skills through the use and practice of English grammatical structures using selected texts. Includes an increasing focus on academic types of writing as well as emphasis on preparation for the Communications sequence.

**ES 094**
**English Support Integrated Skills: Intermediate II**
**1-5 Credits Class 1-5 Lab 0**
Continuing developmental course on the upper intermediate level for the student for whom English is a second language. Integrates and extends conversation, reading and writing skills through supervised practice distributed among the Transitions Center, the Media Center and other available media sources.

**ES 098**
**English Support: Intensive Academic English I**
**1-6 Credits Class 1-6 Lab 3**
This is a high intermediate/advanced course for the student for whom English is a second language. The emphasis is on preparing the high-level English Support student for the challenges of public speaking, composition and reading as required by the Communications sequence.

**ES 099**
**Intensive Academic English II**
**1-6 Credits Class 1-6 Lab 0**
This is a high intermediate - advanced course for the student for whom English is a second language. The emphasis is on preparing the high-level English Support student for the challenges of public speaking, composition and reading as required by the Communications sequence.

**ES 290**
**Special Topics in English Support**
**1-4 Credits Class 1-4 Lab 0**
This is a fundamentals to high-intermediate course for the student for whom English is a second language. The emphasis is on providing continuing support in English Support classes for the student with special topic needs.

## Financial Management

**FMGT 100**
**Principles of Bank Operations**
**3 Credits Class 3 Lab 0**
Aspects of banking from fundamentals of negotiable instruments to contemporary issues and developments within the industry.

**FMGT 101**
**Introduction to Trust Functions**
**1 Credit Class 1 Lab 0**
Overview of trust department including how it fits into the overall bank operations, services it provides and how those services are delivered.

**FMGT 102**
**Money and Banking**
**3 Credits Class 3 Lab 0**
Money, banking and monetary theory. Emphasizes problems such as economic stabilization, types of spending, the role of gold, limitation of central bank control, government fiscal policy, balance of payments and foreign exchange.

**FMGT 103**
**Introduction to Calculators and Adding Machines**
**1 Credit Class 1 Lab 1**
Use of electronic calculators and adding machines.

**FMGT 104**
**Marketing for Bankers**
**3 Credits Class 3 Lab 0**
Examines what motivates customers to purchase financial services and teaches bankers how to develop a successful marketing plan.

**FMGT 105**
**Product Knowledge: The Key to Successful Selling**
**1 Credit Class 1 Lab 0**
Guide to the products and services offered by banks. Consumer products, corporate products and trust products.

**FMGT 106**
**Installment Credit**
**3 Credits Class 3 Lab 0**
Techniques of installment lending. Emphasizes establishing credit, obtaining and checking information, servicing the loan and collecting amounts due. Topics include inventory financing, special loan programs, business development and advertising and the public relations aspect of installment lending.

**FMGT 107**
**Financial Services**
**2 Credits Class 2 Lab 0**
Essential for the banker planning to profit from regulation of the financial services industry. Includes bank structure and profitability, real estate, insurance, mutual funds and securities markets.

**FMGT 108**
**Bank Cards**
**3 Credits Class 3 Lab 0**
Overview of the bank card industry. The role of the bank card in the economy and the basic operational problems involved in the successful management of a bank card plan.

**FMGT 110**
**Credit Administration**
**3 Credits Class 3 Lab 0**
Directed at the executive level. Develops methods of credit investigation and analysis, credit techniques, specific credit problems and regular as well as unusual types of loans.

**FMGT 112**
**Negotiable Instruments and Payment Mechanisms**
**3 Credits Class 3 Lab 0**
Legal implications of normal activities and transactions in bank operations. Introduction to the Uniform Commercial Code, the legal framework of the United States Commercial Code and the legal framework of federal and state statutes.

**FMGT 114**
**Selling Bank Services**
**3 Credits Class 3 Lab 0**
Development of human relations skills that encourage smooth, clear and personal communication. Covers basic steps in selling, bank products, product benefits that appeal to a customer and how to spot clues that can tell what a customer needs.

**FMGT 120**
**Investing and Money Dynamics**
**3 Credits Class 3 Lab 0**
Whether the objectives are retirement, funding a college education, tax reduction or financial independence, this course teaches how to build for the future based on personal financial goals and personal family circumstances. Includes financial tools such as insurance, mutual funds, common stock, bonds, annuities, savings accounts, trusts, and tax shelters.

**FMGT 140**
**Principles of Finance**
**3 Credits Class 2 Lab 4**
Financial operations of small, medium and large size businesses and investors. Prerequisite: ACC 100.

**FMGT 200**
**Bank Control and Audit**
**3 Credits Class 3 Lab 0**
Designed for the non-auditor, this course explains the auditing function in banks. The role, duties and responsibilities of the auditor, reasons for bank controls and evaluating those controls in one's own bank.

**FMGT 201**
**Assets/Liability Management**
**1 Credit Class 1 Lab 0**
Origins, necessity and operations of asset/liability management. Covers specific management techniques including the experience method, asset allocation method, liability management method and banker method.

**FMGT 202**
**Federal Reserve System**
**3 Credits Class 3 Lab 0**
Operations and policies of the Federal Reserve System during critical periods over the last sixty years. International monetary affairs, the changing role of gold, economic developments, goals which affect the stability of the American economy and Federal Reserve efforts to adapt and influence the changing economic environment.

**FMGT 203**
**Financial Planning for Bankers**
**3 Credits Class 3 Lab 0**
Perspectives, principles and practices of financial planning. Enables the student to be more sensitive to customers' financial planning goals and objectives. Develops an understanding of the comprehensive process that looks at a customer's total financial picture and recommends strategies to achieve the customer's objectives.

**FMGT 204**
**Bank Investments for Funds Management**
**3 Credits Class 3 Lab 0**
Concepts of bank financial structure and funds management through asset and liability techniques and investment strategies.

**FMGT 205**
**Accounting I for Bankers**
**3 Credits Class 3 Lab 0**
Current practices of accounting procedures. Includes coverage of the latest principles set by the Financial Accounting Standards Board.

**FMGT 206**
**Home Mortgage Lending**
**3 Credits Class 3 Lab 0**
Provides a clear understanding of the fundamentals of mortgage lending.

**FMGT 208**
**Savings and Time Deposits in Banking**
**3 Credits Class 3 Lab 0**
Historical development of savings institutions and basic economic functions of the savings process. Review of the economics of the savings by individuals or organizations and real savings that appear as capital formation. Types of financial savings are reviewed.

**FMGT 210**
**Agricultural Finance**
**3 Credits Class 3 Lab 0**
Understanding of the extending agriculture and agribusiness loans.

**FMGT 212**
**Deposit Operations**
**3 Credits Class 3 Lab 0**
Overview of the U.S. payment system, banking law and regulation and current industry practices. Examines bank deposit-taking activities, considers how banks manage deposited funds and explores the interbank EFT systems.

**FMGT 214**
**Management of Commercial Bank Funds**
**3 Credits Class 3 Lab 0**
Principles of funds management. Covers a broad range of bank situations and sizes and is designed to be useful to as many different bankers as possible.

**FMGT 220**
**Law and Banking**
**3 Credits Class 3 Lab 0**
Laws pertaining to secured transactions, letters of credit and the bank collection process.

**FMGT 221**
**Law and Banking: Principles**
**3 Credits Class 3 Lab 0**
Banker's guide to law and legal issues with special emphasis on the Uniform Commercial Code.

**FMGT 222**
**Bank Management**
**3 Credits Class 3 Lab 0**
Philosophy and practice of bank management. Provides new and experienced bankers with a working knowledge of bank management. Objectives, planning, structure, control and the interrelationship of various bank departments. Personnel management is not covered.

**FMGT 225**
**Commercial Lending**
**3 Credits Class 3 Lab 0**
Concepts and principles of loans to businesses and other commercial operations.

**FMGT 290**
**Special Topics in Financial Management**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**FMGT 291**
**Individual Study in Financial Management**
**1-5 Credits Class 0 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Fire Science

**FS 100**
**Basic Fire Fighting**
**3 Credits Class 2 Lab 4**
Provides first phase training in the fire fighting profession for the individual who will work under direct supervision. Use of tools and equipment, chemistry of fire, extinguishment and rescue techniques. Following successful completion of the course the student is eligible for fire fighting certification through the State Department of Education. This course meets National Fire Protection Association Inc. (NFPA-1001) standards.

**FS 101**
**Fire Prevention Techniques**
**1-3 Credits Class 1-3 Lab 0-3**
Applicable state and federal fire codes, proper inspection procedures in taking notes and drawings, checking manual and automotive fire protection equipment, observing process and storage hazards and making recommendations to improve fire safety. Include use of inspection tools, location and implementation of resource material and interaction with applicable enforcement agencies.

**FS 103**
**Volunteer Fire Fighting**
**2 Credits Class 1 Lab 3**
Provides first phase training in the fire fighting profession for the individual who will work under direct supervision. Use of tools and equipment, chemistry of fire, extinguishment and rescue techniques will be covered. Following successful completion of the course the student is eligible for fire fighting certification through the State Department of Education. This course meets National Fire Protection Association Inc. (NFPA-1001) standards.

**FS 105**
**Orientation to Fire Services**
**2 Credits Class 2 Lab 1**
Introduction to duties, responsibilities and concerns of the fire services. Topics include fire equipment and apparatus, communications, records and reports, insurance rating systems and the law as it relates to the fire department operations and the responsibilities of various fire service ranks. Fire fighter safety as well as the causes of death and injury are discussed.

**FS 110**
**Advanced Fire Fighting I**
**5 Credits Class 3 Lab 7**
Second level training in the fire fighting profession for the individual who will work under minimum direct supervision. Reviews basic skills learned in Basic Fire Fighting and introduces advanced skills in arson detection, investigation, hydrants, stand pipes, sprinkler systems and inspections. Meets National Fire Protection Association Inc. (NFPA-1001) standards. Prerequisite: FS 100.

**FS 113**
**Hazardous Materials Incident Analysis**
**1-3 Credits Class 1-3 Lab 0**
Case histories and hypothetical situations are utilized in training. Since decision making is a mental process, emergency response personnel must be trained to think situations through in an orderly manner, which requires training to accurately assess the situation, determine priorities and make decisions for action.

**FS 115**
**Advanced Fire Fighting II**
**5 Credits Class 3 Lab 7**
Completes the training in the fire fighting profession for the individual to work under minimum direct supervision. Reviews advanced skills in arson detection, investigation, hydrants, stand pipes, sprinkler systems and inspections. Meets National Fire Protection Association, Inc. (NFPA-1001) standards. Following successful completion of the course the student is eligible for fire fighter certification through the State Department of Education (Fire Fighter II). Prerequisites: FS 100 and FS 110.

**FS 116**
**Fire Prevention and Investigation Techniques**
**3 Credits Class 2 Lab 3**
Fundamentals necessary to conduct basic fire and life safety inspections and to recognize basic fire and life safety hazards associated with various occupancies. Meets selected objectives of NFPA Standard 1031, (Professional Qualifications Standard for Fire Inspector, Level 1). Does not replace the Public Safety Services Training Inspector 1. Includes an overview of the fire fighter's responsibilities for determining cause of fire and fire scene procedures.

**FS 122**
**Fire Investigation Techniques**
**0.5-3 Credits Class 0.5-3 Lab 3**
Principles of fire investigations including recognition, preservation, collection and presentation of arson evidence. Arson laws, interrogation of witnesses, application of photography, preparation of reports, adjustment of insured losses and estimation of loss due to fire, smoke and water.

**FS 128**
**Cold Water Near-Drowning**
**1 Credit Class 1 Lab 0**
Introduction to cold water, medical aspects of hypothermia, hazards of getting to the victim, the rescue trailer and equipment. Workshops in cold water diving equipment and training, water safety for the surface rescuer, interviewing witnesses and victim care and handling. Approved by the Ohio Department of Natural Resources Division of Watercraft.

**FS 131**
**Ice Rescue**
**1 Credit Class 1 Lab 0**
Ohio Department of Natural Resources Division of Watercraft approved course teaches techniques used in ice rescue. Includes judging ice strengths, how ice is formed, identifying types of ice and the multiple factors which affect ice strength, the study of rescue techniques and hands-on training in the use of recommended equipment.

**FS 150**
**Fire Supression Using Foam**
**1 Credit Class 1 Lab 1**
Makeup of foam and the proper application on various types of hazardous materials incidents. Enables the student to go from "soap bubbles" using nozzle aspirated foam with an introduction into compressed air foam (CAFS). Various methods of mixing concentrate and water to make foam solution will be discussed. Prerequisite: FS 100.

**FS 155**
**Confined Space Rescue**
**2 Credits Class 1 Lab 3**
Demonstration and practical performance allows the student to set up and conduct a confined space entry and rescue operation. Prerequisites: Student must be in good physical condition; must have a valid Ohio 36-hour Volunteer or 200-hours Basic Fire Fighter certificate, or its equivalent; must be trained through the Hazardous Materials Operations Level; and must have completed a Basic Rope Rescue course. Documented proof of the above must accompany registration form. Prerequisites: EM 203, EM 227 and FS 100.

**FS 230**
**Fire Safety Inspector**
**4 Credits Class 4 Lab 0**
Based on the standards of the National Fire Protection Association's Standard 1031: Professional Qualifications for Fire Inspector I, 1989 Edition. Provides a working knowledge of the principles of fire safety inspection. Following successful completion of the course the student is eligible for certification through the State Department of Education.

**FS 235**
**Underground Storage Tank Inspection**
**4 Credits Class 4 Lab 0**
State regulations, nationally recognized standards and inspection skills. Students who successfully complete the course earn certification in Underground Storage Tank Inspection.

**FS 240**
**Industrial Fire Protection**
**2 Credits Class 2 Lab 1**
Organization and operation of an in-plant fire company. Purchase of supplies and equipment, special fire fighting tactics, training of personnel, and relationship to the municipal fire department.

**FS 250**
**Fire Apparatus**
**1-4 Credits Class 1-4 Lab 0**
Types of fire equipment used in fighting residential and commercial fires.

**FS 250A**
**Ladder Operations**
**0.25-1 Credit Class 0.25-1 Lab 0**
Includes safe ladder set-up, rescue operations, water tower operations.

**FS 250B**
**Pumps**
**0.25-1 Credit Class 0.25-1 Lab 0**
Provides the pump operator with an overview of the operation of the fire pump. Topics include pump principals and plumbing, ratings, problem areas and practical operations. Prerequisite: The student must be certified as a Ohio Fire Fighter and meet the standards set forth in The Ohio Administrative Code, Chapter 4121:1-21.

**FS 250C**
**Rural Water Movement**
**0.25-1 Credit Class 0.25-1 Lab 0**
Designed for the firefighter who wishes to further knowledge of rural water movement methods and techniques including equipment for rural firefighting operations. Topics include tanker shuttles, relays, and pumping operations.

**FS 250D**
**Dry Hydrants**
**0.25-1 Credit Class 0.25-1 Lab 0**
Designed for the firefighter who wishes to further knowledge of dry hydrants.

**FS 251**
**Fire Extinguishment**
**1-5 Credits Class 1-5 Lab 0**
Participation in a live training fire using NFPA Standard 1403. The student learns interior firefighting tactics, nozzle techniques and other fireground operations that may be used on a working fire. Note: Full turnout gear and SCBA with spare cylinder required. Prerequisite: The student must be certified as an Ohio Fire Fighter and meet the standards set forth in The Ohio Administrative Code, Chapter 4121:1-21.

**FS 251A**
**Residential Fires**
**0.25-1 Credit Class 0.25-1 Lab 0**
Fire prevention and fire extinguishing in the residential environment. Emphasizes appropriate equipment and procedures in extinguishing the residential fire.

**FS 251B**
**Vehicular Fires**
**0.25-1 Credit Class 0.25-1 Lab 0**
Designed for the firefighter who wishes to further knowledge of vehicle fires. The student will learn to recognize the hidden dangers associated with vehicle fires and how to properly protect themselves in the danger zone. Special notice: Full turnout gear required. Prerequisite: The student must be Certified as an Ohio Fire Fighter and meet the standards set forth in The Ohio Administrative Code, Chapter 4121:1-21.

**FS 251C**
**Oil and Gas Well Fires**
**0.25-1 Credit Class 0.25-1 Lab 0**
Attacking oil tank fires and special needs in fighting oil and gas well fires. Prerequisite: The student must be certified as an Ohio Fire Fighter and meet the standards set forth in The Ohio Administrative Code, Chapter 4121:1-21.

**FS 252**
**Arson Investigation**
**0.5-1 Credit Class 0.5-1 Lab 0**
Designed for fire fighters involved in arson investigation involving a homicide. Students will be introduced to the importance of evidence and their role as fire fighters in the collection and preservation of evidence.

**FS 290**
**Special Topics in Fire/EMT Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**FS 291**
**Individual Study in Fire/EMT Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**FS 292**
**Field Experience in Fire Science**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a fire service facility through special arrangement with an instructor.

**FS 294**
**Fire Science Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**FS 295**
**Fire Science Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**FS 296**
**Fire Science Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**FS 297**
**Fire Science Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**FS 298**
**Fire Science Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agencey. Coordinated by an instructor.

**FS 299**
**Fire Science Intership Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Forestry

**FOR 110**
**Reforestation**
**3 Credits Class 2 Lab 3**
Reclamation and reforestation of coal mined lands. State and federal reclamation laws, coal, geology and methods of mining. Reclamation practices and the establishment of grassland and woody vegetation. Reforestation modules involve methods of establishing trees and shrubs on vacant land. Nursery practices, planning, site preparation, planting concepts and assessment.

**FOR 111**
**Forest Dendrology**
**3 Credits Class 1 Lab 6**
Indigenous species of the eastern hardwood region as well as other regions. Identification through tree and product with specific soil, site and silvical characteristics being discussed.

**FOR 120**
**Photo Interpretation**
**3 Credits Class 1 Lab 6**
Tools used in the planning and management of natural resources. Prerequisite: MATH 201.

**FOR 123**
**Forest Measurements**
**4 Credits Class 2 Lab 6**
Tools used daily in the planning and management of natural resources. Prerequisite: MATH 201.

**FOR 124**
**Forest Ecology**
**3 Credits Class 2 Lab 3**
Forest community relationships, synecology and audiology which can be applied to the technical aspects of forestry such as silvi-culture, mensuration, forest management and timber harvesting.

**FOR 131**
**Forest Entomology and Pathology**
**4 Credits Class 3 Lab 3**
Insects, diseases and their economic impact on forest, ornamental and street trees. Stresses identification and potential control.

**FOR 134**
**Agroforestry**
**2 Credits Class 1 Lab 3**
Classification of agroforestry systems and its ecological and social role in societies around the world. Focuses on understanding ancient systems and new systems being developed for profitability and sustainable production of crops and wood products from land.

**FOR 135**
**Forestry Nursery Operations**
**2 Credits Class 1 Lab 3**
Establishment and operation of tree nurseries. Includes the collection, care and propagation of seed; preparation, care and planting of seeds and seedlings in a seed bed; and the water and nutritional needs of seedlings.

**FOR 210**
**Forest Mensuration**
**4 Credits Class 2 Lab 6**
Techniques and equipment used in determining quality, quantity, value and stocking of hardwood timber. Prerequisites: FOR 120, FOR 123 and COMM 122.

**FOR 211**
**Timber Harvesting**
**3 Credits Class 1 Lab 6**
Aspects of conventional hardwood logging operations. Safety, work procedures, care and maintenance of equipment and harvesting techniques and skills.

**FOR 220**
**Applied Silviculture**
**4 Credits Class 2 Lab 6**
Cultural techniques applied to growing, harvesting and regenerating forest crops in North America. Prerequisites: FOR 111, FOR 120, FOR 123, FOR 124 and COMM 122.

**FOR 222**
**Introduction to Forestry**
**3 Credits Class 2 Lab 3**
Introduction to the field of forestry, starting with the role of the forest when North America was discovered up to and including forestry as it is practiced today.

**FOR 230**
**Forest Management**
**4 Credits Class 2 Lab 6**
Management of upland central hardwoods, forest regulation and site species relationships as applied to the operation of a forest property for the production of timber and associated products and as it relates to public needs. Prerequisites: FOR 210, FOR 220 and COMM 122.

**FOR 231**
**Forest Products Utilization**
**3 Credits Class 1 Lab 6**
Utilization of products and services of the central hardwood region. Traditional and noninvolved flow of goods and services from the forest to final product. Emphasizes the conversion of hardwood sawlogs and pulpwood into finished goods while minimizing waste.

**FOR 232**
**Lumber Grading and Marketing**
**4 Credits Class 2 Lab 6**
Rules of the National Hardwood Lumber Association (NHLA). Topics include lumber tally and handling techniques, wood identification and upgrading of lumber. Not intended for training of lumber inspectors.

**FOR 290**
**Special Topics in Forestry**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**FOR 291**
**Individual Study in Forestry**
**1-5 Credits Class 0 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**FOR 292**
**Field Experience in Forestry**
**1-3 Credits Class 0 Lab 12-36**
On-the-job training in a forestry facility through special arrangement with an instructor.

**FOR 294**
**Cooperative Work Experience in Forestry**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**FOR 295**
**Forestry Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**FOR 296**
**Forestry Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**FOR 297**
**Forestry Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

## General

**GEN 115**
**Career Strategies**
**0.5-3 Credits Class 0.5-3 Lab 0**
Increases self-knowledge, interpersonal strengths and occupational awareness and synthesize career planning components into an effective career strategy for personal fulfillment.

## General Studies

**GS 100**
**Orientation to College Life**
**0.25-2 Credits Class 0.25-2 Lab 0**
College procedures, systems and resources available to the student. Methods for accessing, utilizing and solving problems with these options are explored.

**GS 101**
**Hocking College Experience**
**0.25-1 Credit Class 0.25-1 Lab 0**
Orientation to college life at Hocking College and an overview of the services of the Student Affairs Office.

**GS 102**
**Obtaining and Maintaining Employment**
**1-3 Credits Class 1-3 Lab 0**
Defines and identifies suitable employment positions. Includes resume development, directing complaints and concerns in the workplace, conflict resolution and how to get along with co-workers, supervisors and managers. Customer relations concepts are also addressed.

**GS 104**
**Time Management**
**1 Credit Class 1 Lab 0**
Planning and management of time in relation to organizational and individual goal setting, delegation, effective business conferences and decision making. Basic steps toward more effective planning for time management.

**GS 105**
**Mid-Career Planning**
**0.5-1 Credit Class .5-1 Lab 0**
Personal strategies are developed to support mid-career changes, occupational advancement, job promotion, life-long learning and life transitions. Use of career planning tools including assessment of academic skills, personality style and career path.

**GS 106**
**Dynamics of Group Living**
**2 Credits Class 2 Lab 1**
Student development theory and the application of communication techniques. Includes crisis identification, campus and community resources and community development issues.

**GS 107**
**Mediation Dispute Resolution**
**1 Credit Class 1 Lab 0**
Theoretical and practical understanding of the art of mediation. The nature of everyday conflict will be explored as well as alternative forms of dispute resolution. The student will learn techniques used by the mediator and acquire hands-on experience in conflict management during lab hours at Hocking College Mediation Services

**GS 108**
**Caregiver**
**1 Credit Class 1 Lab 0**
Overview of the caregiving process for professionals and family members. Addresses skills of the caregiver, coping strategies, relationships, stages of caregiving, and effects of caregiving on the caregiver.

**GS 109**
**Developing Assertive Behavior**
**1 Credit Class 1 Lab 0**
Recognizing and utilizing behavior and communication styles to control difficult situations and increase successful interactions.

**GS 110**
**Applied Concepts of Employment/Tutors**
**0.5-1 Credit Class 0.5-1 Lab 0**
Overview of and training for positions within the on-campus employment system. Aspects of employment related to professionalism, confidentiality, personal commitment to the job and performance evaluations. Applicable to any work situation.

**GS 112**
**Employment Skills Seminar**
**1 Credit Class 1 Lab 0**
General preparation skills for successful job entry. Topics include customer service, ethics, confidentiality and OSHA training. Procedures and performance expectations for specific jobs are included.

**GS 114**
**College Student Issues**
**2 Credits Class 2 Lab 0**
Acquaints resident assistants with issues relevant to college students as well as provide training and guidance on coping with various situations. Topics range from theoretical understanding of the dynamics of human relations to practical applications of emergency techniques.

**GS 115**
**Overview of Brain Dominance**
**1 Credit Class 1 Lab 0**
Introduction to brain dominance theory. Historical overview of brain dominance exploration by psychologists, educators and human resource development personnel. Includes taking the Herrmann Brain Dominance instrument and a personal interpretation of one's profile.

**GS 116**
**Building Self-Esteem**
**1 Credit Class 1 Lab 0**
Strategies for increasing self-esteem. Self-esteem is linked to success in college, on the job and in personal relationships. Students will examine the factors that create positive and negative feelings of self and learn practical ways to change their own negative perceptions.

**GS 117**
**World Issues Forum**
**1 Credit Class 1 Lab 0**
World issues that address cultural awareness, politics and policies and diversity as they relate to current events.

**GS 120**
**Orientation to American Life**
**3 Credits Class 3 Lab 0**
Specifically designed to meet the needs of new international students. Familiarization with college and community services, aspects of day-to-day American living and national and community activities and customs.

**GS 130**
**PASS (Personal Academic Success Strategies)**
**3 Credits Class 3 Lab 0**
Fine tuning skills needed to succeed in college course work. Concepts and techniques discussed in this course come from hundreds of students from various backgrounds and geographic areas. Effective methods for becoming a master student are reviewed along with topics such as time management, note-taking, test anxiety, creativity, relationships, personal learning styles, learning resources and career development.

**GS 135**
**Degree Development Seminar**
**1 Credit Class 1 Lab 0**
The student, with the assistance of the AIS/ATS instructor, will gather information, explore career options available to through the AIS, develop a curriculum design that best meets needs and write a formal proposal.

**GS 140**
**Caregiver Options**
**1 Credit Class 1 Lab 0**
Provides caregivers with needed skills and resources required to provide positive relationships and experiences for all persons involved. Focuses on issues related to the variety of options available to provide needed care, including independent living, home care and assisted care.

**GS 250**
**Improving Test Performance**
**1 Credit Class 1 Lab 0**
Specifically designed to meet the needs of adult students. Emphasizes sharing of academic concerns and effective study techniques. Topics include time management, test anxiety, studying for exams, strategies for taking exams, improving reading comprehension, reading a textbook effectively, taking notes, improving memory and effective listening.

**GS 251**
**Prior Learning Documentation**
**1 Credit Class 1 Lab 0**
Students analyze, document and present learning acquired prior to enrolling, in a format appropriate for receiving Credit for Learning from Experience and/or Credit by Advanced Standing.

**GS 261**
**Professional Enhancement for Managers**
**0.5-3 Credits Class 0.5-3 Lab 0**
Issues that enhance managers' professional roles within and beyond their organization of employment. Includes community service and volunteerism, lifelong learning and professional self-development, development of communication techniques for leaders, mentoring and serving on boards.

**GS 261A**
**Professional Enhancement for Managers: Overview**
**1 Credit Class 1 Lab 0**
Issues that enhance managers' professional roles within and beyond their organization of employment. Includes community service and volunteerism, lifelong learning and professional self-development, communication techniques for leaders, mentoring, and serving on boards, committees and advisory councils.

**GS 261B**
**Professional Enhancement for Managers: Applications**
**0.5-1 Credit Class 0.5-1 Lab 0**
Techniques and applications for enhancing one's own professionalism including building skills related to community service and volunteerism, self-directed learning, communicating to the public, mentoring and contributing to public boards and forums.

**GS 261C**
**Professional Enhancement for Managers: Project**
**1 Credit Class 1 Lab 1**
Development of professional enhancement methods and techniques. Under instructor guidance, participants enhance their own professional skills by developing a project relevant to their own interests.

**GS 290**
**Special Topics in General Studies**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**GS 291**
**Individual Study in General Studies**
**1-5 Credits Class 0 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**GS 292**
**Community Service Project**
**1-3 Credits Class 1-3 Lab 0-3**
On-the-job training in a community service facility through special arrangement with an instructor.

**GS 295**
**General Studies Seminar**
**1-4 Credits Class 1-4 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**GS 298**
**General Studies Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**GS 299**
**General Studies Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Geographics

**GEO 100**
**Introduction to GIS**
**2 Credits Class 1 Lab 3**
Skills needed to use traditional map information. Geographic Information Systems will be defined and its use in government and industry will be examined.

**GEO 101**
**Intermediate GIS**
**3 Credits Class 2 Lab 3**
Technical inner workings of GIS. Students will explore, examine and experience the rules and operations that govern data storage, data analysis and data display. Prerequisite: GEO 100 or instructor permission.

**GEO 102**
**Introduction to GPS**
**3 Credits Class 2 Lab 3**
Concepts of the Global Positioning System and its history, design and application. Students will have an opportunity to collect and evaluate positional data with GPS receivers.

**GEO 130**
**Applied Coordinate Geometry**
**3 Credits Class 2 Lab 3**
Mathematical concepts utilized in computations of location of points, determination of direction and distances and calculation of area based on coordinate systems. Prerequisites: MATH 201 and MATH 202.

**GEO 200**
**Applications in GIS**
**3 Credits Class 1 Lab 6**
Understanding of GIS applications on the Hocking College campus with real world data. Prerequisites: GEO 100 and GEO 101 or instructor permission.

**GEO 201**
**Intermediate GIS Applications**
**3 Credits Class 1 Lab 6**
Understanding GIS applications in real world work experiences with real world data. Students may be placed under the supervision of various local governmental agencies and/or private industry.

**GEO 202**
**Advanced GIS Applications**
**3 Credits Class 1 Lab 6**
Work experience where sophisticated map products and tabular data are expected products of GIS. Students may be placed under the supervision of various local governmental agencies and/or private industry.

**GEO 203**
**GPS Data Acquisition**
**3 Credits Class 2 Lab 3**
GIS quality and control survey quality GPS equipment and procedures to collect positional data for GIS database projects.

**GEO 204**
**Remote Sensing**
**3 Credits Class 2 Lab 3**
Remote sensing as a means of data acquisition for resource analysis and mapping. Includes a variety of remote sensors that sample wavelengths within the electromagnetic spectrum. Multistage sampling of natural resources will be discussed.

**GEO 290**
**Special Topics in GIS**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic by participants in a group.

**GEO 291**
**Individual Study in GIS**
**0.25-5 Credits Class 0.25-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**GEO 292**
**GIS Field Experience**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a geographic facility through special arrangement with an instructor.

**GEO 293**
**GIS Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function.

**GEO 294**
**GIS Coop Work Experience**
**1-5 Credits Class 0 Lab 10-50**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**GEO 295**
**GIS Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**GEO 296**
**GIS Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**GEO 297**
**GIS Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**GEO 298**
**GIS Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**GEO 299**
**GIS Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Government

**GOVT 142**
**Interaction with Government and Politics**
**3 Credits Class 3 Lab 0**
Function, structure, institution, process and product of the national government and impact of these on the citizens. Emphasizes discussion in the classroom to the personal world and conceptualizing how government and politics function in the real world.

**GOVT 290**
**Special Topics in Government**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**GOVT 291**
**Individual Study in Government**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged with instructor permission on an individual basis.

## Health Careers

**HC 100**
**The Human Organism**
**3 Credits Class 3 Lab 2**
Introductory human anatomy emphasizing understanding structural levels of the body from molecules to organ systems. The organization of each body system is covered. Terminology necessary for explanation of critical concepts including metabolism, homeostasis and inheritance.

**HC 101**
**Medical Terminology I**
**3 Credits Class 3 Lab 0**
Building a basic medical vocabulary with an emphasis on prefixes, suffixes and roots. Spelling and pronunciation rules are covered. Anatomical, physiological and pathological terminology pertaining to selected body systems are explored.

**HC 102**
**Health Promotion Elective**
**1 Credit Class 1 Lab 0**
Credit modules designed for health, public safety service and natural resources students. Students are exposed to knowledge, skills and attitudes related to health promotion and physical fitness for life. Prerequisite: See instructor.

**HC 102A**
**Health Promotion Elective: Dance Aerobics**
**1 Credit Class 0 Lab 2**
Enjoyable exercise program of dance and jogging steps choreographed to brisk music to strengthen and increase the efficiency of the cardiovascular system. The lightweight component utilizes small one to three pound hand weights in simple routines to tone the upper body. Dynabands, improve muscular strength and endurance of the lower body.

**HC 102B**
**Health Promotion Elective: Healthy People**
**1 Credit Class 1 Lab 0**
Promotes personal health and wellness. Stress management, nutrition, beginning a fitness program, environmental factors and behavior change strategies are included.

**HC 102L**
**Health Promotion Elective: Lite Aerobics**
**1 Credit Class 0 Lab 2**
Aerobic muscle strengthening and flexibility workout for those who prefer simple repetitive low impact movements. Emphasizes glide movements with one foot on the floor at all times. Routines are designed for those who have been inactive, are overweight, are at risk for cardiovascular disease, have a minor disability, or feel they lack good coordination.

**HC 102M**
**Health Promotion Elective: Aqua Aerobics**
**1 Credit Class 0 Lab 2**
Aerobic swimming program for improving cardiovascular health and assisting with weight control. Involves simple rhythmic movements in the water. Being able to swim is not a requirement.

**HC 102Q**
**Health Promotion Elective: Physical Conditioning**
**1 Credit Class 0 Lab 2**
Aerobic muscle strengthening and stretching circuit training program designed to improve cardiovascular fitness, muscle strength, endurance and flexibility. Each participant is pre- and post-tested in seven areas of fitness.

**HC 102R**
**Health Promotion Elective: Golden Movers**
**1 Credit Class 0 Lab 2**
Exercise for participants with varied fitness goals. Presentations on various aspects of healthy living including the six components of physical fitness, stress management, nutrition for weight maintenance and the benefits of self massage. Conveys the importance of enjoyment and variety in maintaining a lifelong fitness routine.

**HC 102S**
**Health Promotion Elective: Step Aerobics**
**1 Credit Class 0 Lab 2**
Comprehensive and balanced program that works every major muscle group in the lower body, while strengthening and conditioning the upper body. Involves stepping up and down on a platform while simultaneously performing upper body strength training movements to the accompaniment of music. Designed for the individual who wants a low impact, excellent cardiopulmonary workout without the frills of a traditional dance aerobic setting.

**HC 102T**
**Health Promotion Elective: Tai Chi Chuan**
**1 Credit Class 0 Lab 2**
Instruction in the ancient Chinese system of movement for health, meditation and self defense. Specific coverage of Beijing, a short form of Tai Chi Chuan which is practiced daily by millions. Includes the basics of partner play and a historical perspective on this form.

**HC 102U**
**Health Promotion Elective: Therapeutic Touch**
**0.5-1 Credit Class 0.5-1 Lab 0**
Use of self to assist another in the restorative process through the Krieger/Kunz method of Therapeutic Touch. The relationship between nursing theory, nursing research and nursing practice will be described. Prerequisites: Student accepted in Level II nursing program and is either currently enrolled in or has completed Quarter V.

**HC 102X**
**Health Promotion Elective: Circuit Training**
**1 Credit Class 0 Lab 2**
Comprehensive and balanced program that works every major muscle group in the body. Performed in minute intervals of aerobic conditioning and muscle strengthening movements.

**HC 102Y**
**Health Promotion Elective: Yoga**
**1 Credit Class 0 Lab 2**
Hatha Yoga philosophy and instruction as they relate to practicing postures that contribute to physical strength and flexibility. Spinal alignment and postural detail with recognition of poor postural habits and movement patterns. The body's reaction to stress is countered with relaxation methods. All postures are identified by their Sanskrit names.

**HC 102Z**
**Health Promotion Elective: Holistic Health**
**1 Credit Class 1 Lab 0**
Informative and practical program to improve personal health and ability to cope. Introduction to beginning meditation and relaxation, foods for preventive health, pain control, energy balancing, accupressure, reflexology, polarity, yoga and music relaxation.

**HC 103**
**Cardiopulmonary Resuscitation**
**0.25-1 Credit Class 0.25-1 Lab 1**
Practical course for lay persons in recognition and emergency care procedures for victims of cardiac arrest and respiratory emergencies. Card issued upon completion.

**HC 105**
**Defensive Driving**
**0.25-1 Credit Class 0.25-1 Lab 0**
Part of the National Safety Council's improvement program. Topics include preventing accidents, defensive driving techniques, avoiding collisions with vehicles, the art of passing and being passed and the "mystery crash."

**HC 106 PACE**
**Cardiopulmonary Resuscitation for the Professional Rescuer**
**0.25-1 Credit Class 0.25-1 Lab 1**
Practical course for health professionals in recognition and emergency care procedures for victims of cardiac arrest and respiratory emergencies. Card issued upon completion.

**HC 110**
**Anatomy and Physiology I**
**3 Credits Class 3 Lab 2**
Reproductive, endocrine, circulatory, excretory and respiratory systems with emphasis on their normal physiology. Includes a demonstration of physiological principles, dissection of appropriate specimens and microscopic examination of tissues. Prerequisite: HC 100.

**HC 111**
**Medical Terminology II**
**3 Credits Class 3 Lab 0**
Anatomical, physiological and pathological terminology pertaining to selected body systems and medical specialties are explored. Selected clinical procedures, laboratory tests and abbreviations are discussed. Prerequisite: HC 101.

**HC 114 PACE**
**Standard First Aid**
**0.25-1 Credit Class 0.25-1 Lab 1**
Prepares the student to meet the needs of most situations when emergency first aid care is needed and medical assistance is not excessively delayed. Increases knowledge of personal safety and accident prevention. Prerequisite: See instructor.

**HC 114A**
**First Aid**
**0.25-0.5 Credit Class 0.25-0.5 Lab 0**
Prepares the student to meet the needs of most situations when emergency first aid care is needed and medical assistance is not excessively delayed. Increases knowledge of personal safety and accident prevention. Prerequisite: See instructor.

**HC 114B**
**Cardiopulmonary Resuscitation**
**0.25-0.5 Credit Class 0.25-0.5 Lab 0**
Prepares the participant to respond to respiratory and cardiac emergencies of the adult patient. Skills and techniques learned will help the student stay calm and make decisions appropriate to keep a victim alive.

**HC 115**
**First Responder**
**2 Credits Class 1 Lab 3**
Training in emergency medical care for those who are apt to be the first person responding to an accident.

**HC 116**
**First Aid Recertification Course**
**0.5 Credit Class 0.5 Lab 1**
Reviews the standard first aid skills a person needs to act as the first link in the emergency medical services system. Prepares participants to respond correctly in emergencies. Skills and techniques learned will help the student stay calm and make decisions appropriate to keep a victim alive and injuries from becoming worse until the EMS system arrives. Course consists of adult CPR skills and first aid skills for injuries as well as medical emergencies. Prerequisite: Current adult CPR and First Aid course.

**HC 117**
**CPR Recertification Course**
**0.5 Credit Class 0.5 Lab 1**
Review of adult, infant and child CPR and community CPR courses. Information includes dealing with respiratory emergencies that could lead to cardiac arrest and providing first aid for cardiac emergencies. Prerequisite: Current CPR care.

**HC 120**
**Anatomy and Physiology II**
**3 Credits Class 3 Lab 2**
Nervous, special sensory, integumentary, skeletoarticular, muscular and digestive systems with emphasis on their normal physiology. Laboratory experience offer the opportunity to further clarify learning through the use of audiovisuals and microscopic and gross exercises illustrating anatomical and physiological properties. Prerequisites: HC 100 and HC 110.

**HC 121**
**Medical Transcription**
**3 Credits Class 2 Lab 4**
Transcribing medical reports from cassette transcribers. Emphasizes spelling, punctuation, grammar and proofreading. Patient histories, physical examinations, progress notes, discharge summaries, x-ray reports and letters are transcribed by the student. Prerequisites: HC 101, HC 111, SEC 135 and SEC 180.

**HC 122**
**Swedish Massage**
**2 Credits Class 1 Lab 3**
Introduction to Swedish massage techniques. This is the first course in a series of three classes exploring aspects of massage.

**HC 123**
**Fascia and Joint Release**
**2 Credits Class 1 Lab 3**
Introduction to fascia and joint release with some joint anatomy.

**HC 124**
**Healing Through the Human Energy Field**
**2 Credits Class 2 Lab 2**
Introduction to working with the human energy field.

**HC 125**
**Activities Therapy I (National)**
**3 Credits Class 3 Lab 0**
First of three courses to meet National Association for Activity Professionals (NAAP) requirements for activity director. Emphasizes planning and conducting activities for nursing home residents in a treatment-oriented approach.

**HC 126**
**Activities Therapy II (National)**
**3 Credits Class 3 Lab 0**
Second of three courses for planning and conducting activities for nursing home residents. Stresses the importance of each resident's situation when planning activities. Emphasizes a treatment-oriented approach.

**HC 127**
**Activities Therapy III (National)**
**3 Credits Class 3 Lab 0**
Last of three courses to meet NAAP requirements for activity director. Emphasizes planning and conducting activities for nursing home residents in a treatment-oriented approach.

**HC 128**
**Activity Therapy Clinical I**
**1 Credit Class 0 Lab 3**
Provides hands-on experience needed to apply the principles of the activity profession in the long term care setting.

**HC 129**
**Activity Therapy Clinical II**
**1 Credit Class 0 Lab 5**
Provides hands-on experience needed to apply the principles of the activity profession in the long term care setting. Prerequisite: HC 128.

**HC 130**
**Basic Pathology**
**2 Credits Class 2 Lab 1**
Introduction to diseases with emphasis on diseases of the blood, heart, blood vessels, excretory system, digestive system, liver, gallbladder, pancreas, respiratory system, endocrine system, reproductive system, nervous system, bones, joints, muscles and skin. Includes diseases related to hereditary disorders and neoplasia. Prerequisites: HC 100, HC 110 and HC 120.

**HC 131**
**Fluids and Electrolytes**
**1 Credit Class 1 Lab 1**
Life needs of the cell with an introduction to basic chemistry. Emphasizes assessment data, body fluids, electrolytes and acid base balance/imbalance. Prerequisites: HC 100, HC 110 and HC 120.

**HC 140**
**Technical Aspects of Anatomy and Physiology**
**3 Credits Class 3 Lab 2**
Anatomy and physiology of body systems. Fluids and electrolytes are covered as well as basics of pathology. Prerequisite: Admission to Enrichment.

**HC 146**
**Fitness Leadership**
**1 Credit Class 1 Lab 0**
Designed for those who plan to teach dance exercise. Guidelines on administration, instructor responsibilities, methods of instruction, anatomy and physiology, fitness factors, injury prevention, sports nutrition, safe use of light hand weights and CPR review.

**HC 148**
**Exercise Physiology**
**3 Credits Class 3 Lab 0**
Introduction to the physiology of exercise. Energy metabolism; principles of aerobic, strength and flexibility conditioning; neuromuscular physiology; cardiorespiratory physiology; methods of training and environmental considerations.

**HC 149**
**Stress and Stress Management**
**1 Credit Class 1 Lab 0**
Stress and its implication and relationship to illness. Alternatives in handling stress.

**HC 150**
**Fitness Class Instruction**
**1 Credit Class 0 Lab 3**
Designed for the student who plans to teach aerobic exercise. Guidelines on class administration, instructor responsibilities, instruction methods, anatomy and physiology, fitness factors, injury prevention, sports nutrition and safe use of light hand weights.

**HC 151**
**Nutrition in the 90's**
**2 Credits Class 2 Lab 0**
Concepts of nutrition and their application to personal eating patterns. Topics include nutrient, topical issues and methods of evaluating personal eating habits.

**HC 153**
**Holistic Health**
**1 Credit Class 1 Lab 0**
Improvement of personal health and ability to cope. Beginning meditation and relaxation, foods for preventative health, pain control, energy balancing, accupressure, reflexology, polarity, yoga and music relaxation are introduced.

**HC 155**
**Sports Nutrition**
**4 Credits Class 4 Lab 0**
Nutritional needs of the physically active individual in various environments. Use of erogenic aids and body composition are also covered.

**HC 160**
**Child Care Practicum I**
**2 Credits Class 0 Lab 6**
Provides the opportunity to interact with and plan activities for children in day care settings, head start programs and early childhood classes. Concurrent with HC 249A. Prerequisite: Admission to Nanny program.

**HC 161**
**Fundamentals of Child Care**
**3 Credits Class 3 Lab 1**
Fundamentals of child care. Includes assessment of children's mental and physical development; planning to meet safety, rest, nutritional, play, hygiene and educational needs. Addresses the prevention, recognition, and management of common childhood diseases. Corequisite: HC 160. Co- or prerequisite: HC 162. Prerequisites: HC 100, DT 102 and HC 160.

**HC 162**
**Child Care Practicum II**
**2 Credits Class 1 Lab 8**
Provides the opportunity to interact with, assess, plan play activities for and assist with the physical care of children in day care settings, head start programs and early childhood classes. Corequisite: HC 161. Prerequisites: HC 100, HC 160 and HC 250.

**HC 163**
**Pediatric Emergencies**
**1 Credit Class 1 Lab 1**
Standard first aid, water safety and pediatric aspects of CPR. Prerequisite: HC 100. Co- or prerequisites: HC 161 and HC 162.

**HC 164**
**Dynamics of Child Care**
**3 Credits Class 3 Lab 0**
Communication skills and technical and legal aspects of providing child care. Topics include confidentiality, parental authority, respect for parent's philosophy of child rearing, legal implications, child abuse symptoms and professional attitudes and appearance. Prerequisite: Admission to Nanny program or instructor permission.

**HC 165**
**Child Care Practicum III**
**2 Credits Class 1 Lab 8**
Provides an opportunity to utilize principles of activity therapy, fundamentals and dynamics of child care, food preparation, physiological, social, and psychological sciences and communication techniques to plan and implement care for children in a private home setting. Prerequisites: DT 102, HC 161, HC 162 and HC 163.

**HC 166**
**Complementary Therapies**
**0.5 Credit Class 0.5 Lab 0**
Introduces general public and health professionals to natural and complimentary therapies. Includes pain control through accupressure and non-drug therapies, stress management, vitamin and herb therapy.

**HC 167**
**Loss, Grief and Dying**
**0.5 Credit Class 0.5 Lab 0**
Exploring the dynamics of loss, grief and dying, this course helps nurses and other health professionals better comprehend feelings and responses to loss and grief. Develops an appreciation for the response of clients, the client's family and the colleagues with whom they work.

**HC 200**
**Pathophysiology for Nurses**
**3 Credits Class 3 Lab 1**
Designed for the Level II Nursing student to explore recurring pathological changes in body structure and function leading to alterations in health. Emphasis on identifying interferences in basic human needs of metabolism, immunity, tissue perfusion, cardiovascular, respiratory, renal, and neurological function. Correlation in the clinical setting with expected human responses, signs, symptoms and laboratory data. Prerequisites: HC 110, HC 130 and HC 131 or HC 140.

**HC 202**
**Community Health**
**3 Credits Class 3 Lab 0**
Organizational aspects of community health including health professionals, public health agencies and other aspects of health delivery. Physical aspects of community health including communicable disease, chronic disease and safety; psychological aspects including drug, alcohol and mental health problems; environmental aspects including air, water and food inspection; special aspects of community health including care of infants, mothers and senior citizens.

**HC 203**
**Cardiopulmonary Resuscitation Instructor**
**1 Credit Class 1 Lab 0**
Instructor course in cardiopulmonary resuscitation leading to instructor certification through the American Heart Association or American Red Cross. Basic instruction techniques, background information on heart attacks and rationale for application of CPR.

**HC 204**
**Standard First Aid Instructor**
**1 Credit Class 1 Lab 0**
American Red Cross Standard First Aid and Adult CPR Instructor Course. Application of varying teaching methods used by the American Red Cross to provide the public with knowledge and skills necessary in an emergency. Upon successful completion of this course the participant will be certified as an American Red Cross Standard First Aid Instructor. (All American Red Cross requirements must be met before student may teach classes.)

**HC 220**
**Personnel Supervision**
**3 Credits Class 3 Lab 0**
Functions and techniques of personnel management. Topics include external and internal organizational factors influencing personnel activities, employee selection, employee assimilation, employee compensation and environmental factors. Prerequisite: Second year standing.

**HC 247**
**Microbiology**
**4 Credits Class 4 Lab 1**
How microorganisms live in the world around us and our relationship to them. Systematically covers bacteriology, immunology, mycology, viruses and parasites.

**HC 248**
**Hospital Safety**
**2 Credits Class 2 Lab 0**
Safety practices and procedures for employees in hospitals and nursing homes.

**HC 249**
**Activities Therapy (OHIO)**
**3 Credits Class 3 Lab 0**
Planning and conducting activities for nursing home residents. Stresses the importance of each resident's situation when planning activities through documentation of interests and personal needs.

**HC 250**
**Creative Activity for Children**
**4 Credits Class 4 Lab 1**
Planning and implementing developmentally appropriate activities for young children. Stresses the selection, evaluation and presentation of music, art, books, materials and activities that are developmentally appropriate.
Prerequisite: Admission to Nanny program or instructor permission.

**HC 270**
**Massage Techniques**
**2 Credits Class 1 Lab 3**
Use of massage for frequently encountered dysfunctions.

**HC 271**
**Anatomy and Physiology Principles**
**5 Credits Class 5 Lab 0**
Study of systems of the body with emphasis on healthy physiology. Some pathology will be covered. Association with the healing effects of massage will be discussed.

**HC 272**
**Massage Theory**
**3 Credits Class 3 Lab 1**
Second of two classes on the use of massage to correct dysfunctions of the body.

**HC 273**
**Musculoskeletal System/Massage Therapy**
**2 Credits Class 1 Lab 4**
Muscles, their attachments, directions, and movements.

**HC 274**
**Massage: Professionalism and Ethics**
**3 Credits Class 3 Lab 2**
Introduction to the ethical considerations of massage therapy.

**HC 275**
**Movement Analysis**
**0.5-1 Credit Class 0.5-1 Lab 0**
Introduction to movement analysis. Upon completion of this course the student will be able to recognize the principles of movement analysis and apply these principles to the practice of massage therapy.

**HC 275A**
**Movement Analysis**
**0.5 Credits Class 0.5 Lab 0**

**HC 276**
**Craniosacral Release**
**0.5 Credit Class 0.5 Lab 0**
Therapeutic applications that will help the student accomplish clinical objectives. Cranialsacral pulse is transmitted throughout the body via fluid pressures and tension on the fascial planes and connections. The student will learn ways of facilitating the pulse by freeing fascial planes and by easing fascial restrictions of the movements of the cranial bones.

**HC 277**
**Massage Laboratory Practice**
**1 Credit Class 0 Lab 3**
Provides the opportunity to utilize massage therapy skills in a practice setting.

**HC 290**
**Special Topics in Health Core**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**HC 291**
**Individual Study in Health Core**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**HC 292**
**Field Experience in Health Careers**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a health care facility through special arrangement with an instructor.

**HC 293**
**Health Careers Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function.

**HC 294**
**Cooperative Work Experience in Health Careers**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**HC 295**
**Fitness Leadership Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**HC 296**
**Fitness Leadership Practicum**
**1 Credit Class 0 Lab 7**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**HC 297**
**Health Careers Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**HC 298**
**Health Careers Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**HC 299**
**Health Careers Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Health Information Management

**HIM 100**
**Health Information and Health Agency Orientation**
**3 Credits Class 3 Lab 0**
Introduction to the health information management field and the structure, characteristics and documentation requirements of various health care facilities. Includes the value and uses of the medical record and the roles and functions of the HIM technology practitioner. The influence, roles and functions of regulatory and accrediting agencies are presented as well as an introduction to the roles and functions of the American Health Information Management Association.

**HIM 110**
**Health Records and Procedures I**
**3 Credits Class 2 Lab 4**
Introduction to acute care hospitals and ambulatory care facilities, their ownership, mission and organizational structure; the Uniform Health Discharge Data Set (UHDDS); the Uniform Bill 82/92 (UB 82)/ HCFA form 1500; how the medical record is compiled, abstracted, appropriate medical record content; knowledge of JCAHO, conditions of participation and AOA documentation requirements for acute care and ambulatory patient records. Prerequisite: HIM 100.

**HIM 112**
**Health Information and the Law**
**3 Credits Class 3 Lab 0**
Legal principles applying to health information including how to reserve the confidentiality of patient-related data. Preparation of a medical retention plan based on current legal statute, JCAHO, Medicare and Medicaid requirements. Develops skills responding to various requests for health information via case studies, authorizations for release of information, court orders and subpoenas. Prerequisite: HIM 100.

**HIM 120**
**Basic Coding Elements**
**3 Credits Class 2 Lab 4**
Nomenclatures and classification systems. Focuses on assignment of codes utilizing coding principles for ICD-9-CM. Identification of the principle diagnosis, principle procedure and sequencing of selected codes. Prerequisites: HC 100, HC 101, HC 110, HC 111, HC 120, HIM 110 and HIM 121.

**HIM 121**
**Health Records and Procedures II**
**3 Credits Class 2 Lab 4**
Long term care and mental health records; medical record form design and format types; management of incomplete medical records; health care facility reimbursement, nomenclatures and classification systems; filing, storage and microfilm; indices and registers and review of the release of information function. Prerequisites: HIM 100 and HIM 110.

**HIM 150**
**Legal Documentation**
**0.5 Credit Class 0.5 Lab 0**
Documentation requirements, informed consent, retention of records and responding to requests for health information.

**HIM 200**
**Health Statistics**
**3 Credits Class 2 Lab 3**
Health data collection methodologies. Topics include health data definitions, collection of health data, computing institutional statistics and presentation of health data. Develops skills in preparing data for analysis, calculating institutional statistics and interpreting statistical data. Prerequisites: HIM 100 and HIM 110.

**HIM 201**
**Health Information Management Directed Practice I**
**4 Credits Class 0 Lab 14**
Directed practice in the recognition of ethical responsibilities inherent in the role of the health information management technician. Practice of medical record procedures including filing , maintenance and acquisition of health records, handling and responding to requests for information, transcription, outpatient coding and forms development, design, approval, evaluation and usage. Prerequisite: All first year HIM courses.

**HIM 202**
**Computer Applications in Health Information Management**
**1 Credit Class 1 Lab 1**
Computer software programs utilized by the health information manager to compile a master patient index, abstract information from patient records for research studies, reimbursement, indices, registries and vital statistics; compile disease, operation and physicians' indices; prepare physician incomplete and delinquent record reports; track incomplete charts and correspondence; and compile hospital inpatient statistical analysis. Prerequisite: MICS 121.

**HIM 203**
**Applied Concepts of Coding**
**3 Credits Class 2 Lab 4**
Emphasizes sequencing of codes and using information contained in the medical record to choose the principle diagnosis and procedure. The interrelationship of disease and procedure classification systems, disease and procedure indices, physician profiles and case mix classification systems will be explored. Prerequisite: HIM 120.

**HIM 204**
**Current Topics in Health Information Management**
**0.5-3 Credits Class 0.5-3 Lab 0**
Topics of current interest in health information management.

**HIM 211**
**Health Information Management Directed Practice II**
**4 Credits Class 0 Lab 14**
Application of classroom learning and hands-on experience with entry-level competencies for Accredited Record Technician. Practice of medical record procedures include filing, maintenance and acquisition of health records, handling and responding to requests for information, transcription, outpatient coding and forms development, design, approval, evaluation and usage. Prerequisites: HIM 201 and all first year HIM courses.

**HIM 212**
**Health Information Management Quality Control**
**2 Credits Class 2 Lab 0**
Quality assurance, utilization review, risk management, regulatory agencies driving quality assurance/quality improvement and reimbursement procedures in health care facilities. Prerequisite: HIM 200.

**HIM 215**
**Interpreting Diagnostic Data**
**2 Credits Class 2 Lab 0**
Clinical significance of laboratory tests, invasive diagnostic tests and major drug classifications. Effective use of drug and laboratory test reference texts. Abstracts information from patient records for utilization review purposes. Prerequisites: HC 100, HC 110, HC 120 and HC 130.

**HIM 220**
**Planning for Health Information Services**
**3 Credits Class 3 Lab 0**
Planning, organizing, controlling and directing a medical record department. The student compares, evaluates and selects personnel and new equipment for a medical record department and writes proposals for administrators defending their rationale for equipment selection. Introduces the concepts of planning, budgeting, flow charting and designing floor plans to scale. Prerequisite: HIM 200.

**HIM 221**
**Health Information Management Directed Practice III**
**4 Credits Class 0 Lab 14**
Prepares the HIM student to competently perform functions in a medical record department and recognize the ethical responsibilities inherent in the role of the HIM technician. Practice of medical record procedures including flow charting, employee work scheduling, quality and quantity standards, quality assurance studies, updating job descriptions and disease research. Prerequisite: HIM 211.

**HIM 222**
**CPT Coding**
**0.5-3 Credits Class 0.5-3 Lab 0**
Introduces the current procedural terminology text; CPT codes, HCPCS and CPT editorial notations; evaluation and management codes; different surgical packages; the inclusive global concept of the AMA CPT-4 surgical package; starred procedures; coding of surgical repairs; correct usage of casting codes; application of medicine codes and correct ways to attack and write modifiers. Prerequisite: First year and fourth quarter HIM courses.

**HIM 290**
**Special Topics in HIM**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**HIM 291**
**Independent Studies in Health Information Management**
**1 - 5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**HIM 292**
**Field Experience in Health Information Management**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a health information management facility through special arrangement with an instructor.

**HIM 293**
**Directed Practice in Health Information Management**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function. Prerequisite: Instructor permission.

**HIM 294**
**Cooperative Work Experience in Health Information Management**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week. Prerequisite: Instructor permission.

**HIM 296**
**Health Information Management Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in an actual working environment for a minimum amount of time to gain experience before graduation.

**HIM 297**
**Observation Hour in Health Information Management**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity. Prerequisite: Instructor permission.

**HIM 298**
**Health Information Management Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**HIM 299**
**Health Information Management Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Hotel/Restaurant

**HOTR 120**
**Introduction to the Hospitality Industry**
**2 Credits Class 2 Lab 0**
Introduction to the lodging and food service industry. Explanation of the interrelationships involved and the variety of career opportunities available.

**HOTR 140**
**Accounting for Hospitality Services**
**3 Credits Class 3 Lab 0**
Application of practical accounting techniques to the hospitality service industry. Emphasizes the needs of management and the application of accounting concepts and techniques to managerial decision making. Front office procedures, food and beverage control and useful hotel-restaurant statistics are surveyed. Prerequisite: ACC 100.

**HOTR 170**
**Marketing Small Properties**
**3 Credits Class 3 Lab 0**
Basic knowledge and practical experience enabling the student to develop strategic marketing plans for hotel/motel properties.

**HOTR 211**
**Hotel Restaurant Lab 10A**
**10 Credits Class 2 Lab 24**
All phases of hotel and restaurant operations are covered through hands-on experience at the Quality Inn. Students are assigned a work station and rotate periodically. This lab is scheduled seven days per week, evenings and holidays, and includes the annual Paul Bunyan Show.

**HOTR 212**
**Hotel Restaurant Lab 10B**
**10 Credits Class 2 Lab 24**
All phases of hotel and restaurant operations are covered through hands-on experience at the Quality Inn. Students are assigned a work station and rotate periodically. This lab is scheduled seven days per week, evenings and holidays, and includes the annual Paul Bunyan Show.

**HOTR 213**
**Hotel Restaurant Lab 10C**
**10 Credits Class 2 Lab 24**
All phases of hotel and restaurant operations are covered through hands-on experience at the Quality Inn. Students are assigned a work station and rotate periodically. This lab is scheduled seven days per week, evenings and holidays, and includes the annual Paul Bunyan Show.

**HOTR 223**
**Hotel Restaurant Lab 5A**
**5 Credits Class 1 Lab 14**
Integrates hands-on experience with academic instruction. Application of classroom concepts to practical situations in assigned work stations at the Quality Inn.

**HOTR 224**
**Hotel Restaurant Lab 5B**
**5 Credits Class 1 Lab 14**
Integrates hands-on experience with academic instruction. Application of classroom concepts to practical situations in assigned work stations at the Quality Inn.

**HOTR 225**
**Hotel Restaurant Lab 5C**
**5 Credits Class 1 Lab 14**
Integrates hands-on experience with academic instruction. Application of classroom concepts to practical situations in assigned work stations at the Quality Inn.

**HOTR 226**
**Hotel Restaurant Lab 5D**
**5 Credits Class 1 Lab 14**
Integrates hands-on experience with academic instruction. Application of classroom concepts to practical situations in assigned work stations at the Quality Inn.

**HOTR 227**
**Hotel Restaurant Lab 5E**
**5 Credits Class 1 Lab 14**
Integrates hands-on experience with academic instruction. Application of classroom concepts to practical situations in assigned work stations at the Quality Inn.

**HOTR 228**
**Hotel Restaurant Lab 5F**
**5 Credits Class 1 Lab 14**
Integrates hands-on experience with academic instruction. Application of classroom concepts to practical situations in assigned work stations at the Quality Inn.

**HOTR 241**
**Front Office Operations**
**3 Credits Class 3 Lab 1**
Introduction to technical innovation and technical theory such as yield management, manual night audit and record procedures. Combines technical theory with quality service concepts.

**HOTR 242**
**Supervisory Housekeeping**
**2 Credits Class 2 Lab 0**
Planning, organizing, staffing, directing and controlling housekeeping operations within budgets.

**HOTR 243**
**Hotel and Restaurant Law**
**2 Credits Class 2 Lab 0**
Laws significant to the hospitality industry. Emphasis on awareness of potential legal problems is designed to enable resolutions of problems before they could result in liability.

**HOTR 244**
**Audits and Controls for Lodging Establishments**
**2 Credits Class 2 Lab 3**
Principles of managerial and basic marketing management concepts. Covers the management of personnel and routine managerial duties.

**HOTR 253**
**Interior Decoration and Lodging Establishments**
**1 Credits Class 1 Lab 0**
Successful design of hospitality facilities. Covers whether or not to choose a professional designer, approaching a remodeling job, selecting a theme, correcting structural defects and using color effectively.

**HOTR 260**
**Merchandising and Sales**
**3 Credits Class 3 Lab 1**
Researching potential sources of business, analyzing potential customer needs, selling services and maintaining long term customer relationships.

**HOTR 263**
**Facilities Management**
**2 Credits Class 2 Lab 0**
Energy management, heating, refrigeration, ventilation, air conditioning, electricity and water systems. Practical exercises in food service equipment and use of tools and materials.

**HOTR 275**
**Resort Management and Development**
**3 Credits Class 3 Lab 0**
Application of successful business resort concepts to any type of property. Reflects the increase in importance attached to vacation travel and special weekend packages.

**HOTR 290**
**Special Topics in Hotel/Restaurant Management Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**HOTR 291**
**Individual Study in Hotel/Restaurant Management Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**HOTR 292**
**Hotel/Restaurant Management Field Experience**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a hotel/restaurant facility through special arrangement with an instructor.

**HOTR 293**
**Hotel/Restaurant Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function.

**HOTR 294**
**Hotel/Restaurant Cooperative Work Experience**
**1-6 Credits Class 2 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**HOTR 295**
**Hotel Practicum Seminar**
**2 Credits Class 2 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**HOTR 296**
**Hotel Practicum**
**1-6 Credits Class 0 Lab 8-48**
The student is placed in an actual working environment for a minimum amount of time to gain experience before graduation.

**HOTR 297**
**Hotel/Restaurant Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**HOTR 298**
**Hotel/Restaurant Internship**
**3-6 Credits Class 0 Lab 20-40**
On-the-job training in the workplace of a cooperating agency. Coordinated by an instructor.

**HOTR 299**
**Hotel/Restaurant Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Hotel/Restaurant/ Culinary Arts

**HRCA 100**
**Customer Service Orientation**
**1 Credit Class 1 Lab 0**
Human personality and the importance of courtesy and hospitality. Includes telephone etiquette and guest relations at the front desk. Stresses the importance of dining room atmosphere and food service etiquette as well as practical applications for handling complaints.

**HRCA 101**
**Mixology and Bar Management**
**2 Credits Class 2 Lab 0**
Basic understanding of how to mix drinks. Surveys basic drinks and other spirits and includes management principles. Emphasizes cost control and purchasing.

**HRCA 102**
**Wines and Beers**
**2 Credits Class 2 Lab 0**
Focus on wines and beers of the world including their origin and history. Wine growing regions of Europe, North America and countries new to wine exportation are studied. Traditions, trends, proper glasses, presentation and terminology are covered. Prerequisite: Must be at least 21 years of age.

**HRCA 104**
**Hospitality Management Development**
**5 Credits Class 1 Lab 12**
An opportunity to be trained and to perform as a manager in a full service hotel. Prerequisite: Departmental permission.

**HRCA 107**
**Hospitality Train the Trainer**
**2 Credits Class 2 Lab 0**
Provides the ability to train personnel in new or established hotel/restaurant operations. Prerequisite: Must have completed at least 60 credit hours in Culinary Arts or Hotel/Restaurant.

**HRCA 108**
**Hospitality Human Resources**
**2 Credits Class 2 Lab 0**
Instruction and discussion for a basic understanding of hospitality resource management.

**HRCA 109**
**Hospitality Contemporary Issues**
**1-2 Credits Class 1-2 Lab 0**
Development of professional behaviors and attitudes for hospitality industry. Covers self-assessment and career growth strategies.

**HRCA 110**
**Safety and Sanitation**
**2 Credits Class 2 Lab 0**
Prevention of food, alcohol and safety-related incidents that could cause illness or injury to customers, employees or others. Includes new information on Hazard Analysis Critical Control Points food safety system, emerging pathogens that cause food-borne illness, handling and using shell eggs and working with employees with HIV and AIDS. Also includes Hazard Communication Standard required by OSHA, integrated pest management and crisis management.

**HRCA 111**
**Stocks, Sauces and Soups**
**3 Credits Class 2 Lab 3**
Preparation of foods utilized in commercial kitchens including stocks, soups, sauces, vegetables and farinaceous products.

**HRCA 112**
**Salads, Sandwiches and Eggs**
**3 Credits Class 2 Lab 3**
Introduction to pantry and breakfast cookery including salads, salad dressings, sandwiches and breakfast preparations.

**HRCA 113**
**A La Carte Cookery**
**3 Credits Class 2 Lab 3**
Fundamentals of meat, poultry and seafood cookery. Preparation of entrees cooked to order, accompaniments, garnishing, plate appearance and time management. Prerequisite: HRCA 112.

**HRCA 114**
**Food Management**
**3 Credits Class 2 Lab 3**
Management organization, menu planning, material control, recipes and costing, personnel methods, equipment and facilities, food production methods and an introduction to baking and desserts.

**HRCA 115**
**Breads and Baking Basics**
**3 Credits Class 2 Lab 3**
Bakery products, tools and equipment, weights and measures and the baking process. Preparation of yeast dough products and quick breads. The role of the pastry chef and bake shop management is reviewed.

**HRCA 116**
**Hospitality Menu Planning**
**2 Credits Class 2 Lab 0**
Planning, utilization, pricing and integrating a menu into a commercial food service establishment. The menu concept as it relates to the entire operation is analyzed.

**HRCA 117**
**Hospitality Supervision**
**3 Credits Class 3 Lab 0**
Effective supervision of employees. Focuses on basic principles such as recruiting, interviewing, discipline, motivation and leadership styles.

**HRCA 120**
**Hospitality Security**
**1 Credit Class 1 Lab 0**
Security and loss prevention for hospitality properties. Safety and loss are addressed as necessary management programs and policies to ensure successful operations.

**HRCA 121**
**Hospitality Ethics**
**2 Credits Class 2 Lab 0**
Business values and how they affect actions, decisions and conduct in each department of a hotel. Policies, written and understood, are analyzed from employee, management and owner viewpoints.

**HRCA 125**
**Basic Table Service**
**3 Credits Class 2 Lab 3**
Training in the art of table service. American, French and Russian service will be presented and practiced. Includes training in the areas of wine and beverage service.

**HRCA 145**
**Food Product Identification and Purchasing**
**3 Credits Class 3 Lab 0**
Identification and utilization of various food products used in commercial cooking. Purchasing, receiving, storing and issuing products are reviewed.

**HRCA 223**
**Food, Beverages, Labor Cost Control**
**3 Credits Class 3 Lab 0**
Introduction to techniques for developing new customers, meeting customer needs, maximizing profits and maintaining long term customer relationships. Includes cost, sales and control of food and beverage operations.

**HRCA 224**
**Lounge and Beverage Management**
**2 Credits Class 2 Lab 0**
Introduction to bar and beverage management. Planning, equipping, staffing, operating and marketing a facility. How beverages are made, purchased, controlled and mixed into different kinds of drinks. Music, entertainment, lighting and a review of Ohio laws, service and food are discussed.

**HRCA 227**
**IBM Hospitality Applications**
**2 Credits Class 1 Lab 3**
IBM computer applications used in the hospitality industry in the areas of inventory, accounting, business correspondence and spreadsheets.

**HRCA 229**
**Distinguished Guest Speaker**
**1 Credit Class 1 Lab 0**
National and international leaders serve as guest speaker on hospitality careers, current and future trends.

**HRCA 230**
**Food and Beverage Services**
**3 Credits Class 3 Lab 0**
Principles of quality service and development of food and beverage service skills. Topics include dining room service, buffet and banquet service, table cookery, wines, spirits and beers. Ohio laws and regulations for alcohol control are reviewed.

**HRCA 231**
**Serving Alcohol With Care**
**1 Credit Class 1 Lab 0**
Serving alcohol with care, understanding Ohio Liquor Laws and recognizing effects of alcohol consumption. Prepares the student to deal with potential alcohol related problems and aid in the recognition and fulfillment of social/moral obligations while engaged in the sale and service of alcoholic beverages. Upon successful completion, a certificate from the American Hotel and Motel Association is issued.

**HRCA 240**
**Festival Catering Production**
**1 Credit Class 1 Lab 1**
Special challenges in preparing food for large-volume festival food service.

**HRCA 241**
**Festival Catering Management**
**1 Credit Class 1 Lab 1**
Special challenges in preparing food for large-volume festival food service.

**HRCA 250**
**Bed and Breakfast Operations**
**1 Credit Class 1 Lab 0**
Basics of starting a bed and breakfast including selecting furnishings and equipment, keeping records, developing breakfast menus, serving guests and working with rules and regulations of the industry.

**HRCA 264**
**Budgeting for Hospitality**
**3 Credits Class 3 Lab 0**
Financial accounting concepts used by managers and supervisors in the hospitality industry. Includes development of an annual budget for a full service hotel. Prerequisite: HRCA 130.

**HRCA 290**
**Special Topics in Hotel/Restaurant**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**HRCA 291**
**Individual Study in Hotel/Restaurant/ Culinary**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**HRCA 292**
**Field Experience in Hotel/Restaurant/ Culinary**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a hotel/restaurant facility through special arrangement with an instructor.

**HRCA 294**
**Hotel/Restaurant Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**HRCA 295**
**Hotel/Restaurant/Culinary Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**HRCA 296**
**Practicum in Hotel/Restaurant/Culinary**
**1-6 Credits Class 0 Lab 8-48**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**HRCA 297**
**Hotel/Restaurant/Culinary Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

## Human Services

**HS 100**
**Client Caseworker Interface**
**3 Credits Class 3 Lab 0**
Roles, rights and responsibilities of the client and caseworker. Includes basic client interviewing techniques.

**HS 101**
**Information Management Skills for Human Services Caseworkers**
**3 Credits Class 3 Lab 0**
Interfacing with various federal programs as well as a presentation of organizational skills, time management skills and conflict management techniques. Includes practicum covering caseload information management techniques.

**HS 102**
**Eligibility Determination for Federal Assistance Programs**
**3 Credits Class 3 Lab 0**
Identification of various federal assistance programs including the purposes, goals, policies, rules and eligibility criteria for receiving assistance. Practicum on eligibility determination included.

**HS 103**
**Supplemental Writing Skills for Human Services Caseworkers**
**2 Credits Class 2 Lab 0**
Presentation of documentation skills necessary to accurately complete agency forms.

**HS 104**
**Fraud Investigation in Income Maintenance**
**3 Credits Class 3 Lab 0**
Overview of the responsibilities of the fraud investigation unit in income maintenance. What constitutes fraud, roles and responsibilities of the fraud investigator and caseworker and fraud unit collaboration with the CDHS are discussed. Investigative techniques are identified along with interviewing techniques and the use of the CRIS-E system as related to investigations.

**HS 105**
**Introduction to JOBS/LEAP Program**
**3 Credits Class 3 Lab 0**
Basic foundation and introductory course for the JOBS/LEAP worker in the human service agency. Presents the history and development of social services, development of the JOBS program and its relationship to our current economy, function of the JOBS/LEAP and their relationship to local, state and federal agencies. Training and interviewing techniques are covered as well as job duties and responsibilities. Client participation and motivation factors are reviewed.

**HS 106**
**Resolving Case Problems in Income Maintenance**
**3 Credits Class 3 Lab 0**
Designed for income maintenance workers who have acquired the prerequisite knowledge for exploring issues and problem solving through the case study method. Students will work in self-guided groups and be challenged to study the cases and evaluate a chosen course of action.

**HS 110**
**Overview of Child Support Enforcement**
**3 Credits Class 3 Lab 0**
Origins and history of child support enforcement at the federal and state levels. The importance of networking within the services and assistance areas for child support is covered as well as learning how to obtain and use information in child support cases.

**HS 111**
**Caseworker Recipient Procedures in Child Support Enforcement**
**3 Credits Class 3 Lab 0**
General understanding of cultural diversity, communication techniques when working in potentially volatile situations and confidentiality with the child support enforcement system. Includes a review of caseworker management skills and negotiation and/or caseload management techniques.

**HS 112**
**Conducting CSEA Investigations**
**3 Credits Class 3 Lab 0**
Training in the use of locator systems as well as familiarization with various federal, state and local agencies useful in locating absentee parents. Emphasizes testing information for accuracy and includes practicum for specific CSEA investigation techniques.

**HS 113**
**Court Orders in Child Support Enforcement**
**2 Credits Class 2 Lab 0**
Introduction to the purposes of judicial process and various types of court orders. Included are the formulas and guidelines by which child support obligations are determined.

**HS 114**
**Resolving Case Problems in Child Support Enforcement**
**2 Credits Class 2 Lab 0**
Designed for CSE workers who have acquired the prerequisite knowledge for exploring issues and problem solving through the case study method. Students will work in self-guided groups and be challenged to study the cases and evaluate a chosen course of action.

**HS 120**
**Motivating and Improving Performance of Agency Employees**
**3 Credits Class 3 Lab 0**
Instruction in basic management styles while learning specific factors in employee job performance, morale and productivity. Specific methods for coaching and training employees as well as handling difficult employees and conflict resolution are covered.

**HS 121**
**Managing Priorities, Time and Information of Agency Employees**
**3 Credits Class 3 Lab 0**
Techniques designed to help supervisors learn basic time and information management skills. Setting priorities, timely communication, fiscal planning and management will be covered.

**HS 122**
**Communication Skills for Supervisors**
**3 Credits Class 3 Lab 0**
How to promote team building and set up and facilitate meetings to achieve goals. Additional techniques are stressed to help the supervisor learn to document and write effective agency communications.

**HS 130**
**Case Management in the JOBS and LEAP Programs**
**3 Credits Class 3 Lab 0**
Focus on the Public Assistance Manual as it relates to the JOBS and LEAP programs, covering various components of the programs, how LEAP is tied into JOBS and the importance of proper assignment. Client rights to due process are discussed as well as proper use of resources available on the state and local levels. Emphasizes the concept of managing the clients' services through case management techniques. Concurrent with HS 296.

**HS 131**
**Collaboration Among IV-A, IV-D and IV-F Programs**
**3 Credits Class 3 Lab 0**
Encourages collaboration among IV-A (Income Maintenance), IV-D (Child Support) and IV-F (JOBS) programs across the State of Ohio. Examines legal bases, goals and the idea of interdependence being the effect that one program can have on another in terms of agency funding, client services and workload. Key points of collaboration among the programs are also identified. Concurrent with HS 296.

**HS 132**
**Strategy for Achieving Excellence in Human Services**
**3 Credits Class 3 Lab 0**
Maximizing the contributions that team-building, stress management and coping with change can make to a smooth and productive program operation. Includes discussion on the developing and changing roles of IM caseworkers, CSE investigators and JOBS workers. Analysis of the personal factors that influence the acceptance or rejection of change and strategies for coping with change. Identification of the signs of stress and strategies for overcoming stress and increasing productivity. Focus on the benefits of working as a team to workers, clients and programs. Concurrent with HS 296.

**HS 133**
**Maintaining Professional Safety in Human Services**
**0.5-2 Credits Class 0.5-2 Lab 0**
Increasing and maintaining personal and professional safety in both the office and the field. Methods for preventing and defusing potentially unsafe situations are explored. Examines beliefs, attitudes and actions that can improve and enhance worker/client interaction.

**HS 134**
**Exploring Administrative Processes in CSE**
**2 Credits Class 2 Lab 0**
The administrative processes embodied in Senate Bill 10 for establishing paternity and support with a review of the rationale and origins of the bill. Includes reviewing each phase of the process, from the details of procedures to the criteria for decision-making.

**HS 135**
**Supervising Collaboration Among IV-A, IV-D, IV-F Programs**
**2 Credits Class 2 Lab 0**
Exploration of the interrelatedness of IV-A, IV-D and IV-F programs and the role of the supervisor in supporting interface. Examines the legislative foundation, goals, key components and linkages of each program. Addresses improving coordination between programs, developing and supporting agency rules and policy impacting coordination and identifying the importance of monitoring compliance with rules and policy supporting interface activities.

**HS 150**
**Foundations of Mental Retardation/ Developmental Disability**
**4 Credits Class 4 Lab 0**
Understanding of the person disabled with developmental disabilities and an orientation to the broad spectrum of disabilities. Provides an introduction to the technical terminology associated with those disabilities, what the disability is and how to work with the disability. Legal aspects of mental retardation programs and the legal rights and constraints of the consumer will be reviewed.

**HS 151**
**Behavior Management**
**4 Credits Class 4 Lab 0**
Behavior management in various settings. Emphasis will be given to hospitals, schools, correctional institutions, mental retardation facilities and programs of various kinds in which the behavior management technician would be employed.

**HS 201**
**Case Management**
**3 Credits Class 3 Lab 2**
Theory and practice of case analysis. Outlines case analysis as it specifically relates to the fields of mental retardation, mental health, and vocational rehabilitation. Includes the roles and functions of a case analyzer, skills needed to effectively administer and service caseload activity, utilization of community services and maintaining a client centered approach to case analysis. Prerequisite: CORR 265 or instructor permission.

**HS 202**
**Case Crisis Management**
**3 Credits Class 3 Lab 0**
Understanding severe acting-out behaviors. Crisis is often a period of reaction to another's behavior with a "think about it later" attitude. This course is meant to reverse that procedure. Prerequisite: CORR 265 or instructor permission.

**HS 290**
**Special Topics in Human Services**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**HS 291**
**Individual Studies in Human Services**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**HS 292**
**Field Experience in Human Services**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a human services facility through special arrangement with an instructor.

**HS 294**
**Human Services Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**HS 295**
**Human Services Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**HS 296**
**Human Services Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**HS 297**
**Human Services Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**HS 298**
**Human Services Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**HS 299**
**Human Services Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

**HS 303**
**Program Support, Policy Interpretation and Monitoring**
**2 Credits Class 2 Lab 0**
Relates supervisory role in supporting agency rules and policies such as implementation, communication and the role in monitoring compliance. Emphasizes skills necessary to assist employees in the use of resource manuals.

## Humanities

**HUM 200**
**Introduction to World Literature**
**3 Credits Class 3 Lab 0**
Examines various literary works representing historical periods from ancient Mesopotamia through the twentieth century. Presents a progression of literary styles and forms representing the universality of human concerns through the ages.

**HUM 201**
**Western Civilization and Culture**
**3 Credits Class 3 Lab 0**
Provides an understanding that the human experience is not, and has never been, a series of stagnant, isolated moments. Students will learn to appreciate the fact that all people have not shared the same world views, opportunities and problems.

**HUM 202**
**Understanding and Appreciating Theatre Arts**
**3 Credits Class 3 Lab 0**
Designed to give the student an understanding and appreciation as well as a historical perspective of the development of theatre arts. The student will study plays that are considered classics in the world of theatre arts.

**HUM 203**
**Ethics, Values and Morality**
**3 Credits Class 3 Lab 0**
Rationales by which individuals and societies determine what constitutes ethical and moral behavior. Includes an overview of moral philosophy and theories of value formation.

**HUM 204**
**Twentieth Century U.S. Music**
**3 Credits Class 3 Lab 0**
Explores the predominant music of the United States during the twentieth century. Includes an examination of the foundations and development of classical, jazz, popular, folk and Broadway music of the last one hundred years.

**HUM 290**
**Special Topics in Humanities**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**HUM 291**
**Individual Studies in Humanities**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Juvenile

**JUV 100**
**Juvenile Residential Services**
**3 Credits Class 2 Lab 4**
Operation and programming of juvenile institutional and community-based residential facilities. Includes a review of the history, function, social purposes, programs and their effectiveness.

**JUV 101**
**Family Dynamics**
**3 Credits Class 3 Lab 2**
Family interaction and functioning in response to external and internal pressures. Includes a review of symptoms of family dysfunction that come to the attention of authoritative agencies and official responses to those problems.

**JUV 102**
**Juvenile Delinquency**
**3 Credits Class 3 Lab 0**
History, nature and extent of juvenile delinquency. Theories of causation are reviewed in the study of past and current prevention, control and treatment methods.

**JUV 105**
**Child Abuse**
**3 Credits Class 3 Lab 2**
Dynamics related to child abuse, neglect and abandonment. Includes an overview of the extent of abuse and related dynamics. The influence of abuse on current and future behavior along with its impact on personality development is also explored.

**JUV 110**
**Adolescent Cognitive Behavior**
**3 Credits Class 3 Lab 0**
Dysfunctional cognitive and behavioral patterns of adolescents that bring them into contact with the juvenile justice system. Assessment techniques that identify these thinking errors are presented with discussion of intervention methods to assist the youth in modifying their thinking and behavior.

**JUV 111**
**Juvenile Sexual Offender**
**3 Credits Class 3 Lab 0**
Study of the juvenile offender who has been involved with sexually acting out sexual abuse or sexual assault. Causes and results of such behavior will be compared with current treatment interventions.

## Languages

**LANG 101**
**Street Spanish for Law Enforcement Rangers**
**1 Credit Class 0.5 Lab 1.5**
Practical Spanish vocabulary which will aid in effective communication with Spanish speaking persons during patrol situations.

**LANG 120**
**Beginning Spanish**
**3 Credits Class 3 Lab 1**
Designed for the student with little or no background in Spanish. Includes basic language patterns in order to give and receive information in different contexts. Lessons are organized to reflect the needs of travel professionals.

**LANG 121**
**Intermediate Spanish**
**3 Credits Class 3 Lab 1**
Vocabulary, intonation and the convention of the Spanish language. Emphasizes is on oral/aural skills, rudimentary writing and reading materials tailored to the needs of the Travel and Tourism student are introduced. Prerequisite: LANG 120.

**LANG 130**
**French I**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing French.

**LANG 131**
**French II**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing French.

**LANG 132**
**French III**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing French.

**LANG 133**
**French IV**
**3 Credits Class 3 Lab 2**
Application of language usage in the hospitality industry. The student demonstrates language skills necessary to serve a French guest at a hotel or restaurant speaking only French.

**LANG 140**
**German I**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing German.

**LANG 141**
**German II**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing German.

**LANG 142**
**German III**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing German.

**LANG 143**
**German IV**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing German.

**LANG 150**
**Italian I**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing Italian.

**LANG 151**
**Italian II**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing Italian.

**LANG 152**
**Italian III**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing Italian.

**LANG 153**
**Italian IV**
**3 Credits Class 3 Lab 2**
Foundation for understanding, speaking, reading and writing Italian.

**LANG 290**
**Special Topics in Languages**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**LANG 291**
**Individual Studies in Languages**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Marketing and Customer Service

**MCS 100**
**Beginning Customer Service**
**0.5-3 Credits Class 0.5-3 Lab 0**
Introduction to the role of customer service in an organization. A variety of issues are addressed and reinforced through classroom discussion and videos.

**MCS 101**
**Intermediate Customer Service**
**0.5-3 Credits Class 0.5-3 Lab 0**
Continuation of MCS 100. Additional topics surveyed include cycle of services and developing a service strategy.

**MCS 102**
**Advanced Customer Service**
**0.5-3 Credits Class 0.5-3 Lab 0**
Continuation of MCS 101 including additional study in developing service people and developing customer friendly systems.

**MCS 110**
**Telephone Selling Skills**
**3 Credits Class 3 Lab 0**
Introduction to the skills necessary to operate a telephone system used in telemarketing activities. Communication skills and inbound/outbound call handling is emphasized.

**MCS 120**
**Customer Service Lab**
**3 Credits Class 0 Lab 9**
Actual practical work experience in a real-life customer service center. The student surveys the five basic applications of customer service departments as well as prepares appropriate mailing and processes fulfillment pieces.

**MCS 121**
**Advanced Customer Service Lab**
**3 Credits Class 0 Lab 9**
Provides work experience in a customer service center. Students learn quality control and management skills while processing order fulfillment.

**MCS 130**
**Principles of Customer Service**
**3 Credits Class 3 Lab 0**
Introduction to the profession of customer service. A survey of job opportunities, customer service departments, marketing campaigns conducted by customer service representatives and service as a managed endeavor are covered.

**MCS 140**
**Marketing and Sales Support**
**3 Credits Class 2 Lab 3**
The relationship between the marketing of products and services and their subsequent sale. Includes the marketing mix, product life cycles, selling strategies, methods of distribution and the costs associated with both marketing and selling. Prerequisites: MCS 120 and MCS 130.

**MCS 150**
**Distribution Management**
**3 Credits Class 2 Lab 3**
Survey of distribution channels commonly found in the delivery of products and services. Actual catalog fulfillment is studied as well as a discussion of how the marketing campaign interacts and supports the distribution effort.

**MCS 151**
**Distribution Center/Warehouse Lab**
**3 Credits Class 0 Lab 9**
Receive, inventory and ship products and services. Includes forklift operation.

**MCS 160**
**Direct Mail Marketing**
**3 Credits Class 2 Lab 3**
Introduction to the concepts and principles for direct mail sales and marketing. Advertising and promotional materials preparation are surveyed.

**MCS 200**
**Current Topics in Customer Service**
**0.25-3 Credits Class 0.25-3 Lab 0**
Current issues of concern in the customer service profession. Includes identifying new techniques for handling customer issues and problems.

**MCS 210**
**Successful Marketing Campaigns**
**3 Credits Class 2 Lab 3**
Introduction to a number of successful marketing campaigns. Prerequisites: MCS 120, MCS 130.

**MCS 220**
**Marketing Management**
**3 Credits Class 2 Lab 3**
Basic principles involved in the development of a market research tool. Topics include test marketing procurement, direct marketing methods, product planning and target markets. Prerequisite: BUS 110.

**MCS 240**
**Managing Customer Service Representatives**
**3 Credits Class 1 Lab 6**
Hiring and training practices, motivating employees, comprehensive techniques, evaluation procedures and employee development will be discussed. Prerequisite: MCS 210.

**MCS 290**
**Special Topics in Marketing and Customer Service**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**MCS 291**
**Marketing and Customer Service Individual Study**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**MCS 292**
**Field Experience in Marketing and Customer Service**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in an accounting facility through special arrangement with an instructor.

**MCS 294**
**Cooperative Work Experience in Marketing**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**MCS 295**
**Marketing and Customer Service Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**MCS 296**
**Marketing and Customer Service Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**MCS 297**
**Observation Hour in Marketing and Customer Service**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

## Materials

**MATL 100**
**Materials Fundamentals**
**3 Credits Class 3 Lab 2**
Structure and properties of materials, such as basic atomic, molecular, crystalline and amorphous structures for ceramics, metals and polymers. Methods of evaluating structures and properties of materials are demonstrated.

**MATL 102**
**Metals I**
**3 Credits Class 3 Lab 2**
Principles of metallurgy including effects of plastic deformation, recrystallization and grain growth on metals. The iron-iron carbide equilibrium diagram is studied to relate heat treating and alloying effects that produce specific properties. Prerequisite: MATL 100.

**MATL 103**
**Polymers I**
**3 Credits Class 3 Lab 2**
Thermoplastics and thermosetting polymers and methods used in manufacturing major industry resins. Properties and analysis of resins, rubbers, glasses, crystalline polymers and fibers are covered. Prerequisite: MATL 100.

**MATL 110**
**Metals II**
**3 Credits Class 3 Lab 2**
Nonferrous metals and alloys, processing and properties of aluminum, copper, lead, magnesium, nickel, tin, titanium, precious metals and their alloys. Prerequisite: MATL 102.

**MATL 111**
**Polymers II**
**3 Credits Class 3 Lab 2**
Fabrication of thermoplastic and thermoset resins, molding processes, casting, thermo-forming, coating, fabrication, welding and gluing are covered. Includes tooling and mold-making for these processes. Prerequisite: MATL 103.

**MATL 200**
**Microscopy Analysis of Materials**
**3 Credits Class 2 Lab 4**
Analysis of materials with optical and electron microscopes. Includes selection of the sample, handling and preparation for observation. Prerequisites: CER 103, MATL 110 and MATL 111.

**MATL 205**
**Composite Compositions**
**3 Credits Class 3 Lab 2**
Composite materials and the processing necessary to obtain design properties. Compatibility of materials and production processes are evaluated for technical and economic feasibility. Prerequisites: CER 103, MATL 110 and MATL 111.

**MATL 210**
**Material Processing Systems**
**3 Credits Class 3 Lab 2**
Processing requirements for traditional and composite materials. Advanced processes for economic achievement of improved properties. Topics include heat, pressure, atmosphere and chemical requirements to produce composite materials. Prerequisites: EGR 103 and MATL 201.

**MATL 290**
**Special Topics in Materials**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**MATL 291**
**Individual Study in Materials**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**MATL 292**
**Field Experience in Materials**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a materials facility through special arrangement with an instructor.

**MATL 294**
**Cooperative Work Experience in Materials**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must also be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**MATL 295**
**Materials Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**MATL 296**
**Materials Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**MATL 297**
**Observation Hour in Materials**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**MATL 298**
**Materials Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**MATL 299**
**Materials Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Mathematics

**MATH 060**
**Basic Mathematics**
**3 Credits Class 3 Lab 1**
Whole number operations, fractions and decimals. Emphasizes the application of these topics and order of operation.

**MATH 061**
**Precollege Algebra**
**3 Credits Class 3 Lab 1**
Metric and English systems of measurement, percentages, operations on signed numbers and evaluating expressions containing powers and/or roots.

**MATH 150**
**Food Service Math**
**2 Credits Class 2 Lab 1**
Basic arithmetic operations including the application of basic math operations to food service problems such as recipes, portioning and daily report completion.

**MATH 201 PACE**
**College Algebra I**
**3 Credits Class 3 Lab 1**
Metric and English conversions, algebraic operations, solution of simple equations and the mathematical construction and use of tables, charts and graphs.

**MATH 202 PACE**
**Geometry and Trigonometry**
**3 Credits Class 3 Lab 1**
Plane and solid geometry, right triangle trigonometry, laws of Sine and Cosine, and a basic unit on statistics. Prerequisite: MATH 201.

**MATH 203 PACE**
**College Algebra II**
**3 Credits Class 3 Lab 1**
Basic manipulations and operations involving algebraic terms, factoring and removal of monomial factors, algebraic fractions and equations involving fractions, exponents and radicals. Prerequisite: MATH 201.

**MATH 204 PACE**
**College Algebra III**
**3 Credits Class 3 Lab 1**
Quadratic equations, natural and common logarithms, graphing first, second, and third degree equations, solving simultaneous equations and the manipulations of vectors and their sums. Prerequisites: MATH 201, MATH 202 and MATH 203.

**MATH 205**
**Introduction to Calculus**
**3 Credits Class 3 Lab 1**
Limits and continuity, differentiation, rates of change, differentiation techniques, higher order derivatives, maximum/minimum problems, implicit differentiation, exponential and logarithmic functions, the antiderivative, the finite integral and various application problems. Prerequisites: MATH 201, MATH 202, MATH 203 and MATH 204.

**MATH 290**
**Special Topics in Mathematics**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**MATH 291 PACE**
**Independent Study in Mathematics**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Medical Assistant

**MA 100**
**Basic Clinical Assistant Procedures**
**4 Credits Class 3 Lab 3**
Fundamental clinical assisting procedures in the family practice medical office. Emphasizes procedures employed in the general patient examination including medical asepsis, vital signs, positioning and draping, measuring height and weight, obtaining patient symptoms, charting, health history, patient preparation for and assisting with the physical examination, distance and near visual acuity testing, color vision testing, eye and ear instillations and irrigations and obtaining specimens for laboratory analysis.

**MA 102**
**Medical Office Procedures I**
**2 Credits Class 2 Lab 2**
Administrative or office duties of a medical assistant in a physician's office. Includes answering, screening and placing telephone calls; scheduling patient appointments and hospital admissions; handling patient information brochures; purchasing equipment and supplies, paying invoices, inventory control, storing supplies and drugs and equipment maintenance; establishing priorities for work and office procedures manual.

**MA 110**
**Family Practice Clinical Assistant Procedures**
**4 Credits Class 3 Lab 3**
Intermediate level clinical procedures in the family practice medical office. Emphasizes tissue healing and surgical sepsis including the application of heat and cold, bandaging, cast application and removal, crutch walking, sterilization and disinfection, minor office surgery and urinalysis. Prerequisite: MA 100.

**MA 112**
**Medical Law, Confidentiality and Ethics**
**3 Credits Class 3 Lab 0**
Medical ethics and law in the medical office setting. Analyzes medical office situations to determine ethical and legal status. Includes a history of medicine, the Medical Practice Acts, the physician-patient relationship, confidentiality, implied, verbal and written consent, malpractice, creating and terminating a contract and professional law liability. Identifies reports required by law and emphasizes professionalism in the medical office.

**MA 113**
**Nutrition for Medical Assistants**
**3 Credits Class 3 Lab 1**
Introduction to the science of nutrition. Prepares medical assistants in the application of nutritional concepts to patient care. Emphasizes the function, food sources and dietary deficiencies of nutrients. Includes the process of digestion; menu planning for childhood and adolescence, the elderly and the pregnant patient; food poisoning, food preservation and additives; dental care; modified diet therapy for diabetes mellitus and cardiovascular and gastrointestinal disorders.

**MA 120**
**Obstetrics, Gynecological, Pediatric Clinical Assisting Procedures**
**4 Credits Class 3 Lab 3**
Presentation of theory and techniques required by the medical assistant to perform gynecologic, obstetric and pediatric examining room techniques. Includes the menstrual cycle and gynecologic examination, instructing the patient in methods of birth control, signs and symptoms of pregnancy, the prenatal examination, problems of pregnancy, growth and development of the embryo and fetus, labor and delivery, care of the newborn, and the pediatric examination. Prerequisite: MA 110.

**MA 121**
**Medical Insurance and Coding**
**1 Credit Class 1 Lab 2**
Insurance and coding for the medical office. Emphasis on Blue Cross and Blue Shield, commercial carriers of government plans, HMO's and PPO's. Purpose of coding systems, translating procedures and services into CPT codes, translating diagnoses into ICD-9-CM codes, problems caused by inaccurate procedure and diagnoses codes, the relationship between procedure and diagnosis codes and a knowledge of other procedure/diagnosis coding systems.

**MA 122**
**Medical Office Procedures II**
**2 Credits Class 2 Lab 2**
Filing systems, procedures, equipment and supplies, retention schedules, patient records, types of health insurance coverage, initiating and updating records, insurance terminology, handling insurance claims, coding for professional services, provisions of Blue Cross, Blue Shield, Medicare, Medicaid, CHAMPUS and Workman's Compensation and typing insurance forms. Prerequisites: SEC 100 and MA 102.

**MA 200**
**Advanced Clinical Assisting Procedures**
**5 Credits Class 4 Lab 3**
Procedures employed in administering patient therapy and diagnostic testing, administration of medications, performing venipunctures, running electrocardiograms, administering ultrasound treatments, assisting with sigmoidoscopy and patient preparation and positioning for x-rays. Prerequisite: MA 120.

**MA 202**
**Pharmacology for Medical Assistants**
**4 Credits Class 4 Lab 0**
Pharmacology principles relating to the medical office. Emphasizes correlation of drug therapy with pathologic conditions, patient education regarding medications and obtaining competency in researching drugs in a drug reference. The use, action, side effects, implications, contraindications and route of drugs commonly administered, dispensed and prescribed in the medical office including antihistamines, immunizing agents, antibiotics, cardiovascular drugs, digestive drugs and drugs affecting the urinary, nervous and respiratory systems. Prerequisite: NT 104.

**MA 203**
**Medical Assistant Externship I**
**4 Credits Class 0 Lab 13**
Directed practicum in a medical office, clinic or comprehensive health care facility where the student spends two days each week performing administrative and clinical skills under the supervision of a preceptor. A weekly externship seminar is included to discuss experiences. Prerequisites: HC 100, HC 111, MA 102, MA 112, MA 120, MA 121, MA 122, NT 104, SEC 101.

**MA 204**
**Medical Assistant Externship II**
**4 Credits Class 0 Lab 13**
Continuation of MA 203. Prerequisites: HC 106, HC 107, MA 200, MA 202, MA 203.

**MA 205**
**Medical Assistant Externship III**
**4 Credits Class 0 Lab 13**
Directed practicum in a medical office, clinic, or comprehensive health care facility to provide direct patient contact; apply clinical and administrative theory to practical situations; perform clinical and administrative procedures in a medical office; and gain insight into the medical assistant role in the health care team. Two days each week are spent in a general or specialty practice office performing administrative and clinical skills under the supervision of a preceptor. Prerequisite: MA 204

**MA 220**
**Medical Laboratory Procedures**
**5 Credits Class 4 Lab 3**
Theory and techniques required to perform laboratory tests in the medical office. Emphasizes patient preparation, completion of laboratory forms, collection of specimens for testing in the medical office or for transporting to an outside laboratory, performing laboratory tests and reporting results, identifying abnormal results, quality control and laboratory safety. Clinical procedures include venipuncture, obtaining a capillary blood specimen, blood banking, hematologic laboratory tests, blood chemistry tests, microbiologic laboratory tests and urinalysis. Prerequisite: MA 200.

**MA 221**
**Medical Management Computerization**
**4 Credits Class 3 Lab 3**
Computer concepts and applications for the medical office. Emphasizes utilization of microcomputers in the medical office including the data processing cycle, components of the computer system, selection of hardware and software, secondary storage devices, the disk operating system (DOS) and medical office management applications.

**MA 222**
**Financial Records and Reports**
**3 Credits Class 2 Lab 4**
Financial and business records in a physician's office. Methods of billing, extending credit, installment payments, collection methods and problems, laws pertaining to credit and collection, banking terminology and services, checking accounts, accounting systems, daily service records, combined cash journals, patients' and general ledgers, disbursement records, petty cash records, financial statements, payroll taxes and deductions, tax returns, employee earning records and payroll registers are covered. Prerequisite: ACC 100.

**MA 223**
**Computer Applications in Medical Assisting**
**3 Credits Class 2 Lab 3**
Medical office computer applications. Functions performed by medical office management application programs which include file maintenance, patient registration, posting transactions, appointments, patient billing, insurance billing and reports. Prerequisite: MA 221.

**MA 239**
**Principles and Techniques of Electrocardiography**
**1 Credit Class 0 Lab 2**
Theory and techniques of electrocardiography including patient preparation and the running, care and maintenance of the ECG.

**MA 290**
**Special Topics in Medical Assistant**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**MA 291**
**Individual Study in Medical Assistant**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**MA 292**
**Field Experience in Medical Assistant**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a medical assistance facility through special arrangement with an instructor.

**MA 293**
**Medical Assistant Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function from an assigned instructor, and then observed and critiqued by the instructor in a repeat performance of that function.

**MA 294**
**Medical Assistant Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**MA 295**
**Medical Assistant Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**MA 296**
**Practicum in Medical Assistant**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**MA 297**
**Medical Assistant Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**MA 298**
**Medical Assistant Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**MA 299**
**Medical Assistant Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Microcomputers

**MICS 101**
**Computer Literacy**
**1 Credit Class 1 Lab 1**
Taught on the Apple, this course familiarizes the novice computer user with the operation of a microcomputer through the use of a word processing package, low and high resolution graphics, and BASIC programs.

**MICS 110**
**Micro Operation and BASIC Programming**
**3 Credits Class 2 Lab 4**
Introduction to the disk operating system (DOS) on the personal computer with the use of internal and external operating system commands. Create, sort, manage and manipulate data files as well as program in the language of BASIC. Includes program construction, debugging, sequential file creating and accessing and printing via a network.

**MICS 112**
**Introduction to DOS**
**1 Credit Class 1 Lab 0**
Introduction to IBM compatible machines using the disk operating system (DOS). Use of internal and external operating system commands to create, manage and manipulate files.

**MICS 121**
**MicroSoft Works for Windows**
**3 Credits Class 2 Lab 3**
Introduction to the integrated software package, MicroSoft Works using IBM compatible machines. The student designs and manipulates multiple files to apply the major functions of the word processing, data base and spreadsheet modules of this package.

**MICS 121A**
**MicroSoft Works DOS (Word Processing)**
**1 Credit Class 1 Lab 1**
Taught on IBM compatible machines, this course provides instruction on the word processing component of the software package MicroSoft Works.

**MICS 121B**
**MicroSoft Works DOS (Database)**
**1 Credit Class 1 Lab 1**
Use of the database component of the software package MicroSoft Works.

**MICS 121C**
**MicroSoft Works DOS (Spreadsheet)**
**1 Credit Class 1 Lab 1**
Use of spreadsheet component of the software package MicroSoft Works.

**MICS 122**
**MicroSoft Works on the MAC**
**3 Credits Class 2 Lab 3**
Introduction to Macintosh computers using the integrated software package MicroSoft Works. The student designs and manipulates multiple files to apply the major functions of the word processing, data base and spreadsheet modules of this package.

**MICS 141**
**Lotus 1-2-3**
**1 Credit Class 1 Lab 1**
Introduction to the spreadsheet and database capabilities of Lotus 1-2-3 (V3.0), the most popular spreadsheet package on the market today. Using IBM compatible machines, the student designs and manipulates multiple spreadsheet and database files to apply the major functions of this software package.

**MICS 142**
**dBase IV**
**1 Credit Class 1 Lab 1**
Introduction to the popular and powerful database management software, dBase IV, using IBM compatible machines. Includes creating database files, designing forms, using queries and designing reports and labels.

**MICS 144**
**WordPerfect for Windows**
**1 Credit Class 1 Lab 1**
Taught on IBM compatible machines, this course introduces the wordprocessing software WordPerfect for Windows. Includes program enhancements such as creating tables, Spell Checker, OLE (object, linking, embedding), and spreadsheet links.

**MICS 145**
**Introduction to Windows**
**0.5-1 Credits Class 0.5-1 Lab 0**
Introductory, hands-on seminar to manage, update, and customize using Windows program. Participants will learn the basics of using Windows, work with applications, manage files and directories, customize the windows, use the word processing write and notepad programs, create graphics, and use other Windows accessories.

**MICS 200**
**Apple Software Packages**
**3 Credits Class 3 Lab 2**
Introduction to the integrated software package AppleWorks. The student designs and manipulates multiple files to apply the major functions of the word processing, data base and spreadsheet modules of this package.

**MICS 200A**
**Apple Software Packages: Word Processing**
**1 Credit Class 1 Lab 1**
Introduction to the word processing component of the integrated software package, AppleWorks. The student learns to create, arrange, customize, print and maintain documents.

**MICS 200B**
**Apple Software Packages: Database**
**1 Credit Class 1 Lab 1**
Introduction to the database component of the integrated software package, AppleWorks. Concepts of a database file through creation and manipulation and production of various reports from database files. Includes making structural changes to an existing database, advanced record selection and advanced report writing.

**MICS 200C**
**Apple Software Packages: Spreadsheet**
**1 Credit Class 1 Lab 1**
Introduction to the spreadsheet component of the integrated software package, AppleWorks. The student learns to create, manipulate and print an electronic spreadsheet. Advance topics include IF statements and table look-up functions.

**MICS 201**
**Desktop Publishing: IBM**
**2 Credits Class 2 Lab 2**
Computer-aided page layout and publishing for writing, assembling and designing publications such as business reports, newsletters, trade journals and brochures, by combining text and graphics. Introduces the student to desktop publishing terms and techniques and use of a popular desktop publishing software package in order to create various types of publications.

**MICS 201A**
**Introduction to Desktop Publishing: IBM**
**1 Credit Class 1 Lab 1**
Basic desktop publishing terms and techniques. Students will learn to create simple publications such as letterhead, flyers and brochures.

**MICS 201B**
**Advanced Desktop Publishing: IBM**
**1 Credit Class 1 Lab 1**
Advanced desktop publishing techniques. Students will create more complex publications such as multiple page newsletters, forms and brochures, learn to import graphics and define and use styles and templates. Prerequisite: MICS 201A.

**MICS 290**
**Special Topics in Microcomputers**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**MICS 291**
**Individual Study in Microcomputers**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Natural Resources

**NR 100**
**Astronomy**
**2 Credits Class 1 Lab 3**
The science of the celestial bodies and their magnitudes, motions, and constitution.

**NR 110**
**Introduction to Natural Resources**
**3 Credits Class 2 Lab 3**
Introduction to current world situations regarding natural resource supply, use, competition and conservation.

**NR 111**
**Dendrology**
**3 Credits Class 2 Lab 3**
Identification of woody plants indigenous to Ohio including identifying trees, shrubs and vines through the use of dichotomous keys, site characteristics and physical appearance.

**NR 112**
**Quest Recreation**
**3 Credits Class 2 Lab 3**
Outdoor adventure pursuits are used to introduce problem solving techniques, team work process, initiative, innovation, personal success and leadership skills. Students take on all facets of planning. Adventures may include canoeing, caving, camping and swimming. Initiative games are used to simulate and demonstrate group interaction, teamwork, problem solving and ideation.

**NR 113**
**How to Get Government Jobs**
**1 Credit Class 1 Lab 0**
How to accurately complete U.S. government employee application form 171, with related forms, and National Park Service seasonal employment application form 10-139, with related forms. Includes basic principles for filling out various state and metropolitan park employment applications.

**NR 114**
**Horsemanship I: Beginning Riding**
**3 Credits Class 2 Lab 3**
Basics of proper horse care and horsemanship. How to safely handle the horse and properly feed, groom, saddle and bridle the working trail horse. Riding instruction focuses on proper mounting and safe riding skills in a trail situation. Prerequisite: Must be within our weight limits and physically able to meet the requirements of the class.

**NR 115**
**Horseshoeing I**
**3 Credits Class 2 Lab 3**
Skills necessary to replace a lost shoe on the back country trail. Lecture covers basic horse leg anatomy, horseshoes, nails and lameness problems. Laboratory practice in shaping horseshoes cold and shoeing horses.

**NR 116**
**Horse Pack and Tack Repair**
**3 Credits Class 2 Lab 3**
Basic skills in packing horses and mules and basic repair of harness and tack. Prerequisite: NR 114.

**NR 117**
**Horse Program Management**
**2 Credits Class 1 Lab 3**
Introduction to the management of horse programs. Operation of breeding and training programs and management of recreational riding facilities.

**NR 118**
**Colt Training I**
**3 Credits Class 1 Lab 6**
Methods used to train trail and pack horses. The students starts with young, green horses and cover from halter breaking to round pen training. The student teaches horses how to load into trailers, how to accept bits and saddles and how to perform as mountain trail horses. Prerequisites: NR 114, NR 115, NR 116, NR 134 and NR 135.

**NR 119**
**Tropical Field Biology**
**2 Credits Class 1 Lab 3**
Introduction to tropical ecosystems. Includes a geologic history of at least one tropical country, major tree species, local birds and other tropical animals including reptiles, amphibians and insects.

**NR 120**
**Botany**
**3 Credits Class 2 Lab 3**
Aspects of the plant kingdom including botanical history, taxonomy, mitosis, meiosis, anatomy, cytology and physiology.

**NR 121**
**Zoology**
**3 Credits Class 2 Lab 3**
Survey of the animal kingdom with emphasis on taxonomy, morphology and systems in the various phyla of animals, including man.

**NR 123**
**Surveying and Mapping I**
**3 Credits Class 2 Lab 3**
Plane surveying procedures and applications for distance, direction and elevation measurements. Use and care of surveying instruments including the transit, hand level and engineering level. History, basic applied mathematics, units of measurement and the public land survey system is explored. Basic survey mapping techniques are introduced.

**NR 125**
**Forest Soils**
**3 Credits Class 2 Lab 3**
Development, interpretation and mapping of forest soils. Techniques in analyzing physical and chemical properties of soil. Includes problem soils and the impact of forestry practices on soil conditions.

**NR 126**
**Woods Safety**
**1 Credit Class 1 Lab 0**
Wood safety and associated organizations and regulations.

**NR 127**
**Introduction to Compost Technology**
**3 Credits Class 1 Lab 6**
Processes required to control biological decomposition and conversion of solid organic materials into compost. Natural microorganisms used to break down the complex organic compounds into simpler substances are studied. Methods used to recover organic materials for recycling to the environment as compost are examined.

**NR 131**
**Environmental Chemistry**
**3 Credits Class 2 Lab 3**
Inorganic, organic and environmental aspects of fundamental chemical principles.

**NR 134**
**Horsemanship II: Intermediate Riding**
**3 Credits Class 2 Lab 3**
Development of confidence and skills needed to handle and care for the working trail horse. Prerequisite: NR 114.

**NR 135**
**Horsemanship III: Advanced Trail Riding**
**3 Credits Class 2 Lab 3**
Practice in the full complement of skills needed to handle and ride the working back country trail horse. Lab hours polish riding skills needed to safely handle the horse in the most difficult trail situations in this region. Major aspects of handling trail horses are covered including loading, hauling and caring for horses during transport. Prerequisites: NR 114 and NR 134.

**NR 150**
**Wildfire Control/Recreation Areas**
**2 Credits Class 2 Lab 0**
Includes the Basic Fire Fighter S-130 course and the Introduction to Fire Behavior S-190 course developed by the National Wildfire Coordinating Group. The successful participant is eligible for the National Interagency Fire Qualifications System Red Card. Course S-130 offers the required training for all fire line workers. Covers basic skills required by new wildfire fighters; fire organization, use of safety equipment, size-up, line construction, use and maintenance of tools and basic woodsmen skills. Course S-190 is a prerequisite for all wildfire fighters.

**NR 151**
**Leathercraft**
**3 Credits Class 1 Lab 6**
Leathercraft and leather repair related to horse tack including tools used in repairing and constructing tack items such as bridles, halters and related equipment.

**NR 152**
**Saddle Making I**
**3 Credits Class 1 Lab 6**
Provides skills needed to construct or repair saddles. Prerequisite: NR 151.

**NR 153**
**Saddle Making II**
**3 Credits Class 1 Lab 6**
Refines leather-working skills developed in NR 152. Prerequisites: NR 151 and NR 152.

**NR 154**
**Basic River Paddling**
**2 Credits Class 1 Lab 3**
Introduction to river paddling in canoes and kayaks. Includes river reading, strodes and techniques specific to fast-moving water. On-the-water activities are maximized on a whitewater river. Prerequisite: REC 113 or NR 180.

**NR 155**
**River Rescue for Paddlers**
**1 Credit Class 1 Lab 2**
Designed for recreational paddlers or those teaching recreational paddlers. Each student will practice skills on mock river accidents such as pinning and entrapment. Concentration on self-rescue, proper use of throw bags, stabilization, snag line techniques and two drag systems on moving water. Prerequisites: REC 113 and NR 154.

**NR 156**
**Fly Fishing**
**1 Credit Class 1 Lab 1**
Basics of fishing with a fly rod. Equipment, casting, fly-tying and fishing are introduced.

**NR 163**
**Wildland Fire Standards for Survival**
**0.5 Credit Class .5 Lab 0**
Designed by an interagency work group sponsored by the National Wildfire Coordinating Group. Review of fire related fatalities and firefighter safety training materials. Emphasizes on avoiding situations and conditions which have resulted in fire shelter deployments, serious injuries and fatalities. Prerequisite: NR 150.

**NR 168**
**Horseback Riding for Non-Majors**
**1 Credit Class 0 Lab 3**
Under the supervision of a lead instructor, the course will be taught by student instructors enrolled in the teaching horseback riding course. Introduces proper horse care and horsemanship. Develops safe riding and horse handling skills. Designed to help individuals overcome fear or apprehension of horses. Prerequisite: Instructor permission.

**NR 169**
**Natural Resources Expo I**
**0.5 Credit Class 0 Lab 1.5**
Operating a natural resources exposition with an emphasis on exposition logistics, physical set-up through development of basic work skills and public relations.

**NR 170**
**Natural Resources Expo II**
**0.5 Credit Class 0 Lab 1.5**
Conducting a natural resource exposition. Emphasis on exposition grounds planning, layout, maintenance and restoration of grounds following the exposition.

**NR 171**
**Natural Areas Management**
**2 Credits Class 2 Lab 2**
Basic philosophical need for natural areas and their management with federal, state and nongovernment organization policies being considered. Includes principles of natural areas management, policies and effects of planning, the role of fire in wilderness areas, site management and visitor utilization and access.

**NR 172**
**Geography**
**3 Credits Class 2 Lab 3**
Examination of the economic and geographic factors that determine natural resource distribution, availability and utilization. Examination of the earth's surface region by region in order to determine resource availability, transportation concerns and environmental compatibility of resource use.

**NR 173**
**Surveying and Mapping II**
**3 Credits Class 2 Lab 3**
Surveying operations used in providing horizontal and vertical control for mapping projects. Develops horizontal traversing and trigonometric leveling skills. Appropriate instrument procedures are implemented. Coordinate geometry is used to determine locations of survey control points and data analysis. Prerequisite: NR 123.

**NR 174**
**Adventure Programming**
**1 Credit Class 1 Lab 1**
Value of recreational opportunities for special populations and adaptations necessary to ensure safe and therapeutic delivery of such services. Familiarization with various handicapping conditions, laws and regional resources or barriers available to these populations. The student observes, plans and implements supervised activities with at least two different special populations.

**NR 175**
**Equipment Operations**
**1-3 Credits Class 0 Lab 3-9**
Knowledge, skills and safe working techniques related to heavy equipment operation. Practice in maintenance, operation and service for each type of equipment.

**NR 175A**
**Heavy Bulldozer Operation**
**1-3 Credits Class 0 Lab 3-9**
Techniques and safe work practices involved in heavy bulldozer operation. Proper maintenance, operation, service and safety. Includes actual machine operation.

**NR 175B**
**Light Bulldozer Operation**
**1-3 Credits Class 0 Lab 3-9**
Techniques and safe work practices involved in light bulldozer operation. Proper service, maintenance, operation and safety. Includes actual machine operation.

**NR 175C**
**Backhoe Operations**
**1-3 Credits Class 0 Lab 3-9**
Techniques and safe work practices in backhoe operation. Proper service, maintenance, operation and safety. Includes actual machine operation.

**NR 175D**
**Trenching and Ditching Machine Operation**
**1-3 Credits Class 0 Lab 3-9**
Techniques and safe work practices in trenching and ditching machine operation. Proper service, maintenance, operation and safety. Includes actual machine operation.

**NR 175E**
**Multiple Axle Truck Operation**
**1-3 Credits Class 0 Lab 3-9**
Techniques and safe work practices in multiple axle truck operation. Proper service, maintenance, operation and safety. Includes actual machine operation.

**NR 175F**
**Frontend Loader Operation**
**1-3 Credits Class 0 Lab 3-9**
Various techniques and safe work practices in frontend loader operation. Provides hands-on experience in proper service, maintenance, operation and safety. Includes actual machine operation.

**NR 175G**
**Drag Pan/Tractor Operation**
**1-3 Credits Class 0 Lab 3-9**
Techniques and safe work practices in drag pan/tractor operation. Proper service, maintenance, operation and safety. Includes actual machine operation.

**NR 175H**
**Commercial Drivers License Preparation**
**1-3 Credits Class 0 Lab 3-9**
Prepares the student to sit for both the written and in-vehicle portions of the State of Ohio Commercial Driver's License (CDL) examination.

**NR 175J**
**Track Hoe Operations**
**1-3 Credits Class 0 Lab 3-9**
Techniques and safe work practices in track hoe operations. Proper service, maintenance, operation and safety. Includes actual machine operation.

**NR 175K**
**Forklift Operations**
**1-3 Credits Class 0 Lab 3-9**
Safe operation of a forklift and diagnosis of minor maintenance problems.

**NR 176**
**Wetlands Management**
**3 Credits Class 2 Lab 3**
Dynamics of wetland habitats, classification and management techniques. Legal ramifications and definitions will be covered.

**NR 177**
**Open Water Diver (SCUBA)**
**3 Credits Class 2 Lab 3**
Meets or exceeds standards set by the Recreational Scuba Training council (RSCT), Professional Diving Instructors Corporation (PDIC), and the National Park Service (NPS) for Open Water Diver certification and NPS-4 Diver In Training (DIT) status. Topics include diver physics, equipment usage, safety rules and procedures, first aid as related to the diver and the aquatic environment. Pool sessions include water skills necessary to using Self-Contained Underwater Breathing Apparatus (SCUBA). After required classroom, pool hours and competencies have been met open water diving will be conducted.

**NR 178**
**Ropes Course Certification**
**1 Credit Class 1 Lab 1**
Provides experience to act as a high ropes course instructor assistant and as a primary instructor for low ropes and initiatives. Successful participants will need to work with the lead instructor for at least 20 contact hours before final certification. Facilitation skills will be practiced and evaluated for successful completion of the course. Prerequisite: NR 174.

**NR 180**
**Fundamentals of Kayaking**
**1 Credit Class 1 Lab 2**
Selection, use and maintenance of white-water kayaks. Includes kayak control on flat and moving water.

**NR 181**
**Advanced Whitewater Paddling**
**2 Credits Class 1 Lab 3**
Continued development of paddling skills with the addition of new skills including surfing and turns. Includes reading river features, scouting rapids, set safety and executing rescues of self or others. Prerequisite: NR 154.

**NR 182**
**Advanced Open Water Diver (Scuba)**
**2 Credits Class 1 Lab 3**
Meets or exceeds the standards set by the Recreational Scuba Training Council (RSTC) and the Professional Diving Instructors Training Corporation (PDIC). After the required classroom and student competencies have been met the participant will be afforded the opportunity to complete the minimum 5 dives that are required for certification and evaluation purposes. Prerequisite: NR 177.

**NR 185**
**Resource Area Planning**
**3 Credits Class 3 Lab 2**
Master planning for natural/cultural resource management areas. Includes land acquisition, boundaries, resource inventories, planning of accessways, day use functions, concessions, interpretive system and resource maintenance and management strategies.

**NR 190**
**Compost Safety and Marketing Standards**
**3 Credits Class 2 Lab 3**
Defines and interprets compost safety and marketing standards at the national, state and local levels.

**NR 191**
**Compost Stabilization and Curing**
**3 Credits Class 2 Lab 3**
Principles, processes and controls needed for effective stabilization and curing of compost in controlled environments.

**NR 192**
**Compost High Rate Processing**
**3 Credits Class 2 Lab 3**
Principles, processes and controls to accelerate the forces of nature and science for composting at a predictable, high-rate.

**NR 193**
**Compost Process Operations and Control**
**3 Credits Class 2 Lab 3**
Principles, processes and controls to bring forces of nature and science together for composting.

**NR 210**
**Intermediate Wildland Fire Suppression**
**0.75 Credit Class 0.75 Lab 0.75**
Suppression methods used on wildland fires. Includes hand tools and line construction, types of attack methods as well as mopping-up techniques. Introduces the use of class "A" foam, its advantages and disadvantages and how it works in the wildlife arena. Prerequisite: NR 150.

**NR 215**
**Vehicle Operations for Natural Resources Officers**
**1 Credit Class 1 Lab 1**
Knowledge, skills and attitudes that promote optimum and efficient use of patrol vehicles in recreational areas. Emphasizes defensive driving, skid control and potential liability of negligent operation of patrol vehicles. Terminal performance objectives are established by the U.S. Department of the Interior.

**NR 216**
**Advanced Packing and Wildlife Skills**
**4 Credits Class 0 Lab 12**
Nine days of intensive training as a wilderness trail maintenance crew member for the U.S. Forest Service. Students transport their horse and pack mules to a western wilderness area and spend six days packing into the wilderness where they practice skills required of wilderness rangers. The course is designed as a cooperative practicum with the National Park Service and the U.S. Forest Service. Prerequisites: NR 114, NR 116 and NR 134.

**NR 217**
**Advanced Packing II**
**4 Credits Class 0 Lab 12**
Students will function as work crew supervisors and lead packers during a seven day extended working pack trip into a western wilderness area. Students will be responsible for the care of horses in travel and at the trail head. Prerequisites: NR 114, NR 116, NR 115, NR 134 , and NR 216.

**NR 222**
**Reclamation**
**3 Credits Class 2 Lab 3**
Accepted and prescribed techniques of land reclamation. Regulations, prereclamation planning, measuring impacted areas, water management and re-vegetation.

**NR 223**
**Campus Park Management**
**2 Credits Class 1 Lab 7**
Daily operation of on-site and recreational areas including planning, budgeting, staffing and assessment. Prerequisites: REC 110, REC 120 and REC 130.

**NR 224**
**Forestry Employment Seminar**
**2 Credits Class 2 Lab 0**
Development of resume and cover letter directed toward a career in the natural resources field. Assists in the determination of short and long range career goals.

**NR 225**
**Natural Resources Administration**
**1 Credit Class 1 Lab 0**
Institutional dimensions of recreation and park management. Includes the making and execution of laws pertaining to natural resources, organization, budgeting, governmental structure and liability in recreation.

**NR 226**
**Production Analysis**
**3 Credits Class 2 Lab 3**
Time study and cost analysis techniques in timber harvesting.

**NR 230**
**Project WILD and Learning Tree**
**3 Credits Class 3 Lab 0**
Four-day program designed for educators including youth leaders, camp staffs, elementary and secondary teachers and college students preparing to work with young people in natural resources conservation. Participants receive manuals containing over 140 activities useful in the classroom or out-of-doors that have proven adaptable in rural and urban settings.

**NR 230A**
**Project WILD**
**1 Credit Class 1 Lab 1**
Introduction to Project WILD outlining its financial support by the American Forest Institute and its subsequent development by the Western Regional Environmental Education Council. The student earns a copy of the elementary guide which contains 81 wildlife-related activities.

**NR 230B**
**Project Learning Tree**
**1 Credit Class 1 Lab 0**
Introduction to Project Learning Tree by outlining its financial support by the American Forest Institute and its subsequent development by the Western Regional Environmental Education Council. The student earns a copy of the elementary guide which contains 89 forest-related activities.

**NR 230C**
**Night Hikes**
**1 Credit Class 1 Lab 0**
Preparation for leading camp, nature center or park night hikes. Discussions, field hikes and hands-on activities allow exploration of the best ways to cope with situations in a unique learning environment.

**NR 240**
**Entomology**
**2 Credits Class 1 Lab 3**
Taxonomy and ecology of the common insect orders and families including collection, preservation and display, exploration of insect environments, life histories, population dynamics and impacts on human culture.

**NR 241**
**Ohio Birds of Prey**
**1 Credit Class 1 Lab 1**
Identification, habitat, prey, general breeding biology, aging and sexing techniques, basic census methods and the distribution of selected species. Lab work includes an auditory census of owls and field identification of local raptors using field marks, silhouettes, flight patterns and pellet analysis.

**NR 242**
**Law, Philosophy and Objectives for Natural Resources Officers**
**2 Credits Class 2 Lab 0**
Organization and function of various federal law enforcement agencies with specific focus on law enforcement in the National Park Service. Applicable sections of Title 36 of the Code of Federal Regulations are examined. Emphasizes NPS authority, jurisdiction, philosophy, objectives, policy and guidelines.

**NR 243**
**Law Problems and Recognition**
**1 Credit Class 1 Lab 0**
Identification, logical locations, types of concealment and safety measures for handling bombs and explosives. Use of chemical agents relative to law enforcement, first aid and reporting procedures. Basic orientation to dangerous drug classification, drug abuse symptoms and identification.

**NR 244**
**Vehicular Accident Investigation**
**1 Credit Class 1 Lab 1**
Tools, techniques and uniform terminology used by the traffic accident investigator. Develops skill in measuring, drawing and recording the scene in both vehicle accidents and crime scenes.

**NR 245**
**Public Relations for Natural Resources Officers**
**1 Credit Class 1 Lab 1**
Proper courtroom demeanor and testifying techniques. The importance of positive public image for uniformed law officers, the need for maintaining a high ethical code, interpersonal contacts and the responsibility, moral obligation and legal authority in dealing with the public. Includes effective questioning techniques, legal concepts and limitations protecting rights of the citizen.

**NR 247**
**Defensive Tactics**
**2 Credits Class 1 Lab 3**
Defensive tactics used against knives, clubs and other weapons. Includes kicks, punches, grabs, various control techniques, hand-cuffing procedures and body searching.

**NR 249**
**Western Game Animals**
**3 Credits Class 3 Lab 0**
The life history, habitats and distribution of western North American game birds and mammals. A few non-game mammals are included to represent that segment of the western fauna.

**NR 250**
**Backpacking and Survival**
**3 Credits Class 2 Lab 3**
Backpacking techniques including selection of equipment, hiking skills, selection of food, cooking skills, camping techniques, wilderness travel and wilderness emergencies. Includes training in survival skills such as fire building, shelter construction, finding water and food and the construction of survival kits and tools.

**NR 251**
**Ecology and Management of Waterfowl**
**3 Credits Class 3 Lab 0**
Habitat requirements, management techniques, ranges and migration patterns, management history and problems, diseases and identification of the waterfowl resources of North America.

**NR 252**
**Herpetology**
**2 Credits Class 1 Lab 3**
Introduction to reptiles and amphibians with emphasis on Ohio species. Techniques of capturing, handling and maintaining species in captivity. Ecology, behavior and evolution of the major groups.

**NR 254**
**Nature Drawing**
**1 Credit Class 1 Lab 2**
Techniques of illustration are presented with emphasis on pen and ink. A number of completed plates are required, which are critiqued and graded on a one-to-one basis with the student.

**NR 256**
**Pesticide Use in Natural Resources**
**2 Credits Class 1 Lab 3**
Role of pesticides in our economy and environment. Covers safe and practical use of pesticides in the cultural forestry operation.

**NR 257**
**Night Field Biology**
**1 Credit Class 1 Lab 2**
Introduction to animals often heard but seldom seen at night including frogs, toads, salamanders, night birds and aquatic insects. Introduction to spring wildflowers and wild foods.

**NR 258**
**Winter Camping and Survival**
**3 Credits Class 3 Lab 1**
Skills for winter camping and recognizing survival situations. Includes information on clothing, equipment, survival kits and the psychology of survival.

**NR 259**
**Outdoor Programs**
**3 Credits Class 3 Lab 0**
Development and preparation of interpretive programs using environmental and outdoor educational activities successful on formal school sites and non-formal learning centers including nature centers, parks and camps.

**NR 260**
**Taxidermy**
**2 Credits Class 2 Lab 1**
Techniques in the art of taxidermy. Stresses methods which produce mounted specimens that are exact replicas of the living animals. The course is intended for those who have had no previous training. Emphasis will be placed on birds and tanning.

**NR 261**
**Advanced Taxidermy**
**2 Credits Class 2 Lab 1**
Taxidermy of big game heads. Methods of tanning capes, use of liquid tan and dry preservatives, painting and habitats and exhibit construction are included. Prerequisite: NR 260.

**NR 262**
**Sailing in Protected Waters**
**2 Credits Class 1 Lab 3**
Introduction to sailing, nomenclature, nautical terms and the rules of the road. Emphasizes practical, on-the-water exercises in the Bahamas. Includes rigging, sailing, man overboard and capsizing rescue techniques. Exploration of islands, both uninhabited and inhabited, and observation of environmental and social conditions.

**NR 263**
**Marine Ecology**
**1 Credit Class 1 Lab 1**
On-site field study of Andros Island, Bahamas. Includes an orientation to the area including reef areas, land surfaces, vegetation patterns and population patterns. Introduces the geological, biological and human topics from a historical perspective; includes an examination of lime muds, oolites and coral reefs; compares and contrasts invertebrates found in different areas and their relationship with the particular environment; covers an examination of the physical setting, biological growth, food pyramid, food web and an examination of the interdependence of different organisms; and involves identification of man's relationship with the coral reef.

**NR 264**
**Recreation Programming**
**3 Credits Class 3 Lab 1**
Planning leisure time activities for the general public. Responding to human needs, recognizing physical capabilities and limitations of individuals or groups and identifying appropriate activities for special populations.

**NR 265**
**Basic Elements of Archery**
**1 Credit Class 0 Lab 3**
Use of archery equipment including parts of a bow and arrow, use of archery accessories, difficult shooting techniques and safety procedures.

**NR 266**
**Balanced Bow Hunting**
**1 Credit Class 1 Lab 2**
Fundamentals of bow hunting, responsible attitudes and acceptable behavior toward people, wildlife and the environment are explored. Equipment and harvesting techniques are examined. Stresses safety and the successful participant earns basic course certification from the National Bow Hunters Education Foundation.
Prerequisites: NR 265, NR 267 and instructor permission.

**NR 267**
**Intermediate Archery**
**1 Credit Class 1 Lab 2**
Shooting techniques of the compound bow and application to a teaching situation. Emphasizes self-analysis and peer evaluation through direct observation and video. Teaching basic fundamentals of archery to children and adults using the Anderson Method is covered. Also includes forms of archery currently enjoyed by the recreating public, such as field archery, range archery, archery golf and indoor archery. Prerequisite: NR 265.

**NR 268**
**Sailing**
**2 Credits Class 1 Lab 3**
Beginner's course in the theory of sailing, nomenclature, nautical terms and the rules of the road. Practical exercises at an inland lake cover rigging, sailing, man overboard and capsizing techniques. The single masted training craft used in this course are 12-16 feet in length and are designed for recreational sailing on inland waters.

**NR 269**
**Conservation Law for Natural Resources Officers**
**3 Credits Class 3 Lab 0**
Focus on constitutional law. Various resource/visitor protection authority and the statute foundation for that authority are examined. Major Supreme Court decisions, as well as recent court decisions in each area, are examined to determine the rationale behind procedural restrictions and the attendant responsibilities.

**NR 270**
**Land Navigation**
**1 Credit Class 1 Lab 0**
Provides an opportunity to learn and practice skills necessary to navigate from point to point on the earth's surface.

**NR 271**
**Campus Park Patrol**
**3 Credits Class 1 Lab 8**
Exposure to situations faced as a front country mounted ranger. Emphasizes safely handling horses in traffic, around crowds and children.

**NR 272**
**Teaching Horseback Riding**
**3 Credits Class 2 Lab 3**
Teaching methods appropriate for wilderness riding, ring work and camps. Safety, good horse management and creative teaching methods are stressed.
Prerequisites: NR 114, NR 115, NR 116, NR 134 and NR 135.

**NR 273**
**Horseshoeing II**
**3 Credits Class 2 Lab 3**
Cold keg-shoeing techniques. Includes financial and record keeping aspects of operating a shoeing business. Prerequisite: NR 115.

**NR 274**
**Colt Training II**
**3 Credits Class 1 Lab 6**
For the student who has successfully completed NR 118 and wishes to continue the 90 to 180 day training program with colts. Emphasis on completing training for a started colt and working with a problem horse. Prerequisite: NR 118.

**NR 275**
**Advanced Survival Techniques**
**3 Credits Class 2 Lab 3**
Natural environments including mountains, desert, arctic, tropic and ocean as well as required equipment for human survival for each. The student will develop a survival kit and use that kit for several days in mountainous backcountry or at a local site. Prerequisite: REC 160 or NR 250 or NR 258.

**NR 276**
**Best Management Practices**
**1 Credit Class 1 Lab 0**
Planning, building and maintaining forest access roads to meet state and federal water quality standards in forested ecosystems. Includes forest hydrology, planning road systems, protecting streamside management zones and road maintenance.

**NR 277**
**Forest Hydrology**
**3 Credits Class 2 Lab 3**
Water and its interaction in forested ecosystems including application of basic concepts of forest management.

**NR 280**
**Defense Weapon Training for Natural Resources Officers**
**3 Credits Class 2 Lab 4**
Review of concepts and testing areas contained in the National Ranger Training Institute's Seasonal Officer Training Program and in the Ohio Peace Officer Training Council's Peace Officer Basic Training Program. Includes intermediate shotgun techniques to improve proficiency and understanding of the capabilities and limitations of the shotgun in domestic law enforcement situations.

**NR 285**
**Intermediate Shotgun**
**2 Credits Class 1 Lab 3**
Concepts and testing areas contained in the National Ranger Training Institute's Seasonal Officer Training Program and the Ohio Peace Officer Training Council's Basic Peace Officer Training Program. Focuses on intermediate shotgun techniques to improve proficiency and deployment options as well as understanding of capabilities and limitations of the shotgun in domestic law enforcement situations. Prerequisite: NR 280 or PSCI 216.

**NR 286**
**Watershed Management**
**3 Credits Class 2 Lab 3**
Inventory, analysis, planning and implementation of a field project directed toward restoration of a degraded watershed and ecosystem. Emphasis on inventory of current resources, establishment of permanent sampling/monitoring stations, identification of ecosystem health problems, analysis of inventory and development of management strategies.

**NR 287**
**Paddling Expedition Management**
**4 Credits Class 1 Lab 9**
Covers all phases of expedition management from conception to completion of trip. Includes an expedition of at least seven days. Prerequisites: NR 154, NR 180, NR 250 and REC 113.

**NR 290**
**Special Topics in Natural Resources**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**NR 291**
**Individual Study in Natural Resources**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**NR 292**
**Field Experience in Natural Resources**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a natural resources facility through special arrangement with an instructor.

**NR 294**
**Natural Resources Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**NR 295**
**Natural Resources Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum. Concurrent with NR 296.

**NR 296**
**Natural Resources Practicum**
**1-6 Credits Class 0 Lab 8-48**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation. Concurrent with NR 295.

**NR 297**
**Natural Resources Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**NR 298**
**Natural Resources Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**NR 299**
**Natural Resources Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Nursing

**NT 100**
**Fundamentals and Gerontological Nursing**
**3 Credits Class 3 Lab 0**
Introduces the nursing process as a way to identify basic health care needs of adults in diverse settings. Incorporates methods to deliver basic nursing skills in a professional manner. Gerontology emphasizes the natural aging process and care of older adults with alterations in health. Concurrent with NT 101. Prerequisite: Admission to Nursing.

**NT 101**
**Nursing Clinical Experience I**
**4 Credits Class 0 Lab 13**
Provides the opportunity to utilize the nursing process at a beginning level and apply the principles of nursing fundamentals and gerontology to a culturally diverse population. The lab component of the course correlates with NT 100. Concurrent with NT 100. Prerequisite: Admission to Nursing.

**NT 102**
**Nursing Dynamics I**
**1 Credit Class 1 Lab 0**
Concepts related to communication skills and the attitudinal elements essential to the nurse-patient relationship. Exploration of spiritual, cultural and psychosocial dynamics of illness, loss, institutionalization and the experience of grief. Concurrent with NT 100. Prerequisite: Admission to Level I Nursing.

**NT 103 PACE**
**Nutrients**
**1 Credit Class 1 Lab 0**
Normal nutrition and its role in the maintenance of health. Nutrients, their functions and food sources are examined. Caloric needs are also investigated.

**NT 104 PACE**
**Pharmacology Math**
**1 Credit Class 1 Lab 1**
Computational skills necessary to safely administer medications. Includes temperature conversions. Prerequisite: ASSET Math score of 40 or above or MATH 060.

**NT 105**
**Nursing Charting Skills**
**1 Credit Class 1 Lab 0**
Basic charting skills, legal charting guidelines and adapting charting skills to various charting formats.

**NT 105A**
**Charting Skills-Clinical**
**1 Credit Class 1 Lab 0**
Basic charting skills, legal charting guidelines and adapting charting skills to various charting formats.

**NT 105B**
**Charting Skills-Pre-Clinical**
**1 Credit Class 1 Lab 1**
Basic charting skills, legal charting guidelines and adapting charting skills to various charting formats. Prerequisite: Completion of at least two quarters of general nursing courses.

**NT 106**
**Clinical Math Skills**
**1 Credit Class 1 Lab 1**
Methods and processes of mathematical calculations in the clinical setting. Emphasis on accurately calculating medication dosages and select physiological calculations including age-related diversity. Prerequisites: NT 104 and enrolled in Nursing clinicals.

**NT 110**
**Fundamentals/Maternal-Newborn Nursing**
**3 Credits Class 3 Lab 0**
Principles and practices of care during the antepartum, intrapartum, postpartum and neonatal periods. Includes biological and behavioral changes associated with the normal reproductive process, common complications of pregnancy and common anomalies/complications of the newborn period, including prematurity. Concurrent with HC 106. Prerequisites: HC 100, NT 100, NT 101, NT 102, NT 103 and NT 104.

**NT 111**
**Nursing Clinical Experience II**
**4 Credits Class 0 Lab 13**
Principles of maternal-newborn nursing to provide care for the childbearing family. The lab component of this course correlates with NT 110. Concurrent with NT 110. Prerequisites: HC 100, NT 100, NT 101, NT 102, NT 103 and NT 104.

**NT 112**
**Nursing Dynamics II**
**1 Credit Class 1 Lab 1**
Interpersonal relationships and communication within nursing. Investigates nursing ethics, professional behavior, prepared childbirth and human sexuality. Explores dynamics and nursing interventions related to domestic violence, rape, trauma, substance abuse and pregnancy loss. Awareness of and tolerance for developmental, cultural and lifestyle variations will be encouraged. Prerequisite: NT 102.

**NT 113 PACE**
**Lifespan: Nutrition**
**1 Credit Class 1 Lab 0**
Nutritional needs during specific periods within the lifespan including pregnancy, infancy, childhood, teen years, adult and geriatric years. Also digestion, absorption and metabolism of food, food allergies, fevers, infections and inborn errors of metabolism. Prerequisite: NT 103.

**NT 114**
**Pharmacology for Nurses: Introduction and Drug Administration**
**1 Credit Class 1 Lab 0**
Introduction to pharmacology terminology, sources of information about drugs, legal regulations concerning drugs, drug classifications and the nursing process related to the administration of drugs. Concurrent with NT 110 and NT 111. Prerequisite: NT 104.

**NT 120**
**Nursing of the Adult**
**3 Credits Class 3 Lab 0**
Common health alterations of adult clients including cardiovascular, hematological, endocrine, respiratory, gastrointestinal, renal and gynecological problems. Communication techniques for supportive interaction with clients and families are discussed.

**NT 121**
**Nursing Clinical Experience III**
**4 Credits Class 0 Lab 13**
Supervised clinical experience in the care of adult clients with common health alterations. Observations in critical care units and surgery are included as well as nutrition and pharmacology experiences. Requires demonstration of the ability to integrate concepts in order to plan, prioritize and modify the nursing plan of care. Emphasis is placed on nursing skills, therapeutic communication, professional behavior and accountability. The lab component correlates with NT 120. Concurrent with NT 120. Prerequisites: HC 106, HC 110 or HC 120, NT 110, NT 111, NT 112, NT 113 and NT 114.

**NT 122**
**Nursing Dynamics III**
**1 Credit Class 1 Lab 0**
Interpersonal relationships and communication within nursing. Investigation of legal aspects of nursing, nursing history, nursing image, holistic health and health care alternatives. Utilizing nursing process theory, the student will also focus on nursing interventions related to depression and suicide. Prerequisite: NT 112.

**NT 123 PACE**
**Nutritional Care I**
**1 Credit Class 1 Lab 0**
Background knowledge of routine hospital diets and the special nutritional care indicated in treating disorders of various body systems. Concurrent with NT 120 and NT 121. Prerequisite: NT 113.

**NT 124**
**Pharmacology for Nurses: Drug Classification I**
**1 Credit Class 1 Lab 1**
Administering oral, parenteral medications and the actions, dosages, side effects and interactions of medications in selected drug classifications. Includes cardiotonics, anticoagulants, antiarrhythmics, vasodilating agents, insulin, oral hypoglycemic agents, thyroid, antithyroid agents, male and female hormones, drugs that affect gastrointestinal function, diuretics and antihypertensives. Emphasis is placed on patient care implications of drugs, incorporating information required by a nurse for appropriate administration of drugs, and for the proper assessment, care, evaluation and education of the patient. Concurrent with NT 120 and NT 121. Prerequisite: NT 114.

**NT 130**
**Nursing of the Adult and Child**
**3 Credits Class 3 Lab 0**
Care of adults and children through the lifespan. Includes sensory, motor, immune and integumentary functioning as well as pediatric nursing concepts related to cardiovascular, respiratory and gastrointestinal disturbances. Aspects of disease prevention, health maintenance and rehabilitation are also included. Concurrent with NT 131. Prerequisites: NT 120, NT 121, NT 122, NT 123, NT 124, HC 110, HC 120 and PSYC 151.

**NT 131**
**Nursing Clinical Experience IV**
**4 Credits Class 0 Lab 13**
Care of adult and pediatric clients with alterations in health and observation of the growth and development of children in various community settings. Requires the ability to integrate concepts in order to plan, prioritize and modify the nursing plan of care. The laboratory component of the course correlates with NT 130. Concurrent with NT 130. Prerequisites: NT 120, NT 121, NT 122, NT 123, NT 124, HC 110, HC 120 and PSYC 151.

**NT 132**
**Nursing Dynamics IV**
**1 Credit Class 1 Lab 0**
Communication skills, interpersonal relationships and attitudinal elements essential to the nursing profession. Focuses on preparing for the transition into the world of nursing. Includes exploration of the special areas of nursing such as child abuse, hospice and the nursing care of the terminally ill child. Concurrent with NT 130 and NT 131. Prerequisite: NT 122.

**NT 133 PACE**
**Nutrition Economics**
**1 Credit Class 1 Lab 0**
Food as a source of essential nutrients, menu planning for adequate nutrition, economical food purchasing and preparation, food additives and community nutrition problems including nutritional deficiencies and excesses and food borne illnesses. Prerequisites: NT 103 and NT 113.

**NT 134**
**Pharmacology for Nurses: Drug Classification II**
**1 Credit Class 1 Lab 1**
Actions, dosages, side effects and interactions of medications in selected drug classifications. Includes adrenocorticosteroid drugs, adrenergic and adrenergic blocking agents, cholinergics and cholinergic blocking agents, antibiotics, sulfa drugs, antifungal drugs, antihistamines, sedatives, hypnotics, narcotic analgesics, non-narcotic analgesics, analgesics, antipyretics, antianxiety agents, anti-inflammatory agents, antipsychotic and antidepressant drugs. Emphasizes patient care implications of drugs, incorporating information required by a nurse for the appropriate administration of drugs and for the proper assessment, care, evaluation and education of the patient. Concurrent with NT 130 and NT 131. Prerequisite: NT 124.

**NT 140**
**Technical Aspects of Adult Health Nursing**
**5 Credits Class 4 Lab 4**
Review of common health problems and utilization of the nursing process in planning and caring for adults. Includes the principles and practice of related technical skills and opportunities for supervised activities in the nursing lab and in health care facilities. Prerequisite: Admission to Enrichment.

**NT 142**
**Technical Aspects of Nursing Dynamics**
**1 Credit Class 1 Lab 1**
Communication skills, interpersonal relationships and the role of the nurse on the health care team. Overview of key areas covered in all Level I Nursing Dynamics courses. Investigates concepts related to loss and crisis intervention. Prerequisite: Admission to Enrichment.

**NT 143**
**Technical Aspects of Nutrition**
**1 Credit Class 1 Lab 0**
Review of nutrients and nutritional care including nutrients, dietary guidelines, metabolism and weight control, food safety, diabetes mellitus, cardiovascular disorders and pregnancy and lactation. Optional topics are offered for independent student review. Prerequisite: Admission to Enrichment.

**NT 144**
**Technical Aspects of Pharmacology for Nurses**
**2 Credits Class 2 Lab 0**
Review of pharmacology and related nursing care. Selected drug classifications are presented with emphasis on patient care implications of drugs including information required by a nurse for appropriate administration of the drug and the proper assessment, care, evaluation and education of the patient. Prerequisite: Admission to Enrichment.

**NT 146**
**Technical Aspects of Child Health Nursing**
**2 Credits Class 2 Lab 0**
Review of pediatric nursing, infant through adolescence. Physical, cognitive and psychosocial factors are presented. Emphasis is placed on the study of common health problems and the utilization of the nursing process in caring for children with those conditions. Patient/family teaching, the child's response to hospitalization, communication techniques, utilization of community resources and cultural factors are stressed. Prerequisite: Admission to Enrichment.

**NT 147**
**Technical Aspects of Maternal-Newborn Nursing**
**2 Credits Class 2 Lab 0**
Review of obstetrical nursing to provide or update information so that the student may proceed into Level II nursing courses with a sound basic theoretical background. Use of the nursing process in the delivery of holistic health care in this setting is emphasized. Prerequisite: Admission to Enrichment.

**NT 150**
**Nursing Care Experience**
**4-8 Credits Class 0 Lab 12-24**
Supervised clinical experience in a medical/surgical unit. Emphasizes utilization of the nursing process in planning, implementing and evaluating patient care.

**NT 151**
**IV Therapy for LPN's**
**4 Credits Class 3 Lab 3**
Provides the LPN with the knowledge and skills needed to perform limited intravenous therapy procedures on adults at the direction of a registered nurse, licensed physician, dentist or podiatrist as outlined in 4723-17-10 of the Ohio Board of Nursing Administrative Code. Successful completion of this course and the meeting of all criteria confirmed by the Ohio Board of Nursing results in the Ohio Board of Nursing issuing a card of completion. The laboratory component of this course provides the student with the opportunity to practice intravenous therapy procedures. Clinical will be arranged following satisfactory completion of theory and laboratory components.

**NT 152**
**Physical Assessment**
**0.5-3 Credits Class 0.5-3 Lab 0**
Focuses on the total process of client assessment. Collection of subjective data through the use of a health history. The skills of percussion, auscultation and palpation are introduced as the participant learns to perform physical examinations. Includes assessment techniques for adults, children and obstetric clients.

**NT 152A**
**Physical Assessment of Adult**
**0.5-3 Credits Class 0.5-3 Lab 0**
Enables participants to learn and practice physical assessment techniques that can be used by nurses in all areas of practice. Includes techniques of inspection, palpation and auscultation, as well as accurately describing the objective data gained by these techniques. Focuses on appropriate terminology for clear, concise documentation.

**NT 152B**
**Physical Assessment of Child**
**0.5-3 Credits Class 0.5-3 Lab 0**
Physical assessment techniques used by nurses in pediatric settings. Data base collection for the pediatric client is similar to that of the adult. Exceptions include prenatal growth and development, behavioral and school status histories. Participants will learn the techniques of inspection, palpation, and auscultation, as well as learn to describe accurately the objective data gained by these techniques. Focused on appropriate terminology for clear, concise documentation.

**NT 152C**
**Physical Assessment of Obstetric Client**
**0.5-3 Credits Class 0.5-3 Lab 0**
Skills needed to recognize, interpret and act on abnormal physical assessment findings in the pregnant client. Course content has been designed for acute care, ambulatory clinics and home health nurses who care for both normal and high risk obstetric clients. Perinatal nurses working in all practice areas and at all levels of experience will find this course useful.

**NT 153**
**Nursing Process**
**0.5-6 Credits Class 0.5-6 Lab 0**
The nursing process has been described as the essence of nursing. It is a deliberate, problem-identification and problem-solving approach to meeting the client's health care and nursing needs. The nursing process is based on the American Nurses Association's Standards of Nursing Practice. These standards are incorporated into assessment, nursing diagnosis, planning, implementation and evaluation. Focuses on the steps of the nursing process and formulating an individualized nursing care plan.

**NT 153A**
**Nursing Process: Assessment**
**0.5-3 Credits Class 0.5-3 Lab 0**
The assessment component of the nursing process. Topics include the systematic collection of data about the client's health status, analysis of the data to determine actual and potential health needs and use of the data to formulate nursing diagnoses.

**NT 153B**
**Nursing Process: Critical Thinking**
**0.5-3 Credits Class 0.5-3 Lab 0**
Designed to examine what critical thinking means. Topics include a definition for critical thinking; definition for nursing; how thinking is influenced by such factors as emotions, self-confidence and anxiety; specific, practical strategies to improve thinking and ways of teaching and measuring critical thinking in nursing.

**NT 153C**
**Nursing Process: Analysis**
**0.5-3 Credits Class 0.5-3 Lab 0**
Identification and formulation of nursing diagnoses. Upon completion of the nursing history and health assessment, the nurse organizes, analyzes, synthesizes and summarizes data collected and determines the client's need for nursing care. Focuses on the development of nursing diagnoses using the North American Nursing Diagnosis Association taxonomy.

**NT 153D**
**Nursing Process: Planning**
**0.5-3 Credits Class 0.5-3 Lab 0**
Once the nursing diagnoses have been identified, the planning component of the nursing process is developed including the assignment of priorities to the nursing diagnoses, specification of immediate and long-term goals of nursing action, identification of specific nursing interventions appropriate for attaining the goals, and collaboration between the nurse, other members of the nursing team, other members of the health care team, the client, the client's family and community agencies.

**NT 153E**
**Nursing Process: Implementation**
**0.5-3 Credits Class 0.5-3 Lab 0**
Carrying out of the proposed plan of care. Topics include the nursing care plan as the basis for implementation, the nurse's continued assessment of the client and his response to nursing care while implementing nursing care and altering interventions based on the client's response.

**NT 153F**
**Nursing Process: Evaluation**
**0.5-3 Credits Class 0.5-3 Lab 0**
Determining the client's response to nursing interventions and the extent to which goals have been achieved.

**NT 154**
**Medical/Surgical Nursing Electives**
**0.5-5 Credits Class 0.5-5 Lab 0**
Current concerns and developments in the field of medical/surgical nursing. Focus is directed toward the care of clients with acute or chronic health alterations and the role of the nurse in providing and facilitating nursing care. Additional sections emphasize health alterations, gerontological considerations, pharmacotherapeutics, client education and home health care.

**NT 200**
**Mental Health Nursing**
**3 Credits Class 3 Lab 1**
Focuses on the sensitivity of the student nurse to patient needs, the enhancement of communication skills and the therapeutic use of self. Emphasizes student awareness of and sensitivity to the mental health needs of people across the lifespan and of people experiencing mental health problems. Mental health promotion is included. Concurrent with NT 201. Prerequisites: Graduation from Level I or completion of all Enrichment courses and admission to Level II and PSYC 152 (taken prior to or concurrently).

**NT 201**
**Nursing Clinical Experience V**
**3 Credits Class 0 Lab 9**
Offers the student opportunities to observe and/or provide basic nursing care for people experiencing mental health problems. Focuses primarily on inpatient mental health facilities but community observation experiences are also included. Emphasis is also placed on awareness of and sensitivity to the needs of self, others and the enhancement of interpersonal skill development. Concurrent with NT 200. Prerequisites: Graduation from Level I or completion of all Enrichment courses and admission to Level II.

**NT 202**
**Role Transition LPN to RN**
**1 Credit Class 1 Lab 0**
Focuses on the role change and professional behaviors appropriate for an LPN in transition to an RN. Role and change theory, stress and stress management related to role change and professional issues such as professional organizations, professional commitment, nursing image, the history of the AND, career planning and legal and political aspects related to the scope of practice will be discussed. Concurrent with NT 200 or instructor permission.

**NT 210**
**Advanced Nursing of the Adult I**
**3 Credits Class 3 Lab 0**
Care of adult patients with a variety of selected, well-defined complex health alterations. The student facilitates the patient and family in achieving and maintaining their highest level of functioning. Concurrently with NT 211. Prerequisites: NT 200, NT 201, NT 202 and HC 200.

**NT 211**
**Nursing Clinical Experience VI**
**5 Credits Class 0 Lab 16**
Clinical experience in acute care settings. Emphasizes providing nursing care to adult patients with a variety of complex health alterations. Opportunity is provided to apply nursing knowledge in the performance of intermediate and advanced nursing skills. The laboratory component of the course correlates with NT 210. Concurrent with NT 210. Prerequisites: NT 200, NT 201, NT 202 and HC 200.

**NT 213 PACE**
**Nutritional Care II**
**1 Credit Class 1 Lab 0**
Nutritional assessment, iatrogenic malnutrition, vegetarian regimes and nutritional needs in thermal injury, cancer and mental illness. Additional discussion areas include cardiovascular disorders, sodium modifications and tube feeding. Prerequisite: NT 143 or graduate of Level I.

**NT 220**
**Advanced Nursing of the Adult II**
**3 Credits Class 3 Lab 1**
Care of adult patients with a variety of selected well-defined complex health alterations. Leadership and management roles of the nurse are presented. The lab component of the course includes activities designed to assist the student in the identification and application of leadership and management skills. Concurrent with NT 221. Prerequisites: NT 210, NT 211, NT 213 and PSYC 151.

**NT 221**
**Nursing Clinical Experience VII**
**5 Credits Class 0 Lab 15**
Clinical experience in an acute care setting. Emphasizes utilization of the nursing process in the provision of care to adult/ child patients with a variety of complex health alterations. The student incorporate roles of leader/manager, patient/ family teacher and professional. Concurrent with NT 220. Prerequisites: NT 210, NT 211, NT 213 and PSYC 151.

**NT 222**
**Nursing Dynamics V**
**1 Credit Class 1 Lab 1**
Preparing the student for the transition into the world of nursing. The role of the AND in research, ethical and legal implications for practice and career development issues are explored. Prerequisites: NT 210 and NT 211.

**NT 225**
**Advanced Maternal Child Nursing**
**1 Credit Class 1 Lab 1**
Advanced study and review of maternal-child nursing. Maternal-newborn content includes fetal development, nursing assessment and care during pregnancy, birth and postpartum, and newborn care and complications. Nursing care of the child includes growth and development and health alterations during infancy, toddler, preschool, schoolage and adolescence. Prerequisites: NT 210 and NT 211.

**NT 250**
**Nursing in the Community: Theory**
**3 Credits Class 3 Lab 0**
Concepts and processes related to community health nursing. Emphasis on the tasks and roles of the community health nurse in today's society. Prerequisite: Quarter 7 status or instructor permission.

**NT 251**
**Nursing In The Community: Clinical**
**3 Credits Class 1 Lab 7**
Provides an opportunity to observe and apply basic community health nursing concepts in community settings. Practitioners in the areas of home health, Hospice, public schools and health departments act as preceptors for the student. Prerequisite: Quarter 7 status.

**NT 260**
**State Board Nursing Review**
**3 Credits Class 3 Lab 0**
A comprehensive review of obstetrics, pediatrics, medical/surgical and mental health nursing. Focus on decision making; categories of human functioning; nursing care of the child and adolescent, of the young adult in the reproductive years, of acute and chronic health problems in the adult years, and behavioral and emotional problems throughout the age span. Includes methods to improve test taking skills and to relieve stress. Prerequisite: Graduate of Level II.

**NT 280**
**Health Care Systems**
**3 Credits Class 3 Lab 0**
Provides an opportunity to observe an alternate health care delivery system, to identify the role of the nurse in that system and to assess the impact of that delivery system on the health care consumer.

**NT 290**
**Special Topics in Nursing**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**NT 291**
**Individual Study in Nursing**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**NT 292**
**Field Experience in Nursing**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a nursing facility through special arrangement with an instructor.

**NT 293**
**Nursing Directed Practice**
**1-8 Credits Class 0 Lab 5-40**
Directed practice instruction in the performance of a particular function by the instructor.

**NT 294**
**Nursing Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**NT 295**
**Nursing Technology Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum. Prerequisite: Level I graduate.

**NT 296**
**Practicum in Nursing**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**NT 297**
**Nursing Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**NT 298**
**Nursing Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor. Prerequisite: Level I graduate.

**NT 299**
**Nursing Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Office Administration

**OAT 100 PACE**
**Beginning Typing**
**3 Credits Class 2 Lab 4**
Beginning typing using the IBM personal computer. Offers a quick review for the student with previous training and allows progression at the individual's own rate. Typing of letters, reports and tables are included.

**OAT 101 PACE**
**Intermediate Typing**
**3 Credits Class 2 Lab 4**
Increases speed and accuracy through the use of drills and Diatype analyzers. A variety of manuscripts, tables and correspondence are typed. Prerequisite: OAT 100.

**OAT 102**
**Advanced Typing**
**3 Credits Class 2 Lab 4**
Improves speed and accuracy and develops proficiency for the production of business letters, tables, forms and reports commonly found in the general office, accounting office, executive office, technical office and professional office. Prerequisite: OAT 101.

**OAT 103**
**Collegiate Secretarial International I**
**0.25-0.50 Credit Class 0.25-0.50 Lab 0**
Introduction to professional organizations and the importance of continuing education and networking within the profession.

**OAT 104**
**Collegiate Secretarial International II**
**0.25-0.50 Credit Class 0.25-0.50 Lab 0**
Continuation of OAT 103 for the second-year office administrative student.

**OAT 105**
**Introduction to Personal Shorthand**
**3 Credits Class 3 Lab 2**
Instruction and theory of personal short-hand, an alphabetic system of notetaking. Intended for personal use or for notetaking in business offices.

**OAT 106**
**Advanced Personal Shorthand**
**3 Credits Class 2 Lab 4**
Develops word and phrase building and increases speed through the use of the wireless learning system. Transcription of business letters from shorthand notes is further developed. Prerequisites: OAT 100 and OAT 105.

**OAT 107**
**Telephone Skills**
**1 Credit Class 1 Lab 1**
Aspects of telephone use in an office. Includes single-line telephones and multi-button computerized systems, recording messages, long distance procedures, using directory assistance and handling emergency situations.

**OAT 108**
**Collegiate Secretarial International III**
**0.25 Credit Class 0.25 Lab 0**
Continuation of OAT 104.

**OAT 110**
**Office Administration I**
**3 Credits Class 3 Lab 2**
Overview of the modern business office. Methods that may be encountered in any size office and professional procedures for carrying out duties including secretarial/ receptionist duties and records management. Opportunities in the secretarial field and various levels of secretarial work are explored. Personal qualifications, proper attitude and conduct are stressed through problem-solving situations.

**OAT 111**
**Office Administration II**
**3 Credits Class 3 Lab 2**
Gives the executive assistant background to lend administrative support to today's busy executives; to use judgment and make decisions, to work without supervision and to be able to apply word processing principles to process information. Prerequisites: OAT 100 and OAT 110.

**OAT 113**
**Office Administration Computer Systems**
**1 Credit Class 1 Lab 1**
Utilizing computer systems to classify, sort, merge, record, retrieve, and transmit information. Introduction to computer systems, hardware, software, disk operating systems and windows.

**OAT 114**
**Office Administration Machines**
**1 Credit Class 1 Lab 2**
Use of office machines including the ten-key pad, multi-line switchboard, fax machine, and be able to use the various functions and perform maintenance on copying and duplicating equipment.

**OAT 121**
**Speed Building I**
**1 Credit Class 1 Lab 2**
Intense individualized program to improve the student's speed and accuracy on five-minute timings.

**OAT 122**
**Speed Building II**
**1 Credit Class 1 Lab 2**
Continuation OAT 121.

**OAT 130**
**Beginning Shorthand**
**3 Credits Class 3 Lab 2**
Designed for the beginning Gregg shorthand student with no prior training. The student with prior knowledge and skill will review the basic principles and progress at an individual rate.

**OAT 131**
**Intermediate Shorthand**
**3 Credits Class 2 Lab 4**
Develops word and phrase building and increases dictation speed through the use of the wireless learning system. Transcription of business letters from shorthand notes is introduced and developed. Prerequisite: OAT 130.

**OAT 132**
**Advanced Shorthand**
**3 Credits Class 2 Lab 4**
Develops word and phrase building and increases dictation speed through the use of the wireless learning system. Transcription of business letters from shorthand notes is further developed. Prerequisites: OAT 100 and OAT 131.

**OAT 135**
**DisplayWrite IV**
**3 Credits Class 2 Lab 4**
Introduction to word processing by demonstration and experience on a microcomputer or personal computer using DisplayWrite 4. Prerequisite: OAT 100.

**OAT 150 PACE**
**IBM Personal Typing System**
**1 Credit Class 1 Lab 2**
Independent study for the student who has completed OAT 100 and a software package. The student becomes proficient in operating the IBM Personal Typing System. Prerequisites: OAT 100 and OAT 210.

**OAT 151**
**Xerox 630 Memorywriter**
**1 Credit Class 1 Lab 2**
Independent study course for students who have completed Competency One of Typing II. Students become proficient in operating the Xerox 630 Memorywriter. Skills developed transfer to other electronic typewriters.

**OAT 160**
**Technical Office Practicum**
**1 Credit Class 0 Lab 8**
Hands-on technical experience utilizing Hocking College resources. Prerequisite: Third quarter standing or instructor permission.

**OAT 180**
**Keyboarding**
**1 Credit Class 1 Lab 1**
Basic instruction on the alphanumeric keyboard. The student learns to operate a computer terminal which allows them to key in information swiftly and efficiently.

**OAT 190**
**Pretranscription Skills**
**2 Credits Class 1 Lab 3**
Development of competency in communication including writing, speaking, listening and reading to prepare for transcription in the modern business office. Competencies include grammar, punctuation, capitalization, abbreviations, numbers style, plurals and possessives, spelling, word division, editing and proofreading.

**OAT 200**
**Introduction to Transcription**
**3 Credits Class 2 Lab 4**
Introduction to the desk top cassette transcriber. Proper care of equipment and transcribing techniques stressed to produce mailable copy. Emphasizes communication and proofreading skills. Prerequisite: OAT 101.

**OAT 210**
**WordPerfect**
**3 Credits Class 2 Lab 4**
Operation of word processing by demonstrations and experience using a WordPerfect 5.1. Prerequisite: OAT 100.

**OAT 210A**
**WordPerfect Introduction**
**1 Credit Class 1 Lab 0.5**
Introductory seminar is for the beginner using WordPerfect 5.1. Includes entering, saving, retrieving, editing and formatting documents.

**OAT 210B**
**Advanced WordPerfect**
**1 Credit Class 1 Lab 0.5**
Designed for the current user of WordPerfect 5.1 or the student with basic knowledge of the software. Includes merge printing, headers and footers and desktop publishing. Prerequisite: OAT 210A or equipment experience.

**OAT 211**
**WordPerfect for Windows**
**3 Credits Class 2 Lab 4**
Emphasizes on advanced formatting, desktop publishing and special features. Prerequisite: OAT 210.

**OAT 212**
**WordPerfect Applications**
**1-3 Credits Class 1-2 Lab 1-3**
Experience on a microcomputer using WordPerfect 5.1 for DOS and/or WordPerfect 5.2 for Windows.

**OAT 220**
**Office Administration III**
**3 Credits Class 3 Lab 0**
Designed for prospective secretaries who may be expected to assume some of the duties of an office manager. Topics include principles governing effective supervision, office organization, the functions of management, the office environment and current employment and personnel practices. Prerequisite: OAT 111.

**OAT 230**
**Administrative Transcription**
**3 Credits Class 2 Lab 4**
Development of proficiency in producing mailable copy of dictated letters, memos, reports and material with changes and corrections. Communications involve areas in banking, accounting, government, data/word processing and insurance. Prerequisites: OAT 101 and OAT 200.

**OAT 240 PACE**
**Word Processing Applications**
**3 Credits Class 2 Lab 4**
Advanced course in word processing applications. Prerequisites: OAT 102, OAT 135, OAT 150 and OAT 211.

**OAT 260**
**Administrative Typing**
**3 Credits Class 2 Lab 4**
Develops typing difficult material for acceptability in the business office. Most copy is unarranged and in longhand. Following instructions, implied as well as stated, is required. Simulations provide realistic experiences with various tasks performed by executive and administrative secretaries. Prerequisites: OAT 102 and OAT 230.

**OAT 270**
**Legal Terminology and Typing**
**3 Credits Class 2 Lab 4**
Introduction to legal terminology and typing of legal documents. Definition and spelling of legal terms and correct formats for legal typing. Proofreading skills and productivity are developed. Prerequisite: OAT 102.

**OAT 280**
**Legal Machine Transcription**
**3 Credits Class 2 Lab 4**
Use of the cassette transcriber to type legal documents. Stresses correct spelling, punctuation and placement and accurate proofreading. Prerequisites: OAT 102 and OAT 200.

**OAT 285**
**Research Form for Legal Secretary**
**1 Credit Class 1 Lab 1**
Introduction to terminology explicit to legal research. The student is introduced to the use of law books and the law library. Proper legal citation form is covered. Prerequisites: OAT 270 and OAT 280.

**OAT 290**
**Special Topics in Secretarial Science**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**OAT 291**
**Individual Study in Secretarial Science**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**OAT 292**
**Field Experience in Secretarial Science**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a secretarial facility through special arrangement with an instructor.

**OAT 294**
**Secretarial Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**OAT 295**
**Office Administration Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum. Concurrent with OAT 296. Prerequisite: Sixth quarter standing.

**OAT 296**
**Office Administration Practicum**
**1-6 Credits Class 0 Lab 8-48**
The student is placed in an office two days a week to gain experience before graduation. Concurrent with OAT 295. Prerequisite: Sixth quarter standing.

**OAT 297**
**Secretarial Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**OAT 298**
**Secretarial Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**OAT 299**
**Secretarial Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Oil Well Drilling and Production

**OP 101**
**Well Completions and Stimulation**
**3 Credits Class 2 Lab 3**
Procedures required to put an oil or gas well into production after the well has been drilled. Emphasizes different completion methods regarding casing, cementing and stimulation alternatives. Includes common practices, advantages, disadvantages and requirements.

**OP 102**
**Petroleum Geology**
**3 Credits Class 3 Lab 0**
Nature of the earth as related to the finding and producing of oil and gas. Accumulation and migration of oil and gas, and sample examination and formation evaluation. State-of-the-art exploration techniques and the relationship between reservoir performance and the various production techniques.

**OP 103**
**Production Techniques**
**3 Credits Class 2 Lab 3**
Production techniques commonly used in the Appalachian Basin. Production fundamentals such as sucker rod pumping, downhole pumps and the use of the recording dynamometer. Plunger-lift fundamentals, controlling devices and troubleshooting production problems.

**OP 107**
**Oil and Gas Drilling**
**3 Credits Class 2 Lab 3**
Basic techniques and skills associated with the different drilling methods. Topics include rig components, bits, mud pumps, mud systems and rig safety.

**OP 108**
**Production Gas Measurement I**
**3 Credits Class 2 Lab 3**
Designed for entry-level personnel employed by gas utilities. Basic concepts of gas metering and regulation. Topics include diaphragm meters, rotary meters, meter instrumentation and turbine meters. Basic gas laws and their applications regarding gas measurement. Prerequisite: OP 103.

**OP 110**
**Oil and Gas Field Operations**
**3 Credits Class 2 Lab 3**
Duties and responsibilities of the oil field production worker. Bottomhole configurations, basic downhole problems, preventative maintenance programs and proper record-keeping. Training in the duties of the pumper, methods of production and associated problems. Operation costs, methods of keeping records for individual wells and leases and recognizing when well servicing may be required.

**OP 112**
**Production Gas Measurement II**
**3 Credits Class 2 Lab 3**
Operation and maintenance of orifice, diaphragm, turbine and rotary meters. Proper start-up procedures, differential testing and orifice meter calibration using a dead weight tester and mercury manometer. Includes measurement problems and trouble-shooting.

**OP 113**
**Production Gas Measurement III**
**3 Credits Class 2 Lab 3**
Operation and maintenance of orifice, diaphragm, turban and rotary meters. Proper start-up procedures, differential testing and orifice meter calibration using a dead weight tester and mercury manometer. Includes measurement problems and trouble-shooting.

**OP 200**
**Electricity and Prime Movers I**
**3 Credits Class 2 Lab 3**
Maintenance and trouble-shooting of electrical components and control devices commonly used in oil field applications as related to pumping units, compressors, brine disposal operations and other associated equipment.

**OP 201**
**Electricity and Prime Movers II**
**3 Credits Class 2 Lab 3**
Use of state-of-the-art compressor control panels, brine disposal controls and associated equipment. Troubleshooting and maintenance of all types of electrical equipment commonly used in the oil field. Prerequisite: OP 200.

**OP 205**
**Well Evaluation Techniques**
**3 Credits Class 2 Lab 3**
Basic well logging designed for the student with little or no knowledge of the subject. Emphasizes interpretation of the results of log calculations and how to obtain the data from well logs. Emphasizes the Appalachian Basin, open-hole analysis, core evaluation, mud logs and other mechanical logs.

**OP 206**
**Advanced Drilling Techniques**
**3 Credits 2 Class Lab 3**
Methods used to control wells, a study of drilling fluids, problems in rig safety and the economics of drilling operations. Prerequisite: OP 107.

**OP 207**
**Production/Transmission Pressure Regulation I**
**3 Credits Class 2 Lab 3**
Regulation devices used in industrial applications. Sizing, installation, operation, tear down and repair. Hands-on training in operating and maintaining the various regulating devices available to industry.

**OP 208**
**Production Economics**
**4 Credits Class 4 Lab 0**
Operation costs, factors in determining profit and loss and methods and procedures for keeping records for individual wells and leases. Emphasizes the student's role as a positive economic force. Prerequisites: OP 103 and OP 108.

**OP 209**
**Well Workovers**
**3 Credits Class 2 Lab 3**
Methods, procedures and techniques for repairing a downhole problem or reworking an oil well in order to increase production. Includes training in the use of servicing tools.

**OP 210**
**Advanced Petroleum Applications**
**3 Credits Class 2 Lab 3**
Problems encountered in well production including the areas of pumping, brine disposal and secondary recovery. Prerequisites: OP 102 and OP 204.

**OP 215**
**Production Compressors**
**3 Credits Class 2 Lab 3**
Skills required to operate, maintain and troubleshoot compressors used for wellhead applications. Through hands-on training, students learn to troubleshoot electrical controls, unloading valves and the compressor block. Includes sizing, installation and preventative maintenance.

**OP 217**
**Gas Measurement Instrumentation**
**3 Credits Class 2 Lab 3**
Operation, maintenance and calibration of pressure and temperature compensating devices used in gas measurement applications. Dead weight testers, mercury manometers and calibration procedures.

**OP 230**
**Production/Transmission Pressure Regulation II**
**3 Credits Class 2 Lab 3**
Regulating devices associated with natural gas production and transmission. Pilot operated, back pressure and control/monitor regulators. Includes extensive hands-on training with devices directly applicable to the working environment.

**OP 290**
**Special Topics in Oil Well Drilling and Production**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by the participants in a group.

**OP 291**
**Individual Study in Oil Well Drilling and Production**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**OP 292**
**Field Experience in Oil Production**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in an oil production facility through special arrangement with an instructor.

**OP 294**
**Oil Well Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**OP 295**
**Oil Production Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**OP 296**
**Oil Well Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**OP 298**
**Oil Well Production Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**OP 299**
**Oil Well Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Police Science

**PSCI 105**
**Tactical Patrol Procedures**
**3 Credits Class 2 Lab 3**
Study and practice of duties for the police officer on the street including the tactics, procedures and guidelines for safely and legally answering all types of calls.

**PSCI 106**
**Police Communication Operations**
**2 Credits Class 2 Lab 2**
Procedures of public safety dispatching including LEED's operation. APCD certification.

**PSCI 108**
**Defensive Driving and Cruiser Operations**
**1 Credit Class 1 Lab 1**
Public safety vehicle operation as well as development of driver skills in a vehicle driving range.

**PSCI 140**
**Investigations Techniques and Methods**
**3 Credits Class 3 Lab 2**
Crime scene processing and follow-up investigation.

**PSCI 180**
**Criminalistics I**
**3 Credits Class 2 Lab 4**
Fingerprint systems used in the criminal justice systems. Includes the Henry and the N.C.I.C. methods of fingerprint classification and methods used to take major crime prints and rolled fingerprints.

**PSCI 200**
**Police Performance Objectives Seminar**
**1 Credit Class 1 Lab 1**
Reviews performance objectives presented in the Hocking College (Blend) Policy Academy or the Hocking College (Basic) Police Academy. Students must be eligible to take the state OPOTC test.

**PSCI 205**
**Advanced Patrol Procedures**
**3 Credits Class 2 Lab 3**
Practical, safe and professional techniques in dealing with problems encountered by police. Includes a comprehensive examination of traffic and crowd control functions and techniques. Prerequisite: PSCI 105.

**PSCI 210**
**Crime Prevention and Community Relations**
**2 Credits Class 1 Lab 4**
Methods used by criminal justice personnel in crime prevention and community relationships including programs and systems.

**PSCI 216**
**Police Firearms**
**3 Credits Class 2 Lab 4**
Introduction to modern police firearms. Nomenclature, weapons care, proper use, restrictions, liability, transporting arms and safety procedures. Includes range practice. Prerequisite: Instructor permission.

**PSCI 217**
**O.P.O.T.C. Firearms Requalification Program**
**0.5 Credit Class 0.5 Lab 0.5**
Review of the individual's departmental use of force policy. Proper safety procedures, general safety, range safety and safety at home will be discussed. Includes range qualification under OPOTC standards. Prerequisite: PSCI 215 or PSCI 216 or PSCI 250.

**PSCI 223**
**Criminal Evidence**
**3 Credits Class 3 Lab 2**
Rules of evidence applied by the courts. Contrasts the Federal Rules of Evidence, the Ohio Rules and the Common Rules and their applications. Prerequisite: Instructor permission.

**PSCI 235**
**Police Report Writing**
**2 Credits Class 2 Lab 1**
Writing effective police reports. The participant learns to find and record all relevant facts, analyze and organize findings as well as distinguish fact from hearsay, conclusion and opinion and communicate all relevant findings in a well-written report. Prerequisite: COMM 122.

**PSCI 240**
**Advanced Investigation**
**3 Credits Class 2 Lab 5**
Major case preparation and analysis including homicide investigation procedures and forensic techniques. Prerequisite: PSCI 140.

**PSCI 245**
**Accident Investigation**
**3 Credits Class 3 Lab 2**
Techniques used in vehicle traffic accident investigation including report writing, scene reconstruction and analysis of causes.

**PSCI 246**
**Homicide Investigation**
**3 Credits Class 3 Lab 0**
Problems and considerations relevant to conducting a homicide investigation. Includes a review of the special procedures, investigative techniques and latest laboratory analysis used by the investigator.

**PSCI 248**
**Unsolved Homicides**
**0.25-5 Credits Class 0.25-5 Lab 0**
Case studies applying investigative law enforcement techniques to currently unresolved homicides.

**PSCI 249**
**British Law Enforcement**
**1 Credit Class 1 Lab 0**
Provides American police officers with the opportunity to observe and experience British law enforcement operations. Structured activities create an understanding of the operational and jurisdictional issues and functions of the London Metropolitan Police. Students gain technical knowledge of advanced criminalistics through observation and demonstrations at the London Metropolitan Forensic Laboratory. Criminal investigation methods and issues will be presented and discussed by detectives from Scotland Yard. Prerequisite: Peace Officer Certification or instructor permission.

**PSCI 250**
**Peace Officer Basic Training**
**18 Credits Class 12 Lab 18**
Prepares the individual for a career in law enforcement. Introduction to performance objectives outlined by the Ohio Peace Officer Training Council. Upon successful completion the student will be eligible for the Ohio Peace Officer certification exam.

**PSCI 260**
**Interviewing and Interrogation**
**2 Credits Class 2 Lab 2**
Tactics and techniques of the art of interrogation. Emphasizes methods to properly and adequately solicit information to solve crime.

**PSCI 270**
**Police Administration**
**3 Credits Class 3 Lab 1**
Introduction to the administration of policing agencies. Basic organizational and management principles and individual line and staff elements in terms of their purpose, organization and administration.

**PSCI 280**
**Criminalistics II**
**3 Credits Class 2 Lab 5**
Scientific methods of investigation. Recognizing, gathering, preserving, evaluation and processing evidence. Includes the physical technologies used in processing criminal evidence in the police laboratory.

**PSCI 281**
**Criminalistics III**
**3 Credits Class 2 Lab 5**
Procedures used to analyze evidence in the police laboratory. Practical application is used to study the procedures of taking evidence from the crime scene, processing evidence to establish association with known standards and applying results to the criminal justice system.

**PSCI 282**
**Current Topics in Police Science**
**0.25-5 Credits Class 0.25-5 Lab 0**
Current topics and issues as well as new developments in the field of law enforcement are reviewed, studied and discussed.

**PSCI 283**
**Special Operations in Law Enforcement**
**5 Credits Class 5 Lab 5**
Concepts and practices of special operations including communications, team management, team movement and tactics, close quarter firing techniques, and first aid. Prerequisite: Second year Police Science or Human and Correctional Services student.

**PSCI 283A**
**Special Operations in Law Enforcement Level I**
**1 Credit Class 1 Lab 1**
Concepts and practices of special operations and where special operations fall in the law enforcement mission. Prerequisite: Second year Police Science or Human and Correctional Services student.

**PSCI 283B**
**Special Operations in Law Enforcement Level II**
**1 Credit Class 1 Lab 1**
Team management, communications and first aid. Prerequisites: Second year Police Science or Human and Correctional Services student and PSCI 283A.

**PSCI 283C**
**Special Operations in Law Enforcement Level III**
**1 Credit Class 1 Lab 1**
Firearms instruction with primary focus on close quarters firing techniques.
Prerequisites: Second year Police Science or Human and Correctional Services student, PSCI 283A and PSCI 283B.

**PSCI 283D**
**Special Operations in Law Enforcement Level IV**
**1 Credit Class 1 Lab 1**
Training in team movement and tactics. Prerequisites: PSCI 283A, PSCI 283B and PSCI 283C.

**PSCI 283E**
**Special Operations in Law Enforcement-Level V**
**1 Credit Class 1 Lab 1**
Advanced training in team movement and tactics. Prerequisites: PSCI 283A, PSCI 283B, PSCI 283C and PSCI 283D.

**PSCI 290**
**Special Topics in Police Science Technology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**PSCI 291**
**Individual Study in Police Science Technology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**PSCI 292**
**Field Experience in Police Science**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a police facility through special arrangement with an instructor.

**PSCI 294**
**Police Science Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**PSCI 295**
**Police Science Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with Practicum. Concurrent with PSCI 296. Prerequisite: Instructor permission.

**PSCI 295A**
**Police Science Practicum Seminar**
**1 Credit Class 1 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**PSCI 295B**
**Police Science Practicum Seminar**
**1 Credit Class 1 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**PSCI 296**
**Police Science Practicum**
**2-4 Credits Class 1-2 Lab 7-14**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation. Concurrent with PSCI 295. Prerequisite: Instructor permission.

**PSCI 296A**
**Police Science Practicum (Communication)**
**2 Credits Class 1 Lab 7**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**PSCI 296B**
**Police Science Practicum (Patrol)**
**2 Credits Class 1 Lab 7**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**PSCI 297**
**Police Science Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**PSCI 298**
**Police Science Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**PSCI 299**
**Police Science Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Psychology

**PSYC 119**
**Women's Issues**
**1 Credit Class 1 Lab 0**
Issues in the personal and professional growth of women. Each participant will explore individual feelings and attitudes toward these issues.

**PSYC 120**
**Women's Retreat**
**1 Credit Class 1 Lab 0**
Addresses personal growth issues pertaining to women. With activities, films and literary reflections as components of the course, each woman has the opportunity to share as individuals and as group members.

**PSYC 121**
**Women in Transition**
**3 Credits Class 3 Lab 0**
Personal growth issues of women. Exploring and experiencing feelings contributing to women's self-awareness. Women have an opportunity to share themselves as individuals and group members. This course is a substitute for Interpersonal Relationships.

**PSYC 122**
**Life Transitions**
**3 Credits Class 3 Lab 0**
Personal growth issues of men and women based on the premise that new behavior patterns need to be established as we continue through adulthood. Includes exercises in personal development, analysis, reflection and discussion for understanding behavior.

**PSYC 123**
**Women's Lives Around the World**
**1 Credit Class 1 Lab 0**
Themes and diversities in the lives of women in other parts of the world. Guest speakers from other cultural backgrounds will share their experience and knowledge on what it means to be women in their corners of the world.

**PSYC 140**
**Issues in Child Development**
**4 Credits Class 4 Lab 0**
Child development issues are explored within four separate class modules: special needs children, developmentally appropriate discipline, communicating with children and adolescents and infancy.

**PSYC 140A**
**Special Needs Children**
**1 Credit Class 1 Lab 0**
Children's differences and the practices related to meeting special needs. Topics include mental giftedness, developmental delays, physical challenges, learning disabilities and emotional disturbances.

**PSYC 140B**
**Developmentally Appropriate Discipline**
**1 Credit Class 1 Lab 0**
Principles and theories of child discipline based on developmentally appropriate practices.

**PSYC 140C**
**Communicating with Children and Adolescents**
**1 Credit Class 1 Lab 0**
Techniques for communicating with children and adolescents to enhance social and emotional development. Theories of language development will be integrated.

**PSYC 140D**
**Infancy**
**1 Credit Class 1 Lab 0**
Physical, emotional, social and cognitive development in infancy.

**PSYC 150 PACE**
**Introduction to Psychology**
**3 Credits Class 3 Lab 0**
Background, development and current thinking in psychology. Overview of major areas of psychology emphasizing learning, memory, intelligence, consciousness, personality and abnormal behavior.

**PSYC 151 PACE**
**Developmental Psychology**
**3 Credits Class 3 Lab 0**
Physical, emotional, social and intellectual development of an individual from conception to death. Emphasizes normal growth and development of the individual with discussion of genetic and environmental factors that can cause developmental abnormalities.

**PSYC 152**
**Abnormal Psychology**
**3 Credits Class 3 Lab 0**
Characteristics of emotional disturbances, mental illnesses and related social deviance in the United States. Includes identification, diagnosis and treatment of mental disturbances.

**PSYC 154**
**Interpersonal Communications**
**3 Credits Class 3 Lab 0**
Familiarization with interpersonal processes through lecture, discussion and experiential tasks. Information presented is aimed at personal growth and development leading to enhanced relationships.

**PSYC 155**
**Human Sexuality**
**3 Credits Class 3 Lab 0**
A frank discussion course in human sexuality including physiological aspects. Considers the broad spectrum of sexuality including those practices that deviate and those that may be considered pathological. Emphasizes the positive nature of sexuality.

**PSYC 160**
**Behavioral Science Statistics**
**5 Credits Class 5 Lab 0**
Measures of central tendency, variability and correlation. Sampling distributions and statistical inference. Simple tests of hypotheses.

**PSYC 162**
**Child and Adolescent Development**
**4 Credits Class 4 Lab 0**
Physical, emotional, social and intellectual development of an individual from conception through adolescence. Emphasizes normal growth and development of the individual with discussion of genetic and environmental factors that can cause developmental abnormalities. Prerequisite: PSYC 150.

**PSYC 290**
**Special Topics in Psychology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

PSYC 291
**Individual Study in Psychology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Real Estate

RE 101
**Real Estate Principles**
**3 Credits Class 3 Lab 0**
Introduction to real estate as a business and profession. Includes license, law, ethics, purchase agreements, escrow and title work, advertising, appraisals, sales, market trends, taxes, assessments and the role and influence of real estate in the economy.

RE 102
**Real Estate Law**
**3 Credits Class 3 Lab 0**
Legal phase of realty transactions from the listing of the property to the closing of the escrow. Review for owners, brokers, salesmen, mortgage and escrow officers.

RE 103
**Real Estate Finance**
**3 Credits Class 3 Lab 0**
Financial instruments, availability of mortgage credit, risk analysis and federal agencies influencing real estate transactions.

RE 104
**Real Estate Appraisal**
**3 Credits Class 3 Lab 0**
Real estate appraisal concerns in estimating the value of property. Includes salvage, book, investment, esthetic, sentimental, cash, replacement and market values; how these values are related to real property values and how appraisal values can then be used.

RE 110
**Land Title Search**
**3 Credits Class 3 Lab 0**
Information and practice in searching out a title to real estate.

RE 290
**Special Topics in Real Estate**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

RE 291
**Individual Study in Real Estate**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Recreation

REC 110
**Chainsaw Operation**
**1 Credit Class 1 Lab 1**
Operation and maintenance of chainsaws used in the maintenance and management of recreation and wildlife areas. Designed for individuals unfamiliar with safety and operation techniques.

REC 113
**Watercraft Operations and Maintenance**
**2 Credits Class 1 Lab 3**
Use and maintenance of canoes, rowboats, outboard motors and other boating equipment. State laws regarding boating and safety on Ohio waterways. Lifesaving techniques, swamping and uprighting of canoes and rowboats, reentry of craft, canoe strokes, rowboat handling techniques, canoeing and rowboating on flat and moving water and the use of outboard motor and craft.

**REC 114**
**Recreation Employment Seminar**
**1 Credit Class 1 Lab 1**
Speakers from a variety of agencies concerned with the management of natural resources participate in this course. Covers educational requirements of prospective employees, projection of job opportunities and methods of applying for specific jobs.

**REC 115**
**Interpretive Methods**
**3 Credits Class 2 Lab 3**
Interpretive theories and philosophies. Principles and concepts of sound interpretive planning and delivery. Includes various media utilized in the interpretive process.

**REC 116**
**Introduction to Cultural Interpretation**
**2 Credits Class 1 Lab 3**
Interpretive training related to guided programming exhibits, activities, self-guided tours, brochure development, living history techniques, stand up talks and slide programs and audio tape tours.

**REC 117**
**Interpretive Interaction Techniques**
**2 Credits Class 1 Lab 3**
Effective interaction with the audience during a presentation. Non-verbal skills, talents, gimmicks and innovative techniques are used to build a repertoire for naturalists, tour guides, teachers, speakers or anyone who communicates.

**REC 118**
**Historical Perspectives**
**2 Credits Class 1 Lab 3**
Historical research as related to interpretive programming. Examination of the settlement and growth of the Hocking Valley through the use of archival materials, libraries, private collections and other resources.

**REC 120**
**Woodshop**
**1 Credit Class 0 Lab 3**
Development of correct safety habits in the use of power equipment and hand tools. Emphasizes operational safety techniques, daily routine machinery inspections and minor maintenance repairs and personal and group safety rules. The care, use and maintenance of hand tools, power tools and woodworking machinery will be stressed throughout the course.

**REC 121**
**Ohio Trees**
**2 Credits Class 1 Lab 3**
Identification of Ohio trees in the winter condition by sight and by using keys, buds, twigs, fruit, bark and growth habitats.

**REC 122**
**Game Animals of East Central U.S.**
**3 Credits Class 2 Lab 3**
Life history, habitat and distribution of common game animals of the East Central United States. Includes sexing and ageing techniques, waterfowl identification, track and scat identification, food analysis, study of skin preparation and small mammal identification.

**REC 123**
**Cartography**
**2 Credits Class 1 Lab 3**
Theoretical understanding of maps and map making are combined with technical exercises designed to help the student manipulate, enlarge and transcribe maps for other uses.

**REC 124**
**Adaptive Recreation**
**3 Credits Class 1 Lab 6**
Developing recreational activities for persons with handicapping conditions. Training occurs by working directly with children and adults within schools and special facilities.

**REC 130**
**Recreation Area Equipment**
**1 Credit Class 1 Lab 1**
Maintenance and operation of tractors and farm machinery used in wildlife areas. Operational skills are designed for individuals unfamiliar with safety and operational knowledge of tractors and farm machinery use.

**REC 131**
**Field Biology**
**3 Credits Class 2 Lab 3**
Identification of the spring flowering plants; life histories, habitat requirements and field identification of reptiles, aquatic insects and amphibians. Includes an introduction to fresh water ecology.

**REC 132**
**Geology**
**3 Credits Class 2 Lab 3**
Introduction to the scope and purpose of the science of geology. Basic considerations and minerals, the conditions and processes that form the earth and how these earth forming processes affect man and man's use of the earth.

**REC 134**
**Environmental Issues**
**3 Credits Class 2 Lab 3**
Human influence on the environment including land, water, air, hazardous waste, noise and population. Awareness, observation and evaluation of these problems are included.

**REC 136**
**Wildlife Investigation Techniques**
**2 Credits Class 1 Lab 3**
Techniques used to evaluate wild game populations. Includes auditory surveys, trapping, habitat evaluation investigations, photographic techniques, project planning and reporting, use of wildlife literature, preservation of biological materials and improvement of field habits.

**REC 140**
**Camp Counseling**
**3 Credits Class 3 Lab 0**
Needs of summer youth camps and resident outdoor programs in the public schools. Responsibilities as camp counselors to the camp director, campers, parents, other counselors and the program.

**REC 141**
**Nature Center and Museum Operations**
**2 Credits Class 1 Lab 7**
Practical, hands-on experience in nature centers and museums. Landscaping, building restoration, exhibitory and programming tasks included. Prerequisites: REC 115 and REC 150.

**REC 142**
**Recreation for Special Populations**
**3 Credits Class 2 Lab 3**
Knowledge and skills needed to work confidently and effectively with special populations such as those with national and cultural differences, cultural disadvantages, physical and mental disabilities and the elderly. Focuses on working in a recreational hospitality setting.

**REC 150**
**Introduction to Interpretation**
**2 Credits Class 0 Lab 6**
Orientation to the field of interpretation. Field trips to interpretive facilities to observe professional interpreters.

**REC 160**
**Survival Techniques for Wildlife Areas**
**3 Credits Class 2 Lab 3**
Introduction to wilderness survival techniques including compass and map reading, construction of emergency shelters, controlled fires, personal hygiene in the wilderness setting, preparation of native foods, survival medical treatment and health care techniques.

**REC 161**
**Ichthyology**
**3 Credits Class 2 Lab 3**
Identification, ecology and morphology of Ohio fish species. Includes field and laboratory identification, use of taxonomic keys, fish community sampling methods and community assessment indices.

**REC 200**
**Wildlife Field Research**
**3 Credits Class 1 Lab 6**
Participants function as a team while collecting data for wildlife research projects. Field work may include radiotelemetry, live-trapping, raptor hacking, plant species inventories and migratory bird banding. Prerequisites: REC 122 and REC 136 or instructor permission.

**REC 209**
**Terrestrial Ecology**
**3 Credits Class 2 Lab 3**
Relationship and components of Ohio's terrestrial ecosystems. Lab and field work includes the measurement and analysis of the various communities with the flora, fauna, soil, light and moisture.

**REC 210**
**Woodland Ecology**
**3 Credits Class 2 Lab 3**
Local plant communities, succession and forest types, major North American vegetation types and the ecology of Ohio. Analysis of vegetation types in various communities by the use of plot surveys and line transects. Prerequisite: NR 111 or REC 121.

**REC 213**
**Fish Ecology**
**3 Credits Class 2 Lab 3**
Identification, ecology and morphology of fish. Influence of aquatic organisms on abundance of fish, recognition of various aquatic habitat types and methods of sampling fish populations.

**REC 215**
**Wildlife Management I**
**3 Credits Class 2 Lab 3**
Theory and techniques of wildlife management with emphasis on forest game. Includes habitat evaluation, habitat management planning, species management, censusing, population dynamics, ageing and sexing, wildlife and waterfowl identification. Prerequisite: REC 122.

**REC 217**
**Aquatic Ecology**
**3 Credits Class 2 Lab 3**
Aquatic ecosystems including lakes, rivers and wetlands. Emphasis on hydrology, interrelationships and identification of major communities and community assessment.

**REC 221**
**Fish Management I**
**3 Credits Class 2 Lab 3**
Physical, chemical, biological and sociological factors which influence fisheries and their management. Techniques of monitoring and influencing the factors are practiced in laboratory. Prerequisites: REC 161 and REC 217.

**REC 222**
**Recreation Area Maintenance**
**2 Credits Class 1 Lab 3**
Planning, development, operation and management of outdoor recreation facilities such as trails, campgrounds, picnic areas and water areas. Prerequisites: REC 110, REC 120 and REC 130.

**REC 226**
**Development and Design of Outdoor Studies Situations**
**3 Credits Class 2 Lab 3**
Survey of existing and potential outdoor education sites. Evaluating areas for safety and identifying activities that best show the ecological concepts of the site. Prerequisite: NR 264 or REC 236 or instructor permission.

**REC 232**
**Park Landscaping**
**3 Credits Class 2 Lab 3**
Horticultural requirements associated with operation of park wildlife areas. Includes soils, fertilizing, liming, seeding, transplanting large trees and shrubs, grafting, pruning, pesticides and their control and lawn establishment.

**REC 233**
**Ornithology**
**3 Credits Class 2 Lab 3**
Study of local birds including both migrants and residents. Habitat requirements, nesting habits, general behavioral patterns and anatomical characteristics are studied.

**REC 234**
**Archaeology**
**3 Credits Class 3 Lab 1**
The goal of archaeology is to better understand the present by understanding the past through examining the reciprocal effects of man and technology.

**REC 235**
**Guided Interpretive Activities**
**2 Credits Class 1 Lab 3**
Principles and practices necessary to prepare and conduct guided visitor activities such as nature walks and slide programs. Interpretive principles, professionalism and communication skills are discussed and practiced in classroom and field situations.

**REC 236**
**Exhibit and Visitor Center Design**
**2 Credits Class 1 Lab 3**
Graphic and interpretive principles used to effectively communicate in interactive and non-interactive exhibits. Principles of lighting, symmetry, flow and labeling are emphasized. Prerequisite: REC 115 or instructor permission.

**REC 237**
**Self Guided Interpretive Activities**
**2 Credits Class 1 Lab 3**
Self-guiding interpretive activities including signs and labels, trails, auto tours, tape recordings, and interpretive publications. Emphasizes design and layout of self-guiding systems as well as production of support media. Prerequisite: REC 115 or instructor permission.

**REC 238**
**Fish Management II**
**4 Credits Class 2 Lab 6**
Methods and techniques used in sampling fish populations and aquatic environments. Evaluation and application of fish management techniques. Prerequisite: REC 221.

**REC 239**
**Wildlife Management II**
**4 Credits Class 3 Lab 4**
Techniques of manipulating wildlife populations through management. Includes field work in public wildlife areas. Prerequisites: REC 110, REC 122, REC 130 and REC 215.

**REC 240**
**Environmental Enforcement Problems**
**2 Credits Class 2 Lab 2**
Specific problems in natural resources enforcement related to air, water, forestry, wildlife and reclamation. Individual and corporate violations are studied.

**REC 241**
**Fish Hatchery Management**
**4 Credits Class 2 Lab 6**
Aspects of fish culture including warm water, cool water and cold water species. Emphasizes nutrition, disease and water quality. Prerequisites: NR 131, REC 213 and REC 221.

**REC 243**
**Living History Techniques**
**2 Credits Class 1 Lab 3**
Processes of historical interpretation which utilizes third and first-person techniques. It is a period research and characterization course and requires each participant to develop a character which is in keeping with the period and assigned theme. The importance of research in revealing the people, lifestyles, mannerisms, dress, industry, education, medicine, politics and religion of the period is emphasized. Prerequisites: REC 115 and REC 118.

**REC 244**
**Land Management and Soils**
**3 Credits Class 2 Lab 3**
Landscape management techniques and the principles of soil science are combined to provide a comprehensive perspective of natural resource management as it relates to landscaping, soil conservation and soil management.

**REC 245**
**Wildlife Investigation Techniques II**
**1 Credit Class 0 Lab 3**
Offered to those who completed REC 136 and have excelled in field data collection techniques and seek to enhance supervisory skills. Prerequisite: REC 136 or instructor permission.

**REC 251**
**Big Game and Furbearer Management I**
**3 Credits Class 1 Lab 6**
Theory and techniques of wildlife management as it pertains to big game and furbearing mammals, particularly species indigenous to Ontario, Canada. Emphasizes practical data collection and measurement of individual specimens and populations. Prerequisites: REC 122 and REC 215 or instructor permission.

**REC 252**
**Big Game and Furbearer Management II**
**3 Credits Class 1 Lab 6**
Managing big game and furbearers indigenous to Ontario. Emphasizes fur handling and management of the fur resource including humane care and treatment of furbearers. Moose and white-tailed deer harvest will be examined in terms of big game species. Prerequisites: REC 122 and REC 215 or instructor permission.

**REC 269**
**Field Ichthyology: Lotic Investigations**
**3 Credits Class 1 Lab 6**
Field operations including the sampling of river habitats with electroshocking apparatus. Field work will extend to detailed note taking and habitat assessment. Laboratory work will include preservation and cataloging specimens. Prerequisite: REC 238.

**REC 270**
**Field Ichthyology: Lentic Investigations**
**3 Credits Class 1 Lab 6**
Field operation including sampling of oligiotropitic systems of northern environments. Field work includes electroshocking, gill netting, trap netting, water chemistry and habitat evaluation. Water chemistry, habitat evaluation and biostatistics. Prerequisite: REC 238.

**REC 271**
**Fish Disease/Pathology**
**1 Credit Class 1 Lab 2**
Fish disease and pathology. Focuses on common cool and warm water pathogens.

**REC 290**
**Special Topics in Recreation and Wildlife**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**REC 291**
**Individual Study in Recreation and Wildlife**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**REC 292**
**Field Experience in Recreation and Wildlife**
**1-3 Credits Class 0 Lab 12-36**
On-the-job training in a recreation and wildlife facility through special arrangement with an instructor.

**REC 294**
**Recreation and Wildlife Cooperative Work Experience/Seminar**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week. Concurrent with REC 295. Prerequisites: REC 110, REC 120 and REC 130.

**REC 295**
**Recreation and Wildlife Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum. Concurrent with REC 294. Prerequisites: REC 110, REC 120 and REC 130.

**REC 296**
**Practicum in Recreation and Wildlife**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**REC 297**
**Recreation and Wildlife Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**REC 298**
**Recreation and Wildlife Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**REC 299**
**Recreation and Wildlife Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Retail Marketing Management

**RET 100**
**Retail Management**
**3 Credits Class 2 Lab 3**
Introduction to the retail industry from a management perspective. Structure and opportunities in retailing, franchising, location and layout, organization, sales promotion, customer services, merchandise management and control, buying procedures, mark-up, pricing, stock turnover and analysis of current merchandising policies.

**RET 210**
**Retail Buying**
**3 Credits Class 2 Lab 3**
The buying function and its place within the retail organization. Resources, product differentiation, buying techniques and practices, merchandising at different levels and pricing. Prerequisite: BUS 245.

**RET 220**
**Advertising**
**3 Credits Class 3 Lab 2**
External advertising for a retail operation covering basic advertising areas including television, radio, newspaper, magazine, direct mail and outdoor. Concentration on practical matters of budgeting, media selection, copywriting, layout and design, campaign construction and market segmentation. Prerequisite: BUS 110.

**RET 230**
**Retail Store Operations**
**1-5 Credits Class 1-5 Lab 0**
Daily operations in retail institutions. Emphasizes the role and responsibility of the manager.

**RET 235**
**Principles of Apparel Management**
**3 Credits Class 3 Lab 2**
Basic principles in textiles and fashion. Provides a foundation for understanding the apparel industry and applying its concepts to the business world.

**RET 290**
**Special Topics in Retail Marketing Management**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

## Sawmill/Lumber Grading

**SLG 110**
**Lumber Grading I**
**4 Credits Class 2 Lab 6**
Understanding and use of the rules of the National Hardwood Lumber Association (NHLA). Topics include lumber tally and handling techniques, wood identification and upgrading of lumber.

**SLG 111**
**Log Grading and Scaling**
**2 Credits Class 1 Lab 3**
Measurement and quality evaluation of hardwood sawlogs as practiced in the hardwood industry.

**SLG 130**
**Lumber Grading II**
**12 Credits Class 6 Lab 18**
Develops increased speed and accuracy while applying NHLA special grades, species grades, species identification and lumber upgrading techniques. Lumber handling, inventory and storage techniques are explored as well as lumber markets and marketing. Prerequisite: SLG 110.

## Security and Police Sciences

**SEPS 100**
**Introduction to Security**
**3 Credits Class 3 Lab 0**
Historical, philosophical and legal bases of the security profession. A review of the various types of security roles.

**SEPS 106**
**Retail Security**
**1-5 Credits Class 1-5 Lab 0**
Introduction to the responsibility of security departments at institutions such as hospitals, schools, museums and other public buildings. Includes analysis of special security problems encountered in these institutional settings.

**SEPS 201**
**V. I. P. Protection**
**1 Credit Class 1 Lab 2**
Executive protection functions and responsibilities. Includes special areas of security procedures, terrorism, authority, communication, emergency procedures, post, patrols, advances and travel.

**SEPS 205**
**Correctional Security**
**3 Credits Class 3 Lab 0**
Maintaining security in a criminal justice setting. Focus on the relationship between security and treatment, various roles of security within criminal justice agencies and security technology. Security practices to be studied include theory of searches, restraining procedures and offender supervision. Prerequisite: CORR 100.

**SEPS 206**
**Industrial Security**
**1-5 Credits Class 1-5 Lab 0**
Legal aspects of patrol functions, gate duty, fixed-post loss prevention and special situations encountered in the industrial setting.

**SEPS 207**
**Bank Security**
**3 Credits Class 3 Lab 0**
Security measures for banks and other financial institutions and the rules establishing minimum standards under current federal and state legislation.

**SEPS 208**
**Private Security**
**4 Credits Class 3 Lab 3**
A comprehensive overview of the private security function including investigative skills, legal considerations, court procedures and disaster planning.

**SEPS 211**
**Security Intelligence**
**3 Credits Class 3 Lab 0**
Developing an intelligence unit within a law enforcement agency as well as the constitutional questions related to collecting and dispersing intelligence information.

**SEPS 250**
**Private Security Training**
**12 Credits Class 8 Lab 12**
Performance objectives outlined by the Ohio Peace Officer Training Council required for obtaining certification as a private security officer in the state of Ohio. Introduction to laws, policies, procedures and techniques necessary to become employed and practice successfully as a private security officer in private or public institutions.

**SEPS 270**
**Security Administration**
**3 Credits Class 3 Lab 0**
Principles of supervision and leadership as well as an exploration of various administrative and organizational approaches to security organizations and operations.

**SEPS 274**
**Security Research**
**3 Credits Class 3 Lab 0**
Overview of existing research in the security field and its application to present and future security operations. Analysis of risk management through a security needs assessment survey.

**SEPS 290**
**Special Topics in Security**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**SEPS 291**
**Individual Study in Security**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**SEPS 292**
**Field Experience in Security**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a security facility through special arrangement with an instructor.

**SEPS 294**
**Security Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**SEPS 295**
**SEPS Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**SEPS 296**
**Security Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**SEPS 297**
**Security Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

## Sociology

**SOCI 120**
**Parenting Issues**
**1 Credit Class 1 Lab 0**
Focus on issues in parenting. Attention is given to acquiring skills to improve parent-child relationships.

**SOCI 121**
**Parenting**
**3 Credits Class 3 Lab 0**
Parenting issues and parenting skills. Through an overview of child development, the student is exposed to how both parent and child shape one another's behavior. Primary focus on interactional and social patterns in parent-child relationships.

**SOCI 135**
**Social Problems**
**1 Credit Class 1 Lab 0**
Focus on social issues that confront modern American society. Issues are identified, defined and analyzed.

**SOCI 150**
**Cultural Diversity Issues**
**1-2 Credits Class 1-2 Lab 0**
Introduction to cultural diversity in the workplace. Provides communication skills to relate to people of diverse cultural backgrounds.

**SOCI 151**
**Intercultural Experience**
**2 Credits Class 1 Lab 3**
History and culture of another country prior to the travel experience. Includes a visit to another country to learn more about the country, people and culture.

**SOCI 160**
**Introduction to Sociology**
**3 Credits Class 3 Lab 0**
Aspects of human society and social behavior. Theory, current thinking and contemporary social issues are the focus for discussion. Includes topics in normative and deviant behavior, social institutions and social stratification.

**SOCI 161**
**Sociology of Family Living**
**3 Credits Class 3 Lab 0**
Examines marriage and family as social institutions in our society. Family composition, gender and sex roles, foundations of marriage, methods of communication, life cycles of the family, parenting and family dysfunctions. Includes cultural comparison of various family and marriage forms.

**SOCI 162**
**Social Issues**
**3 Credits Class 3 Lab 0**
Social issues and social problems confronting American society. Topics include consideration of how social issues are identified, defined, analyzed and resolved. Application of critical reading and thinking skills to a variety of social issues/ problems including homosexuality, drug abuse, violence, health care, poverty, the environment, racism, sexism and the family.

**SOCI 165**
**Cross Cultural Studies**
**3 Credits Class 3 Lab 0**
Similarities and differences of people from various racial and cultural heritages. Includes discussion of people from diverse groups living in the United States.

**SOCI 166**
**Appalachian Ohio Culture**
**3 Credits Class 3 Lab 0**
Historical and social influences that have shaped Appalachian culture, particularly in the Ohio Appalachian region. Emphasizes history of the Ohio Appalachian region, various ethnic migrations and social groupings in the area, regional culture and significant industries in the area.

**SOCI 169 PACE**
**Human Relations in Organizations**
**3 Credits Class 3 Lab 0**
Concepts, skills and techniques which relate to the human aspects of work. Emphasis on human interaction, dynamic factors, personal development as well as legal and ethical issues in the workplace.

**SOCI 290**
**Special Topics in Sociology**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**SOCI 291**
**Individual Study in Sociology**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Supervision and Leadership

**SUPR 135**
**Supervision and Leadership Skills**
**1 Credit Class 1 Lab 0**
Skills needed in effective leadership including incorporating these skills into one's own styles of leadership.

**SUPR 230**
**Dynamic Leadership I**
**3 Credits Class 3 Lab 0**
Time management, new developments in leadership, leadership practice and theory, handling change, minimizing stress, power structures and other practical discussion terms.

**SUPR 231**
**Dynamic Leadership II**
**3 Credits Class 3 Lab 0**
Continuation of SUPR 230.

**SUPR 232**
**Dynamic Leadership III**
**3 Credits Class 3 Lab 0**
Leadership training emphasizing self and staff development techniques and leadership in a changing world of work.

**SUPR 235**
**Supervision and Leadership**
**3 Credits Class 3 Lab 0**
Designed for managers and supervisors who enter at the first line of management and supervision. Introduces the managerial processes of planning, organizing, staffing, directing and controlling.

**SUPR 236**
**Outdoor Leadership Skills**
**1 Credit Class 1 Lab 0**
Designed for the outdoor leader. Enables both the experienced and inexperienced leader to identify, develop and successfully incorporate leadership skills into the leader's own style of leadership. Focuses on definable leadership skills and how they are interrelated to develop a practical leadership style.

**SUPR 237**
**Supervision Skills for the 90's**
**0.5-3 Credits Class 0.5-3 Lab 0**
Perspectives on the supervisor's changing role with regard to organizational mission and supervisory styles. Strategies and skills for effectively communicating, developing teams, working with varying personality styles, motivating staff and handling difficult employees.

**SUPR 237A**
**Supervision Skills Overview**
**0.5-1 Credit Class 0.5-1 Lab 0**
Perspectives on the supervisor's changing role with regard to organizational mission and supervisory styles. Strategies and skills for effectively communicating, developing teams, working with varying personality styles, motivating staff and handling difficult employees.

**SUPR 237B**
**Supervision Skills Application**
**0.5-1 Credit Class 0.5-1 Lab 0**
Applications of supervisor skills from SUPR 237A. Examination of the participant's own organization in relation to supervisor skills.

**SUPR 237C**
**Supervision Skills Project**
**0.5-1 Credit Class 0.5-1 Lab 0**
Examination of topics in SUPR 237A. Participants develop a project through research, interviews, travel, community or work site investigation or other development initiatives.

**SUPR 290**
**Special Topics in Supervision and Leadership**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**SUPR 291**
**Individual Study in Supervision and Leadership**
**0.5-5 Credits Class 0.5-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

## Timber Harvesting

**THS 110**
**Tree Identification**
**2 Credits Class 1 Lab 3**
Field identification of trees native to Ohio, particularly those of commercial value. Important commercial species in the United States, but not native to Ohio, are included.

**THS 111**
**Diesel, Gas, Small Engine Repair**
**3 Credits Class 2 Lab 3**
Routine maintenance and light repair of two and four cycle internal combustion engines.

**THS 112**
**Timber Harvesting Skills I**
**6 Credits Class 2 Lab 12**
Use, operation, safety and maintenance of logging machinery including rubber-tired skidder, bulldozer and knuckleboom loader.

**THS 120**
**Hydraulics and Mechanical Systems Maintenance and Repair**
**3 Credits Class 2 Lab 3**
Theory, design and function of hydraulic systems and drive chain components of forest harvesting machinery.

**THS 121**
**Welding**
**2 Credits Class 1 Lab 3**
Joining and cutting metals using a gas and electric welding apparatus.

**THS 122**
**Timber Harvesting Skills II**
**6 Credits Class 2 Lab 12**
Continuation of THS 111. Prerequisite: THS 112.

**THS 124**
**Advanced Welding**
**3 Credits Class 2 Lab 3**
Designed for maintenance trades and kindred workers who are familiar with the basics of welding and fabrication. Advanced techniques of welding utilizing MIG, electric arc and oxyacetylene equipment. Shop set-up and applicable safety procedures are also included. Prerequisite: THS 121 or instructor permission.

**THS 130**
**Timber Harvesting Skills III**
**9 Credits Class 2 Lab 22**
Development of entry-level logging skills utilizing chainsaws, crawler tractor, rubber-tired skidder, knuckleboom loader and other tools, equipment and supplies involved in producing and marketing logs and pulpwood. Prerequisite: THS 112 or THS 122.

**THS 131**
**Timber Harvesting Seminar**
**3 Credits Class 3 Lab 0**
Harvesting costs and techniques applicable to eastern hardwood logging including raw material procurement and product marketing.

**THS 290**
**Special Topics in Timber Harvesting**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**THS 291**
**Individual Study in Timber Harvesting**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**THS 292**
**Field Experience in Timber Harvesting**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a timber harvesting facility through special arrangement with an instructor.

**THS 294**
**Timber Harvesting Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**THS 295**
**Timber Harvesting Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**THS 296**
**Timber Harvesting Practicum**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**THS 297**
**Timber Harvesting Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**THS 298**
**Timber Harvesting Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**THS 299**
**Timber Harvesting Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Travel and Tourism

**TRAV 101**
**Festival Operations**
**1 Credit Class 1 Lab 1**
Organization and operation of a visitor information network on the grounds of the annual Paul Bunyan Show. Emphasizes promotional skills and positive public relations.

**TRAV 110**
**Travel Agency Office Procedures**
**3 Credits Class 3 Lab 2**
Completing handwritten airline tickets, tour orders and refund forms. Tracking flow of the money collected from sales, computation of commission and the agency income statement showing income expenses resulting in net profits. Prerequisites: TRAV 131, TRAV 150 and TRAV 270.

**TRAV 131**
**Airline Reservations**
**3 Credits Class 3 Lab 1**
Introduction to System One computerized reservations systems used within the travel industry. Through the use of a live system the student gains an understanding of the computerized system of basic reservations and PNR creation. Prerequisite: TRAV 150.

**TRAV 134**
**Destination Geography**
**3 Credits Class 3 Lab 1**
Travel and tourism product knowledge and fundamental destination geography.

**TRAV 135**
**Tourism Promotion**
**3 Credits Class 3 Lab 1**
Identifies and interprets the tourism system including career opportunities, current industry research and current trends and topics for tourism in the 90's.

**TRAV 150**
**Introduction to Travel Industry**
**3 Credits Class 3 Lab 2**
Operations of the travel agency from job function to use of reference materials. Also investigates tour operation, OAG's, reservations, record-keeping and tariffs.

**TRAV 152**
**Introduction to Ecotourism**
**0.5-2 Credits Class 0.5-2 Lab 0**
Introduction to the field of ecotourism. Principles and practices of attracting and serving customers who desire an ecotourism experience. The natural resources perspective as well as tourism and hospitality principles are studied.

**TRAV 154**
**Travelogue Central U.S.A.**
**3 Credits Class 3 Lab 2**
Geography, history, economy and culture that comprise the various regions of the central United States. Emphasizes tourist attractions and scenic beauty.

**TRAV 155**
**Travelogue Eastern U.S.A.**
**3 Credits Class 3 Lab 2**
Attractions, points of interest and the most popular cities in the states east of the Mississippi.

**TRAV 156**
**Travelogue Western U.S.A.**
**3 Credits Class 3 Lab 2**
Familiarization with the western United States through research into attractions, points of interest and tourism promotion.

**TRAV 157**
**Exploring Asia and the Pacific**
**3 Credits Class 3 Lab 2**
Geography, history, economy and culture of Asia and the South Pacific. Utilization of tour planning and geographical skills in arranging and developing individual and group tours to this destination.

**TRAV 160**
**Tour Development**
**3 Credits Class 3 Lab 1**
Techniques and skills for planning, directing and promoting tours.

**TRAV 177**
**Advanced Reservations**
**3 Credits Class 3 Lab 1**
Domestic and international reservations and ticketing, pricing and fare rules as well as booking car rentals and hotel accommodations. Prerequisite: TRAV 270.

**TRAV 190**
**Exploring Ohio**
**2 Credits Class 2 Lab 1**
Tourist destinations of Ohio. Historical and cultural background, sightseeing attractions, major highways and transportation facilities to various regions are discussed.

**TRAV 191**
**Promoting Ohio**
**2 Credits Class 2 Lab 1**
Techniques and procedures required to promote tourism destinations of specific locations in Ohio. Prerequisite: TRAV 190.

**TRAV 201**
**Festival Management**
**1 Credit Class 1 Lab 1**
Development of management skills while supervising and aiding in the training and scheduling of students enrolled in TRAV 101.

**TRAV 240**
**Computer Reservation Systems**
**2 Credits Class 2 Lab 2**
Computer airline reservation systems, training and practices of Apollo, Sabre and other systems. Prerequisites: TRAV 131, TRAV 177 and TRAV 270.

**TRAV 250**
**Sales for Travel**
**3 Credits Class 3 Lab 1**
Sales and selling of travel including techniques for marketing group tours to diverse groups of individuals and methods for soliciting business. Prerequisites: TRAV 150 and COMM 130.

**TRAV 260**
**Convention and Seminar Management**
**2 Credits Class 2 Lab 2**
Organization and planning for meetings and conventions including budget, site selection, menu and program planning and marketing the event.

**TRAV 264**
**Hawaii, Alaska and Canadian Provinces**
**3 Credits Class 3 Lab 2**
Domestic/international aspects of the travel industry in relating to travel to Hawaii, Alaska and Canada. Provides an overview of the geography, history, economy and culture and emphasizes attractions and scenic beauty of the most popular destinations.

**TRAV 265**
**Mexico, Caribbean, Central and South America**
**3 Credits Class 3 Lab 2**
Domestic/international aspects of the travel industry in relation to Mexico, Caribbean and the Americas. Geography, arranging transportation via air and other modes and developing tours to popular tourist destinations.

**TRAV 266**
**European Travel**
**1-3 Credits Class 1-3 Lab 0-2**
Geography, culture and popular travel destinations of the European nations for the purpose of planning and developing individual and group tours.

**TRAV 266A**
**Travelogue: British Isles**
**1 Credit Class 1 Lab 1**
Geography, culture and popular travel destinations for the purpose of planning and developing individual and group tours.

**TRAV 266B**
**Travelogue: France**
**1 Credit Class 1 Lab 1**
Geography, culture and popular travel destinations for the purpose of planning and developing individual and group tours.

**TRAV 266C**
**Travelogue: Eastern Europe**
**1 Credit Class 1 Lab 1**
Geography, culture and popular travel destinations for the purpose of planning and developing individual and group tours.

**TRAV 267**
**Self Directed Learning in Travel**
**2 Credits Class 2 Lab 2**
Individual or group work in an area in which the student desires to expand knowledge. Involves organizing a project and field trip. Emphasizes effective decision making and understanding of the current tourism trends in the industry.

**TRAV 270**
**Intermediate Reservations**
**3 Credits Class 3 Lab 1**
Discounted air fares and qualifying rules. Procedures for booking car rentals and hotels and use of System One computerized reservation system. Prerequisite: TRAV 131.

**TRAV 280**
**Tour Directing**
**3 Credits Class 2 Lab 3**
Techniques and skills necessary for directing a tour and acting as a step-on guide for a certain area. Prerequisite: COMM 130.

**TRAV 281**
**Concierge**
**3 Credits Class 3 Lab 1**
Providing guest services to customers in specific locations. Practical application for providing personal information is incorporated.

**TRAV 282**
**Travel Show Management**
**1 Credit Class 1 Lab 0**
Marketing experience, detailed consumer travel show set-up, knowledge of local and statewide travel attractions. Includes working with the Convention and Visitor's Bureau.

**TRAV 290**
**Special Topic in Travel and Tourism**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of specific topic(s) by participants in a group.

**TRAV 291**
**Individual Study in Travel and Tourism**
**1-5 Credits Class 1-5 Lab 0**
Individual study for research. Topics are arranged on an individual basis with instructor permission.

**TRAV 292**
**Field Experience in Travel and Tourism**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a travel and tourism facility through special arrangement with an instructor.

**TRAV 294**
**Travel and Tourism Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**TRAV 295**
**Travel Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum. Prerequisite: TRAV 150.

**TRAV 296**
**Travel Industry Practicum**
**2-4 Credits Class 1-3 Lab 7-21**
Students apply classroom experience at a travel-related or tourism business for 80 - 160 hours. Prerequisites: TRAV 131 and TRAV 150.

**TRAV 297**
**Travel and Tourism Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**TRAV 298**
**Travel and Tourism Internship**
**3-6 Credits Class 0 Lab 20-40**
On-the-job training in the workplace of a cooperating agency coordinated by an instructor.

**TRAV 299**
**Travel and Tourism Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

## Tree Care

**TRC 110**
**Climbing**
**3 Credits Class 1 Lab 6**
Orientation to basic climbing equipment and its proper use in tree forestry. Saddles, climbing ropes and knots for the beginning climber. Concurrent with TRC 112, TRC 113 and TRC 115.

**TRC 112**
**Mechanics of Tree Care**
**3 Credits Class 2 Lab 3**
Common problems affecting trees and treatment of these problems including tree surgery. Concurrent with TRC 110, TRC 113 and TRC 115.

**TRC 113**
**Tree Care Equipment**
**3 Credits Class 2 Lab 3**
Selection, use and maintenance of hand tools used in tree surgery and arboriculture. Operation and maintenance of power equipment including chainsaws, chipper trucks, chipper, spray rig and stump grinder. Concurrent with TRC 110, TRC 112 and TRC 115.

**TRC 115**
**Climbing II**
**3 Credits Class 2 Lab 3**
Development of climbing skills with an emphasis on efficient movement in the trees, rigging and lowering techniques for pruning, topping and tree removal. Use of the chainsaw in trees. Concurrent with TRC 110, TRC 112 and TRC 113.

**TRC 117**
**Landscape Maintenance Lab**
**6 Credits Class 0 Lab 18**
Landscape maintenance tasks including care of lawns, trees, shrubs and flowers; repair or retaining walls, fences, walks and bridges; draining systems; and painting.

**TRC 118**
**Landscape Maintenance Lab II**
**6 Credits Class 0 Lab 18**
Continuation of TRC 117. Prerequisite: TRC 117.

**TRC 120**
**Landscaping Fundamentals**
**1 Credit Class 1 Lab 0**
Horticultural requirements of residential and recreational areas. Analyzing the landscape to fit an individual's needs, whether to aesthetically enhance the area or to solve a problem. Investigations involving soils, lawn establishment, site modification, cost estimation for landscape construction, principles of landscape design, maintaining the landscape design and ornamentals.

**TRC 122**
**Advanced Tree Care Mechanics**
**3 Credits Class 2 Lab 3**
Diagnosis of tree problems to develop appropriate treatment techniques. Tree problems diagnosed include construction, cable and lightning damage. Identification of trees that are likely to cause structural and damage to buildings and safely removing hazardous trees.

**TRC 123**
**Climbing III**
**3 Credits Class 2 Lab 3**
Practice the climbing skills learned in TRC 110 and TRC 115 to improve speed, safety and efficiency. Includes secured footlocks, use of pulleys, redirectionals, false crotches and other innovative climbing techniques.

**TRC 124**
**Rigging**
**3 Credits Class 2 Lab 3**
Application of mountaineering and rescue rigging techniques to safely work trees. Use of pulleys, lowering devices, z-drags, slings, prussick loops, slide lines and other rigging systems.

**TRC 290**
**Special Topics in Tree Care**
**0.25-5 Credits Class 0.25-5 Lab 0**
Structured exploration of a specific topic(s) by participants in a group.

**TRC 291**
**Individual Study in Tree Care**
**1-5 Credits Class 1-5 Lab 0**
Individual study or research. Topics are arranged on an individual basis with instructor permission.

**TRC 292**
**Field Experience in Tree Care**
**1-4 Credits Class 0 Lab 12-48**
On-the-job training in a tree care facility through special arrangement with an instructor.

**TRC 294**
**Tree Care Cooperative Work Experience**
**1-4 Credits Class 0 Lab 10-40**
An on- or off-campus paid work experience coordinated by a faculty member with at least one on-site visit during the quarter. Each student must be enrolled in an on-campus seminar. One credit is awarded for a minimum of ten clock hours of work experience scheduled during a standard work week.

**TRC 295**
**Tree Care Practicum Seminar**
**1-3 Credits Class 1-3 Lab 0**
Discussion of job-related concerns and assistance with practicum.

**TRC 296**
**Practicum in Tree Care**
**1-6 Credits Class 0 Lab 7-42**
The student is placed in a work environment for a minimum amount of time to gain experience before graduation.

**TRC 297**
**Tree Care Observation Hour**
**1-3 Credits Class 0 Lab 15-45**
Participation in an educational experience as observers of practitioners representative of the occupational area. The student may participate at times in the actual work activity.

**TRC 298**
**Tree Care Internship**
**3-6 Credits Class 0 Lab 20-40**
On the job training in the workplace of a cooperating agency. Coordinated by an instructor.

**TRC 299**
**Tree Care Internship Seminar**
**3 Credits Class 3 Lab 0**
Discussion of internship experiences, objectives, and evaluation.

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# Ten Great Reasons to Attend Hocking

1. Earn a two-year Associate Degree.
2. Take advantage of outstanding technical programs and low cost education.
3. Prepare for a new career or a mid-life career change.
4. Enjoy learning in a caring environment.
5. Experience practical, hands-on learning.
6. Attend college and work at the same time.
7. Acquire job skills for employment.
8. Take the first two years of study in preparation for transfer to a four-year college or university.
9. Learn from experienced and committed faculty.
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# Programs at Hocking College

**Automotive and Energy Technologies**
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- Compressor

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- Culinary Arts
- Hotel/Restaurant Management
- Office Administration
- Travel and Tourism

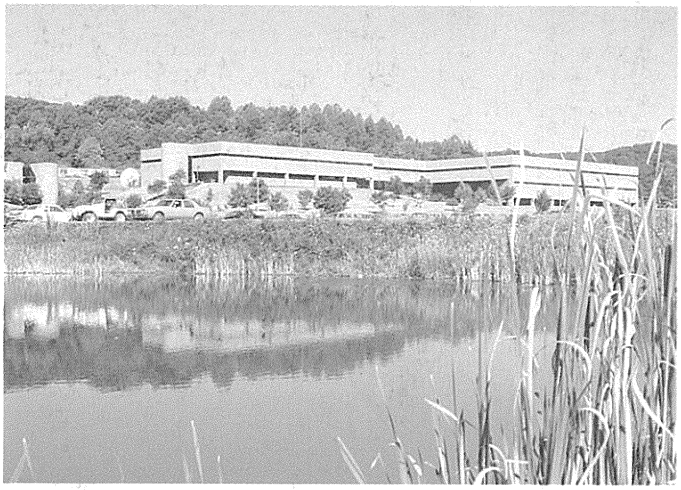
**Customized Programs**
- Associate of Individualized Studies
- Associate of Technical Studies
- University Bound

**Engineering and Science Technologies**
- Broadcast Engineering and Production
- Ceramic
- Computer Science
- Drafting and Design
- Electronic
- Industrial
- Materials
  - Industrial Plastics *

**Health Careers Technologies**
- Dietetic
- Health Information Management
- Massage Therapy
- Nanny
- Medical Assistant
- Nursing Level I (Practical Nursing)
- Nursing Level II (Associate Degree)
  (For graduates of approved practical nursing schools)
- Physical Therapist Assistant *

**Natural Resources Technologies**
- Ecotourism
- Forestry
- Geographics
- Recreation and Wildlife
  - Back Country Horsemanship
  - Fish and Wildlife Management
  - Interpretive Services
  - Ranger Services
- Timber Harvesting
- Tree Care

**Public Safety Services Technologies**
- Emergency Medical
- Fire and Emergency Services
- Human and Correctional Services
  - Juvenile Corrections
- Police Science

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**Telephone**
614 753-3591

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* New Programs
Contact the Admission Office at 1 800-282-4163, extension 2162 for more information.

**NATIONAL RANGER TRAINING INSTITUTE**
**at Hocking College.**

Page 1 of 2 pages.

MANLAND, MICHELLE MARIE KEYPUNCHED

Last Name, First Name, Middle Name

6/2/94
Date

Summer 1994
Quarter Enrolled

JUN 22 1994

492 N Nom St Southampton NY 11968
Permanent Address (Street or RR Number, City, State, Zip Code)

Suffolk
County

585-06-2516
Social Security Number

516) 287-2535
Permanent Telephone

( ) ?
Local Telephone

?
Technology

Day [ ] Evening [X]
Courses

?
Local Address (Street or RR Number, City, State, Zip Code)

( ) ?
Alternate Telephone

VA Benefits: Yes [ ] No [X]

Date of Birth 4/7/64 Age 29 U.S. Citizen: Yes [X] No [ ] Eligible Non-Citizen: Yes [ ] No [ ]

Marital Status: Married [ ] Single [X] GED or High School Graduate: Yes [X] No [ ] Year 1982 Male [ ] Female [X]

Housing: Commute From Home [ ] On-Campus [ ] Off-Campus [ ] One or More Years Ohio Resident: Yes [ ] No [X]

Race/Ethnicity: Native American [ ] Hispanic [ ] White/Caucasian [X] Afro-American [ ] Asian [ ]

Have You Ever Been A Full-Time Student at Hocking College? Yes [ ] No [X] Selective Service Number NA

Instructions: Draw A Heavy Dark Line Through Each Course In Which You DO NOT Wish To Be Enrolled.

| Course Number | Course Name | Cr | Days | Time | Dates | Lab Fee | Room | Instr |
|---|---|---|---|---|---|---|---|---|

The Seasonal Officer Training Program is composed of the courses listed in this block and successful completion of the courses qualify the graduate for a seasonal law enforcement commission by the National Park Service and the Fish and Wildlife Service. Reduced fees for HC students with one former full-time student status and for multiple agency registrants.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NR 215 215 | Vehicle Operation For Natural Resource Officers | 1 | TBA | | | | | |
| REC 240 215 | Environmental Enforcement Problems | 2 | TBA | | | | | |
| NR 269 215 | Constitutional Law For Natural Resource Officers | 3 | TBA | | | | | |
| NR 280 215 | Defensive Weapons Training For Natural Resource Officers | 3 | TBA | | | | | |
| NR 242 215 | Law, Philosophy & Objectives For Natural Resource Officers | 2 | TBA | | | | | |
| NR 243 215 | Law Problems - Recognition | 1 | TBA | | | | | |
| NR 244 215 | Vehicular Accident Investigation | 1 | TBA | | | | | |
| NR 245 215 | Public Relations For Natural Resource Officers | 1 | TBA | | | | | |
| | Seasonal Officer Training | 14 | Su-Sa | 8:00am- 5:00pm | Jun 21-Aug 11 | $ 00 | NRTCtr | Swayne |

[illegible] 6/22/94
Last Name, First Name, Middle Name — Date — Summer 1994 Quarter Enrolled

492 N. Main St. Southampton, NY. 11968 — Suffolk — 525-06-2516
Permanent Address (Street or RR Number, City, State, Zip Code) — County — Social Security Number

(516) 287-2585 — (614) 753-1135 — NRTT — Day [ ] Evening [X]
Permanent Telephone — Local Telephone — Technology — Courses

45 E. Franklin, Nelsonville, OH. 45764 — (505) 662-9026 Parents
Local Address (Street or RR Number, City, State, Zip Code) — Alternate Telephone — VA Benefits: Yes [ ] No [X]

Date of Birth 6/7/64 Age 30 — U.S. Citizen: Yes [X] No [ ] — Eligible Non-Citizen: Yes [ ] No [ ]

Marital Status: Married [ ] Single [X] — GED or High School Graduate: Yes [X] No [ ] Year 1982 — Male [ ] Female [X]

Housing: Commute From Home [ ] On-Campus [X] Off-Campus [ ] — One or More Years Ohio Resident: Yes [ ] No [X]

Race/Ethnicity: Native American [ ] Hispanic [ ] White/Caucasian [X] Afro-American [ ] Asian [ ]

Have You Ever Been A Full-Time Student at Hocking College? Yes [ ] No [X] — Selective Service Number NA

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| NR 215 215 | Vehicle Operation For Natural Resource Officers | 1 | TBA | | | | | |
| REC 240 215 | Environmental Enforcement Problems | 2 | TBA | | | | | |
| NR 269 215 | Constitutional Law For Natural Resource Officers | 3 | TBA | | | | | |
| NR 280 215 | Defensive Weapons Training For Natural Resource Officers | 3 | TBA | | | | | |
| NR 242 215 | Law, Philosophy & Objectives For Natural Resource Officers | 2 | TBA | | | | | |
| NR 243 215 | Law Problems - Recognition | 1 | TBA | | | | | |
| NR 244 215 | Vehicular Accident Investigation | 1 | TBA | | | | | |
| NR 245 215 | Public Relations For Natural Resource Officers | 1 | TBA | | | | | |
| | Seasonal Officer Training | 14 | Su-Sa | 8:00am- 5:00pm | Jun 21-Aug 11 | $ 00 | NRTCtr | Swayne |

MADLAND MICHELLE MARIE
Last Name, First Name, Middle Name

Date 6/22/94

Summer 1994
Quarter Enrolled

92 N. Main St. Southampton NY. 11968
Permanent Address (Street or RR Number, City, State, Zip Code)

Suffolk
County

585-06-2516
Social Security Number

516, 287-2585
Permanent Telephone

614, 753-1135
Local Telephone

NRTI
Technology

Day | | Evening |X|
Courses

45E Franklin, Nelsonville OH 45764
Local Address (Street or RR Number, City, State, Zip Code)

Parents
505 662-9026
Alternate Telephone

Date of Birth 6/7/64 Age 30 U.S. Citizen: Yes |X| No | |

VA Benefits: Yes | | No |X|

Eligible Non-Citizen: Yes | | No | |

Marital Status: Married | | Single |X| GED or High School Graduate: Yes |X| No | | Year 1982 Male | | Female |X|

Housing: Commute From Home | | On-Campus |X| Off-Campus | | One or More Years Ohio Resident: Yes | | No |X|

Race/Ethnicity: Native American | | Hispanic | | White/Caucasian |X| Afro-American | | Asian | |

Have You Ever Been A Full-Time Student at Hocking College? Yes | | No |X| Selective Service Number NA

Instructions: Draw A Heavy Dark Line Through Each Course In Which You DO NOT Wish To Be Enrolled.

| Course Number | Course Name | Cr | Days | Time | Dates | Lab Fee | Room | Instr |
|---|---|---|---|---|---|---|---|---|
| ~~EM 123 224~~ | ~~Rappelling and Rope Technique~~ Would like to take if schedule permits | 2 | Th<br>F-Su | 6:00pm-10:00pm<br>8:30am- 5:30pm | Jul 14<br>Jul 15-17 | $ 20 | NRTCtr | Swayne |
| ~~EM 226 225~~ | ~~Vertical Rope Rescue (EM 123 Prerequisite)~~ | 1 | Sa-Su | 8:00am- 5:30pm | Aug 20-21 | $ 25 | NRTCtr | Swayne |
| ~~NR 150 222~~ | ~~Wildfire Control for Rec Areas (S-130/S-190)~~ | 2 | F-Su | 8:00am- 5:00pm | Aug 12-14 | $ 20 | NR103 | Swayne |
| ~~NR 177 232~~ | ~~Open Water Diver (SCUBA)~~ Would like to take if schedule permits | 3 | TBA<br>TBA | 5:30pm-10:30pm<br>8:30am- 5:30pm | TBA<br>TBA | $125 | NRTCtr | Swayne |
| ~~NR 270 220~~ | ~~Land Navigation~~ | 1 | F<br>Sa | 6:00pm-10:00pm<br>8:00am- 5:00pm | Aug 26<br>Aug 27 | $ 10 | NRTCtr | Butt |
| SUPR236 219 | Outdoor Leadership Skills | 1 | F<br>Sa | 6:00pm-10:00pm<br>8:00am- 5:00pm | Aug 5<br>Aug 6 | $ 5 | NRTCtr | Butt |
| ~~CJ 191 217~~ | ~~Detecting The Alcohol Impaired~~ | 1 | W-Th | 8:00am- 5:00pm | Aug 17-18 | $ 50 | NRTCtr | Swayne |
| ~~NR 113 226~~ | ~~How To Get Government Jobs~~ | 1 | M | 8:00am- 7:50pm | Aug 15 | $ 10 | NRTCtr | Swayne |
| ~~CJ 217 238~~ | ~~Side Handle Baton (PR-24)~~ | 1 | M-T&Th | 6:00pm- 9:50pm | Aug 29-30/Sep 1 | $ 20 | NRTI Blg | Swayne |
| ~~CJ 160 239~~ | ~~Kubotan/Persuader Impact Instrument~~ | .5 | W | 6:00pm- 9:50pm | Aug 31 | $ 10 | NRTI Blg | Swayne |
| ~~CJ 161 237~~ | ~~Advanced Side Handle Baton (CJ 217 or Equivalent Prerequisite)~~ | .5 | F | 6:00pm- 9:50pm | Sept 2 | $ 10 | NRTI Blg | Swayne |