2015 - 2016
ACADEMIC CATALOG

ONONDAGA
COMMUNITY COLLEGE

4585 WEST SENECA TURNPIKE, SYRACUSE, NEW YORK 13215-4585 | (315) 498-2000 | SUNYOCC.EDU

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Important Information

Authorization and Accreditation

Onondaga Community College is accredited by the Middle States Commission on Higher Education. Accreditation was renewed in 2008. Middle States, 3624 Market Street, 2nd Floor West, Philadelphia, PA 19104, telephone (267) 284-5000.

Early Childhood : accredited by the National Association for the Education of Young Children, Early Childhood Associate Degree Accreditation, 1313 L. Street NW, Suite 500, Washington, DC 2005-4101, telephone (202) 232-8777.

Health Information Technology: accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), 233 North Michigan Avenue, 21st Floor, Chicago, IL 60601-5800, telephone (312) 233-1100.

Nursing Program: accredited by the Accreditation Commission for Education In Nursing (ACEN), 3343 Peachtree Road, NE, Suite 850, Atlanta, GA 30326, telephone (404) 975-5000.

Physical Therapist Assistant Program:
accredited by the Commission on Accreditation in Physical Therapy Education, American Physical Therapy Association, Department of Accreditation, 1111 North Fairfax Street, Alexandria, VA 22314-1488, telephone (800) 999-2782.

Surgical Technology: accredited by the Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756, telephone (727) 210-2350

Documents for accreditation and licensure can be reviewed by contacting the agencies listed above.

Approved by:

Onondaga Community College is approved by and registered with the New York State Department of Education. The College is authorized by the Board of Regents of the University of the State of New York to award Associate in Arts, Associate in Science, Associate in Applied Science and Associate in Occupational Studies degrees.

All degree and certificate programs are approved for veterans and veterans' dependents eligible for Veterans Administration education benefits under the various public laws.

Memberships:

The American Association of Community Colleges.

Onondaga Community College reserves the right to cancel any offerings described herein (or in any other catalog or brochure), including but not limited to degrees, certificates, programs, specializations, minors or courses. The College also reserves the right to change any rules governing curriculum, administration, tuition, fees, admission, regulations affecting students, dates and course content **when such action will serve the interest of the College or its students. Students are responsible for acquainting themselves with the regulations pertinent to their status. The College reserves the right to modify its regulations in accordance with accepted academic standards and to require observance of the modifications.** Such changes shall take effect whenever the administration deems necessary.

This catalog contains all modifications that occurred prior to May 1, 2015; however, changes may be made periodically. For current information, visit www.sunyocc.edu.

Applying to Onondaga

Admission Requirements

Admission to any specific program offered at the College will be based upon consideration of the following criteria:

1. Completion of the Onondaga admission application (no fee required) online at www.sunyocc.edu or hard copy (by special request from Student Central at (315) 498-2000).
2. Presentation of an official high school transcript from a recognized, accredited high school showing proof of graduation, or an original (or a copy of) a high school equivalency diploma (GED® or TASK™). Home schooled applicants should refer to the section regarding admission of homeschooled students.

   Note: Onondaga participates in the New York State Educational Opportunity Program (EOP) for students who are considered academically and financially disadvantaged. Please see page 35 for more details.
3. Satisfactory high school grades and/or satisfactory college-level grades.
4. Appropriate academic preparation for the desired program of study at Onondaga.
   a. Some students may be required to take one or more non-credit, developmental courses before taking courses required for their degree.
   b. Certain courses and programs may require a minimum level of achievement in science and mathematics. Please refer to our website at www.sunyocc.edu for the most up to date program requirements.

Onondaga participates in the Full Opportunity Program of the State University of New York. Under this program, the College accepts all recent high school graduates and returning veterans from the sponsorship area (Onondaga County).

College policy pertaining to the admittance of ex-offenders is available from the Office of Recruitment and Admission. The College will consider applications for admission from ex-offenders upon receipt of all necessary information. Paroled individuals should be aware of the implications regarding licensure in some professions.

Contact the Office of Recruitment and Admission at (315) 498-2202 for further information.

Application Credentials and Admission Decisions

As an Onondaga applicant, you are responsible for completing the requirements listed below that pertain to your situation. Your application will be considered complete when all official applications, fees, transcripts and, if necessary, placement tests and letters of recommendation are on file.

Note: Students applying to one of the Health Profession programs must have completed placement testing before application is considered complete.

We cannot process your application until all information has been received.

Please use this checklist to assist you with the admission process. If you have concerns or questions about the program you're interested in, call the Office of Recruitment and Admission at (315) 498-2202 or e-mail us at OCCadmissions@sunyocc.edu and we will help you.

1. **Complete an application for admission**
   (Note: F1 students must download and complete the application by hand.)
   a. APPLY ONLINE AT www.sunyocc.edu (no fee required), OR
   b. APPLY via the Onondaga Paper Application (available by special request from Student Central 315-498-2000) OR
   c. APPLY via the SUNY online application ($50 fee)

   NOTE: Only one application is needed.
2. **Send an official high school transcript to Onondaga Community College**

   In addition to your completed application, we will need one of the following:
   a. An official high school transcript showing proof of graduation from high school. Applicants still in high school should send their most recent transcript at the time of application and a final transcript upon graduation, OR
   b. An original or a copy of an official GED® or TASK™ and score report
3. **Send college transcripts (if applicable) to Onondaga Community College**

   Send official transcripts of college credits or advanced placement scores earned before admission/matriculation to the Office of Recruitment and Admission for inclusion in your admission file.

PLEASE NOTE: Some programs (particularly in Health Occupations and Performing Arts) have additional requirements for acceptance; you are encouraged to check with the Office of Recruitment and Admission or visit the website at www.sunyocc.edu for details.

Admission Decisions

Whichever way you choose to apply, we will evaluate your application when all required forms have been received. As soon as our evaluation is complete, you will receive an admission decision via standard mail. If you have questions regarding your admission status, please call us at (315) 498-2202 or E-mail us at OCCadmissions@sunyocc.edu.

Application Deadlines

The College will establish a deadline date for submission of application materials each semester. Early application is strongly encouraged to ensure the best possible selection of courses.

You may begin work on nearly all Onondaga programs during any semester. Please contact us at (315) 498-2000 if you have any questions or concerns regarding this process.

Further Requirements

Certain programs require new students to have physical examinations; you will be notified if this applies to you.

Applicants may wish to investigate the Collegiate Science and Technology Entry Program (CSTEP) or Educational Opportunity Program (EOP) as part of the application process. See page 35 for detailed information.

Non-High School Graduates

Fast Track GED Test Preparation

Onondaga Community College, in partnership with OCM BOCES, offers Fast Track GED® Test Prep classes for students interested in earning a GED®. For more information, please complete the inquiry form and a representative from OCM BOCES will contact you. The inquiry form can be found at www.sunyocc.edu/community.

Deferred Admission (Postponing Enrollment)

Once you have been accepted by Onondaga, you may defer enrollment at the College for up to two semesters. If you have not attended Onondaga (enrolled) by then, and later choose to attend Onondaga in a degree program, you must begin the application process again, including filing an application, and provide required academic documentation.

Admission of Home-Schooled Students

Home-schooled students who submit the necessary documentation demonstrating compliance with the minimum requirements of the home instruction regulations, and have been granted a letter of substantial equivalency from their local school district, will be considered for admission to Onondaga in the same manner as a high school graduate.

Admission of International Students

Onondaga Community College welcomes and supports international students whose presence enriches the diversity of the student body, fosters an international perspective throughout the campus community, and adds vitality to a dynamic, growing college environment.

By definition, international students are neither United States citizens nor permanent, legal United States residents.

In order to pursue academic studies and/or language training programs in the United States (U.S.), international students are required to obtain a nonimmigrant student visa. For visa information, visit the U.S. Citizenship and Immigration Services (USCIS) website: www.uscis.gov.

Onondaga Community College Issues F-1 Nonimmigrant Student Visas Only.

International students are encouraged to apply for an F-1 Nonimmigrant Student Visa as soon as they are prepared to do so to allow ample time for visa processing. Applying three months before the start of the desired semester of enrollment is recommended, as additional time for special Consular clearances and administrative processing varies from country to country.

For F-1 Nonimmigrant Student Visa information, visit the U.S. Department of State website:
http://travel.state.gov/visa/temp/types/types_1268.html

For F-1 Nonimmigrant Student Visa Processing wait times, visit: http://travel.state.gov/visa/temp/wait/wait_4638.html

Visa Change of Status

International students already in the U.S. who need to change their nonimmigrant visa status to F-1 are required to consult with the Onondaga Community College Office of Recruitment and Admission before their current immigration status expires and before initiating a change of status process. Please be aware that the U.S. Citizenship and Immigration Services (USCIS) division of the U.S. Department of Homeland Security (DHS) adjudicates requests on a case-by-case basis, and there is no guarantee that a change of status to F-1 will be granted.

F-1 Transfer Students

F-1 students who transfer from a U.S. college, university of other educational institution must initiate the release of their Student and Exchange Visitor Information System (SEVIS) file at least three months before the start of the desired semester of enrollment at Onondaga Community College. To begin the transfer process, a SEVIS Transfer-In Verification Form must be completed and submitted to the Onondaga Community College Office of Recruitment and Admission. Download the SEVIS Transfer-In Verification Form at: www.sunyocc.edu

International Admission Requirements

All incoming students must apply for admission
by downloading and completing the Onondaga International Student Application Package at
www.sunyocc.edu (no fee required). See below.

1. **Onondaga Community College Admission Application**

   Applications can be obtained by going to
   www.sunyocc.edu and printing the .pdf file (preferred) or by contacting the Office of Recruitment and Admission via email (international@sunyocc.edu) or phone (001) 315 498-7266 to receive one via U.S. Postal mail. International applicants may NOT use the online version of the application due to technical issues.

2. **Proof of English Proficiency**

   a. Non-native English-speaking applicants must demonstrate a minimum English language proficiency to ensure their understanding of college-level course content, therefore either the Test of English as a Foreign Language (TOEFL®) or the International English Language Testing System (IELTS) are required. For TOEFL® Test information, go to: www.toefl.org

      To request that a TOEFL® Test Official Score Report is sent directly to the Onondaga Community College Office of Recruitment and Admission, refer to Institution Code #2627.

      Minimum acceptable TOEFL® Scores:• Internet-based: 61
      • Computer-based: 173
      • Paper-based: 500

      Minimum acceptable IELTS score is 5,
      go to www.ielts.org for more information.

   Non-native English speaking applicants already in the U.S. may be eligible for alternate
   English-language testing. For further information, please contact the Office of Recruitment and Admission at:
   international@sunyocc.edu or 001-315-498-7266.

3. **Proof of Financial Resources**

   In order to obtain an F-1 Nonimmigrant Student Visa, international student applicants must demonstrate the ability to finance an
   Onondaga Community College education for one (1) year.

   As proof of financial resources, the following document is required:

      b. A statement from your personal/home country bank (or the bank of whoever is responsible for financing your Onondaga Community College education and expenses).

      The country bank statement must provide equivalent available funds in U.S. dollars (USD$).

   Onondaga Community College offers neither scholarships nor financial support. Please refer to our website, www.sunyocc.edu, for the most up to date tuition and fees.

4. **Proof of High School Graduation and/or College Attendance**

   a. **High School Graduation Documents**

      International students must be graduates of a school that is considered equivalent in level to a U.S. high school as determined by the American Association of Collegiate Registrars and Admissions Officers (AACRAO). As proof, the following original, official documents must be submitted and accompanied by a certified English translation:

      i. Transcripts

      ii. Diploma Certificates

   b. **College Attendance Documents**

      To receive academic transferred credit for college-level courses taken and/or degrees earned at non-U.S. colleges or universities, international student transcripts must undergo evaluation by foreign credential evaluation services.

We recommend the following foreign credential evaluation services:

i. Evaluation Service, Inc.: www.evaluationservice.net

ii. World Education Services: www.wes.org

Please arrange to have all Proof of High School Graduation and/or College Attendance documents, accompanied by certified English translations, in addition to the completed application for admission, sent directly to the Office of Recruitment and Admission, 4585 West Seneca Turnpike, Syracuse, NY USA 13215.

5. **Proof of Immunization**

For complete immunization requirements and information see page 11.

International students may carry their immunization records to campus with them or fax them in advance directly to Student Central (Fax: 001 315 469 9270).

6. **Request for On-Campus Housing in Residence Halls**

Onondaga offers both suite residence halls equipped with a full kitchen, living room, bedrooms and two full bathrooms, traditional single and double rooms with shared common areas and pods of single, double and triple rooms with shared living room and two bathrooms. Due to the strong demand for on-campus housing, applying early is recommended.

For information, an online application for on-campus housing and a virtual tour, visit: www.sunyocc.edu

Please direct all international admissions inquiries and correspondence to:

Onondaga Community College
International Admission
Office of Recruitment and Admission (G220)
4585 West Seneca Turnpike
Syracuse, New York 13215-4585, USA

Tel: 001 315 498 7266

Fax: 001 315 498 2107

E-mail: international@sunyocc.edu

International student applications for admission are reviewed when all required and accurately-completed documents are received.

Additional information regarding international student services is found on page 36 of this catalog.

Admission of English Speakers of Other Languages

English speakers of other languages seeking admission to the college may be required to demonstrate a minimum English proficiency, including written work, spoken and listening skills, depending upon their educational background.

Please contact the Office of Recruitment and Admission at (315) 498-2202 for the proper enrollment process.

Transfer Applicants

Students Who Have Attended Any Other College Prior to Onondaga

If you have completed coursework at another institution and wish to transfer to Onondaga, please follow the procedures outlined in Applying to Onondaga (see page 7). It is your responsibility to arrange for all official transcripts from previous college(s) attended, including any AP (Advanced Placement), CLEP (CEEB College Level Examination Program) and IB (International Baccalaureate) scores to be sent to Onondaga's Office of Recruitment and Admission.

Students who have been dismissed for any reason from their previous college may be required to interview with an Admission Counselor prior to acceptance. Call the Office of Recruitment and Admission at (315) 498-2221 for scheduling.

You will be notified of your placement test requirements after official transcripts from previous institutions have been received.

As an incoming transfer student, at least 24 of the academic credits for the degree must be completed at Onondaga Community College, subject to specific program restrictions. Certificate programs are calculated proportionally.

Granting of Credits for Students Who Wish to Transfer to Onondaga from Another Institution

1. Official transcripts for coursework completed prior to admission at Onondaga should be sent to the Office of Recruitment and Admission for inclusion in your admission file. .. A transfer credit evaluation is completed for all students who are matriculated and have sent proof of coursework completed elsewhere.

Coursework which has been satisfactorily completed with a grade of C or better at any regionally accredited college or

university will be considered for credit at Onondaga Community College. Please note, programs such as NET.AAS and NUR.AAS require a grade of C+ or better for certain core courses. Grades earned at previous colleges will not apply to your GPA at Onondaga. Only courses applicable to your intended curriculum will be accepted. If you change your program after you arrive at Onondaga, transfer credits will be re-evaluated at your request based on your new program. Transfer credits from institutions on a "quarter plan" or "trimester" will be adjusted in accordance with College policy. You will be sent an email with instructions on viewing your transfer credits in WebAccess once your evaluation is complete.

2. Credit may also be granted on the basis of a qualifying examination. This includes work done in the NYHS College Proficiency Examination Program, Advanced Placement (AP) with score of three or higher, the College Board College Level Examination Program (CLEP)* with score of fifty or higher, International Baccalaureate (HL Exams) with score of four or higher and other acceptable examination programs. Official scores must be sent directly to Onondaga.

   Please Note: CLEP examination scores and experiential credits cannot be used to receive credit for Modern Language courses.

3. If you completed college courses in high school (other than OCC), you must request an official transcript from those colleges in order for the credit to be evaluated. Transfer credit is not awarded from high school transcripts.
4. Individuals who have served in the military should submit a Joint Services transcript by logging on to https://jst.doded.mil/ and requesting an official transcript.
5. Credits earned at a college or university outside of the United States must first be evaluated by World Education Services or Evaluation Services, Inc. This service converts your coursework into U.S. standards, so that it may be evaluated by Onondaga.

Degree Choices and Requirements

Requirements for the Associate Degree

All curricula offered at Onondaga Community College have been registered with the New York State Education Department and approved by the State University of New York with authorization to award the degrees of Associate in Arts (A.A.), Associate in Science (A.S.), Associate in Applied Science (A.A.S.), and Associate in Occupational Studies (A.O.S.). According to New York State Education Law, "Associate degree programs shall normally be capable of completion in two academic years of full-time study, or its equivalent in part-time study, with an accumulation of not less than 60 semester hours." Eligibility for a degree is based on the successful completion of the program of study outlined by a curriculum.

A core group of courses in the liberal arts and sciences is required in each curriculum. These courses fall into four fields — humanities, mathematics, natural sciences, and social sciences. This liberal arts core is intended to provide the student with exposure to and knowledge of the cultural, social and scientific heritage which has shaped today's world.

The Associate in Arts degree requires completion of at least 75 percent of course work in the arts and sciences. Students pursuing the Associate in Science degree must complete at least 50 percent of their course work in the arts and sciences. And those in Associate in Applied Science programs must complete at least 33 percent of their course work in the arts and sciences.

Associate degree candidates must fulfill the following general requirements:

1. A student must be matriculated in a degree/certificate program and meet all program and credit hour requirements.
2. Onondaga will automatically confer a degree or certificate upon the student's completion of all program requirements. However, students who wish to participate in the college's commencement ceremony must submit an Application for Graduation.
3. The student must achieve at least a 2.0 program GPA (GPA2).
4. All grades of Incomplete ("I") must be resolved before the degree/certificate is conferred.
5. All financial obligations to the College and other College requirements must be met.
6. At least twenty-four (24) of the academic credits for the degree/certificate must be completed at Onondaga Community College, subject to specific program restrictions. Certificate programs are calculated proportionally.
7. No more than 12 independent study credits may be taken at Onondaga Community College.

Requirements for Certificates

The one-year certificate is available in several academic programs. The certificate is designed for students seeking a quick path to job opportunities. The programs provide the essential coursework typically required by employers for entry-level positions.

Certificate candidates must fulfill the following general requirements:

1. Be accepted and currently matriculated in a certificate program, and complete all curriculum requirements.
2. Complete at least one-half of the academic credit hours required for the certificate at Onondaga Community College. (No more than 6 credit hours taken by independent study at Onondaga may be applied toward degree requirements.)
3. Receive the recommendation of the curriculum proctor, Scholastic Standards Committee, the College Faculty, the President and the Board of Trustees.
4. Meet all financial obligations to the College and fulfill all other College requirements.

Multiple Degrees

You may earn more than one degree at Onondaga

A minimum of twenty of the academic credits for any associate's degree and ten academic credits for any certificate must be credits which have not been applied to any previously or concurrently awarded degree. You may not earn more than one degree from any single curriculum grouping.

Information about curriculum groupings and placement of new programs is available at Student Central in the Gordon Student Center.

Liberal Arts & Sciences

As defined by the New York State Education Department (22 October 2009)

Courses of a general or theoretical nature that are designed to develop judgment and understanding about human beings' relationship to the social, cultural, and natural facets of their total environment.

Working corollaries for counting liberal arts courses:

1. Independent of specific application
2. Theoretical understanding as opposed to practical application

3. Breadth and scope in principle covered
4. Not definitely directed toward particular career or specific professional objectives
5. Not chiefly "how to" in manipulative skills or techniques
6. Not "applied" aspects of a field

The liberal arts and sciences comprise the disciplines of the humanities, natural sciences and mathematics, and social sciences.

A. Examples of course types that are generally considered within the liberal arts and sciences:
   1. Humanities:
      - English—composition, creative writing, history of language, journalism, linguistics, literature, literature in translation, playwriting
      - Fine arts—art appreciation, history or theory
      - Foreign languages—composition, conversation, grammar, history of the language, literature of the language, reading, translation studies
      - Music—music appreciation, history or theory
      - Philosophy—comparative philosophy, history of philosophy, logic, schools of philosophy
      - Religion—comparative religion, history of religion
      - Theater—dramatic interpretation, dramatic literature, dramaturgy, history of drama, playwriting
   2. Natural sciences and mathematics:
      - Natural sciences—anatomy and physiology, biology, chemistry, earth science, geology, physics, zoology
      - Mathematics—calculus, mathematical theory, statistics
      - Computer Science—broad survey/theory courses
   3. Social sciences:
      - Anthropology, cultural studies, economics, geography, government, history, political science, psychology, sociology
      - Criminal justice—introductory and broad survey courses
      - Communications—interpersonal communication, mass communication, public speaking, speech and rhetoric

B. Examples of course types that are generally not considered within the liberal arts and sciences:
   - Agriculture
   - Business—administration, finance, human resources, management, marketing, production
   - Computer applications (e.g., word processing, database, spreadsheet), programming (e.g., specific languages)
   - Health and physical education
   - Home economics
   - Education and teaching methods
   - Library science
   - Music—studio, performance, practice courses—voice, instrument, direction, conducting
   - Office technologies and practice
   - Performing and related arts—acting, costume design, dance, direction, lighting, production, scene construction, sound production
   - Specialized professional courses in such fields as accounting, architecture, dental hygiene, dentistry, engineering, law, medicine, nursing, nutrition, pharmacy, podiatry, veterinary medicine
   - Studio art—drawing, painting, ceramics, sculpture
   - Technology/technician fields— construction, data processing, electrical, electronics, graphic arts, mechanical, medical, refrigeration repair
   - Television and radio production
   - Theology—pastoral counseling, ministry

General Education

General Education enables individuals to acquire the knowledge, skills and dispositions necessary for responsible participation in society. These include the ability to reason and communicate effectively; a capacity for compassionate inquiry; a framework for intellectual, ethical and aesthetic growth; and a commitment to the well-being of self and the larger community. General Education is the under- pinning of the College's mission, which is to enable students to "Explore. Discover. Transform."

Consistent with the requirements of the College's accrediting body, The Middle States Commission on Higher Education, all Onondaga programs are infused with a minimum of 15 hours of General Education academic coursework.

Global Awareness & Diversity

Several programs at Onondaga Community College require students to complete coursework with a focus on Global Awareness and Diversity. The following is a list of GLAD-designated courses:

Global Designation Courses

ANT 152, ANT 154, ANT 155, ANT 201, BIO 147, COM 282, ECO 103, EMC 101, ENG 224, ENG 250, GEG 101, HIS 214, LCC 245, POS 214, SOC 214, SPA 220

Multicultural Designation Courses

ANT 203, ASL 101, ASL 102, ASL 201, ASL 202, ASL 203, ASL 204, ASL 212, ENG 225, ENG 226, ENG 230, ENG 239, ENG 245, HIS 107, HIS 207, HIS 208, HIS 209, HIS 240, HUM 230, MUS 166, POS 215, POS 230, PSY 218, SOC 211, WMS 101

International Designation Courses

ART 105, ART 106, ART 253, CHI 101 CHI 102, ECO 160, FRE 101, FRE 102, FRE 201, FRE 202, GER 101, GER 102, HIS 101, HIS 102, HIS 103, HIS 104, HIS 213, HIS 221, HIS 250, ITA 101, ITA 102, ITA 201, ITA 202, LCC 220, NUR 286, POS 201, SOC 213, SPA 101, SPA 102, SPA 165, SPA 201, SPA 202

SUNY General Education Requirements

(For students transferring to a SUNY four-year institution)

For a complete listing of applicable courses, please refer to the web site at: www.sunyocc.edu

Programs of Study

Onondaga Community College offers nearly 50 programs

of study in areas such as

Business, Human Services,

Applied Technologies, Computers,

Health Professions, Humanities,

Math, Science, and the

Performing and Visual Arts.

In This Section

Degree and Certificate Programs

Years ago, well-paying careers could be attained simply through hard work and diligence after graduating from high school. Statistics and research tell us that anyone wishing to earn a good living in the coming years will require at least one or two years of post-high school education. Onondaga Community College offers nearly 50 programs leading to associate degrees or career certificates. Upon completion of these programs, you will be prepared to either transfer to a four-year institution, or to begin working in the area you have studied.

Program	Code	Award	HEGIS*	ASC Code
Accounting	BUA	AAS	5002.00	0630
Advanced Manufacturing - Machining	AMF	CERT	5315.00	2433
Alcohol & Substance Abuse Counseling	ASA	AAS	2004.00	2404
American Sign Language	ASL	AS	5506.00	2415
Apprentice Training – Building Trades	ABT	AAS	5317.00	0410
Apprentice Training – Electrical	ASE	AAS	5310.00	0597
Architectural Technology	ARH	AAS	5304.00	0538
Art	ART	AAS	5012.00	0509
Automotive Technology	AUT	AOS	5306.00	0525
Business Administration	BUS	AS	5004.00	0671
Business Technology	BUS	AAS	5004.00	0671
Communication Studies	COM	AA	5606.00	1974
Computer Forensics	CFS	AS	5505.00	1491
Computer Information Systems *(Specializations: Information Technology Support, Networking, Programming, or Web Technology)*	CIS	AAS	5101.00	0636
Computer Science	CSC	AS	5101.00	0532
Criminal Justice	CRJ	AS	5505.00	0640

Early Child Care	ECC	CERT	5503.00	5503
Early Childhood	ECH	AAS	5503.00	1327
Electrical Engineering Technology	ELT	AAS	5310.00	0555
Electronic Media Communications *(Specializations: Digital Media, Radio/Audio Production, or Television/Video Production)*	EMC	AAS	5008.00	0555
Emergency Management	EMG	AAS	5505.00	1741
Engineering Science	ENS	AS	5609.00	0530
Environmental Technology *(Specializations: Geoscience or Biotechnology)*	ENV	AAS	5408.00	5408
Fire Protection Technology	FPD,FPC	AAS, CERT	5507.00	0639
Health Information Technology/Medical Records	HIT	AAS	5213.00	0603
Hospitality Management *(Specializations Culinary Management, Food Service/Institutional Management, Hotel Management, or Restaurant Management)*	HOS	AAS	5010.00	1730
Human Services	HUM	AS	5501.00	0604
Human Services	HUM	CERT	5501.00	0949
Interior Design	IND	AAS	5012.00	0656
Law Enforcement	LEC	CERT	5505.00	1780
Liberal Arts & Sciences - Adolescence Education - Grade 7-12 (Teacher Education Transfer)	EDA	AA	5608.00	1804
Liberal Arts & Sciences - Childhood Education - Grade 1-6 (Teacher Education Transfer)	EDC	AA	5608.00	1802
Liberal Arts & Sciences - General Studies	GEN	AA	5649.00	0250
Liberal Arts & Sciences - Humanities and Social Sciences	HMT	AA	5649.00	0201
Liberal Arts & Sciences - Mathematics and Science	MTS	AA, AS	5649.00	0220
Mechanical Technology	MET	AAS	5315.00	0595
Music	MUS	AAS	5610.00	0682
Nuclear Technology	NET	AAS	5316.00	2384
Nursing	NUR	AAS	5208.00	0622
Photography	PHO	AS	5007.00	0660
Physical Education & Exercise Science Studies	EXR	AS	5299.00	2070
Physical Therapist Assistant	PTA	AAS	5219.00	0489
Professional Cooking	PFC	CERT	5404.00	0943
Surgical Technology	SGC	CERT	5211.00	0028
Web Technology	WEB	CERT	5101.00	1398

Please Note:

1. Award abbreviations are defined as follows:
   AA – Associate in Arts
   AS – Associate in Science
   AAS – Associate in Applied Science
   AOS – Associate in Occupational Studies
   CERT – Certificate
2. Some courses required for degrees may have course or skill prerequisites.

* The HEGIS (Higher Education General Information Survey) code is a federal designation, adopted by most states, of codifying academic programs and disciplines.

Accounting (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 324
PHONE: (315) 498-2435, EMAIL: OCCINFO@SUNYOCC.EDU

If you've always enjoyed working with numbers and mathematics, and picture yourself in a career working with numerical data, then an Accounting degree might be of interest to you.

As an Accounting major, you will graduate with the necessary skills to qualify for employment in entry level positions in public, private or governmental accounting.

Students planning to earn a four-year degree in Accounting should not enroll in this curriculum, but should pursue the Business Administration A.S. degree.

Program Learning Outcomes

1. Effectively communicate knowledge of selected content areas in accounting.
2. Demonstrate critical-thinking skills by understanding, evaluating, and synthesizing accounting information.
3. Analyze and interpret quantitative information, and draw meaningful conclusions.
4. Apply various accounting procedures culminating in the preparation of financial statements.

First Year	Credits
ENG 103-104 Freshman Composition and Literature I and II	6
BUS 105-106 Financial Accounting and Managerial Accounting	6
BUS 117 Integrated Financial Systems I	4
COM 210 Public Speaking	3
BUS 243-244 Business Law I and II	6
Liberal Arts Electives (2 courses)	6
Total Credits:	31

Second Year	Credits
BUS 201 Intermediate Accounting I (Fall only)	4
BUS 202 Intermediate Accounting II (Spring only)	4
ECO 203 Principles of Macroeconomics OR ECO 204 Principles of Microeconomics	3
BUS 212 Business Correspondence	3
BUS 203 Electronic Spreadsheets for Business I	3
BUS 204 Electronic Spreadsheets for Business II	3
BUS 205 Income Tax Accounting I or 207 Cost Accounting	3
Liberal Arts Elective	3
Business Elective (1 course)	3
Total Credits:	29
Total Program Credits:	60

Advanced Manufacturing - Machining (Certificate)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W143
PHONE: (315) 498-2442, EMAIL: OCCINFO@SUNYOCC.EDU

A one-year certificate in Advanced Manufacturing - Machining is offered as a complement to the Mechanical Technology A.A.S. It is designed to provide the skills necessary for employment in the machining industry. Included in this certificate is the course work and hands-on skills necessary to enter the workforce in a year.

The students who complete the Advanced Manufacturing - Machining certificate will also be prepared to continue in the Mechanical Technology A.A.S degree at Onondaga Community College if desired. The courses included in the certificate provide the Core Advanced Manufacturing and SUNY General Education courses to articulate to other SUNY specialty certificate and degree programs.

Program Learning Outcomes

1. Demonstrate an understanding of the principles and theory of manufacturing processes.
2. Demonstrate knowledge of the basic operation of machine tools.
3. Apply knowledge of metrology in an industrial setting.
4. Create and interpret technical drawings and models utilizing current state of the art Computer Aided Design software.
5. Create and debug basic programs as applied to machine tools.

First Year	Credits
ENG 103 Freshman Composition and Literature I[1]	3

MAT 114 Intermediate Algebra with Applications[2]	4
MET 151 Machine Tools	3
MET 161 Engineering Drawing I	3
MET 171 Manufacturing Processes	3
Total Credits:	16

Second Year	**Credits**
CIS 100 Information and Computer Literacy	3
MET 152 Machine Tools	3
MET 153 Introduction to Modern Manufacturing	3
MET 254 Numerical Control Programming[3]	3
MET 270 Solid Modeling	4
Total Credits:	16
Total Certificate Credits:	32

Notes:
1. Prerequisite: Onondaga Community College placement test and/or satisfactory completion of ENG 099 or ESL 116.
2. Prerequisite: Beginning algebra or equivalent.
3. Prerequisite: MET 261 or Permission of Instructor; co-requisite: MET 151.

Alcohol and Substance Abuse Counseling (A.A.S.)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-2341, EMAIL: OCCINFO@SUNYOCC.EDU

The Alcohol and Substance Abuse Counseling Program is for students interested in pursuing a career as a Credentialed Alcoholism and Substance Abuse Counselor, in the field of addiction treatment. Students participating in this program will be provided with the 350 hours of education and training required by the NYS Office of Alcoholism and Substance Abuse Services (OASAS), in order to receive a credential as an alcoholism and substance abuse counselor. Upon completion of this program, the student will receive a certificate, provided by OASAS, to attach to their Credential Alcoholism and Substance Abuse Counselor application. The student will be sent, after the application is received and processed, their certification as a Credentialed Alcoholism and Substance Abuse Counselor – Trainee (CASAC-T). Students receiving this certification as a CASAC-T can work at alcohol and substance abuse agencies throughout New York State. If you choose to transfer to the Alcohol and Substance Abuse Counseling program from another Onondaga curriculum, you must have at least a 2.0 cumulative average. Special program costs may include transportation to and from fieldwork sites. You may be required to have a medical exam, a tuberculin test and a background check before beginning your fieldwork.

Program Learning Outcomes:

1. Students will demonstrate knowledge base theory specific to the alcohol/substance abuse work discipline.
2. Students will apply knowledge base theory to practice.
3. Students will demonstrate awareness of the code of ethical conduct.
4. Students will demonstrate cultural and diversity awareness, and sensitivity to social justice.
5. Develop guidelines/policy for review of student/program fit.

First Semester	**Credits**
ENG 103 Freshman Composition and Literature I	3
COM 220 Interpersonal Communication or COM 210 Public Speaking	3
BIO 106 Human Biology	4
HUM 150 Human Services Theory, Skills, and Resources	3
ASA 159 Chemical Dependencies	3
Total Credits:	16

Second Semester	**Credits**
ASA 268 Clinical Skills for Alcohol and Substance Abuse Counselors	3
ENG 104 Freshman Composition and Literature II	3
MAT 104 or Higher	3-4
PSY 103 General Psychology or SOC 103 Introductory Sociology	3
ASA 227 Overview of Addiction Services	3
Total Credits:	15-16

Third Semester	**Credits**
ASA 271 Cultural Competence and Special Populations	3
ASA 226 Group Skills for Alcohol and Substance Abuse Counseling	3
ASA 269 Individual Counseling Skills for Chemical Dependency Counselors	3

PSY 103 General Psychology or SOC 103 Introductory Sociology	3
HUM 164 Human Services Field Instruction and Seminar I	3
Total Credits:	15

Fourth Semester	**Credits**
ASA 229 Addictions and Family Systems	3
HUM 263 Human Services Field Instruction and Seminar II	3
COM 282 Intercultural Communication	3
General Elective	3
ASA 270 Counselor Spirituality and Wellness	3
Total Credits:	15
Total Program Credits:	61-62

American Sign Language

OFFICE: MAWHINNEY HALL, ROOM M308
PHONE: (315) 498-2536, EMAIL: OCCINFO@SUNYOCC.EDU

Growth in the interpreting field continues at an undaunted pace with endless career possibilities. If you picture yourself working in a career that uses American Sign Language, then this degree program will be of interest to you. The A.S. degree in American Sign Language is designed to provide students with a broad educational experience, which includes the balance and diversity of general education and the knowledge and skills of American Sign Language and the Deaf community.

While this program is designed for those students seeking successful transfer to a 4-year ASL-English Interpreting institution, it also lends itself to students seeking to supplement another degree at Onondaga so they may integrate with their foundation of American Sign Language and the Deaf community to their primary academic area of study. If you are already employed in the interpreting field, this degree will sharpen your skills and advance your career.

Degree Requirements

Students matriculated in this program must achieve a minimal grade of C+ or better in all ASL courses.

Graduation Requirements

1. All requirements outlined for the A.S. degree in this catalog.
2. A grade of C+ or better in all ASL courses.
3. Consistent demonstration of
    a. Language proficiency at each level (assessment)
    b. Academic and professional integrity

Program Learning Outcomes:

1. Demonstrate intermediate-high level receptive and expressive proficiency in American Sign Language.
2. Demonstrate knowledge of the norms, values and beliefs of Deaf culture.
3. Demonstrate knowledge about the profession of interpreting.
4. Demonstrate knowledge of various interpreting theoretical models and the interpreting process.
5. Develop sub-skills of consecutive and simultaneous interpretations.
6. Explore selected works of American Sign Language literature and film.

First Semester	**Credits**
ASL 100 Beginning American Sign Language I and II	6
ENG 103 Freshman Composition and Literature I	3
MAT Elective (SUNY Gen. Ed. Mathematics)	3-4
PSY 103 General Psychology	3
Total Credits:	15-16

Second Semester	**Credits**
ASL 200 Intermediate American Sign Language I and II	6
COM 210 Public Speaking	3
ENG 104 Freshman Composition and Literature II	3
SUNY Gen. Ed. Natural Science with Lab	4
Total Credits:	16

Third Semester	Credits
ASL 203 Advanced American Sign Language I	3
ASL 210 Introduction to the Field of Interpreting	3
ASL 247 Linguistics of American Sign Language	3
History Elective (SUNY Gen. Ed. American History or Western Civilization)	3
PHI 108 Ethics	3
Total Credits:	15

Fourth Semester	Credits
ASL 204 Advanced American Sign Language II	3
ASL 206 Processing Skills Development	3
SOC 103 Introductory Sociology	3
ANT 152 Introduction to Cultural Anthropology	3
General Elective (ASL 211, 212, or 215 recommended)	3
Total Credits:	15
Total Program Credits:	61-62

Apprentice Training: Building Trades (A.A.S)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 352
PHONE: (315) 498-2687, EMAIL: ARCHTECH@SUNYOCC.EDU

The Building Trades degree program allows you to earn an A.A.S. degree while completing your apprenticeship training. Graduates of the Building Trades program will have a strong foundation for advancement in their chosen field. To be eligible for this program, you must be an apprentice or journeyworker in a building trades apprentice program approved by the United States Department of Labor, Employment and Training Administration, Office of Apprenticeship (USDOL/ETA/OA) or the New York State Department of Labor (NYSDOL). To enroll in the program, you will need proof of your status as an apprentice or journeyworker in a USDOL/ETA/OA or NYSDOL registered apprenticeship and sponsored by employers, employer associations or labor management organizations. Once you have completed the Building Trades program academic requirements, thirty (30) college credit hours will be awarded for your journeyworker certificate.

Program Learning Outcomes:

1. Comprehend and communicate written, verbal, and visual information as it relates to the construction process.
2. Develop mathematical knowledge and skills, with particular emphasis on problem solving, data analysis and critical reasoning.
3. Demonstrate the ability to work effectively as a team member with various construction trades and personnel.
4. Demonstrate an understanding of how interpersonal communication affects personal and professional relationships.
5. Demonstrate an understanding of the relationship between supervisory and labor positions in the construction industry.
6. Describe effectively the construction process.
7. Describe the various roles and responsibilities inherent in a successful construction project.
8. Solve practical problems that arise out of professional conflicts within the construction process.
9. Apply practical construction skills in a particular trade area. (Note: this LO is related to the successful completion of the student's apprenticeship and will be measured by receipt of a Journeyman Certificate. We award credit for the Certificate.)

First Year	Credits
Fall	
CIS 100 Information and Computer Literacy	3
Spring	
ENG 103 Freshman Composition and Literature I	3
Summer	
Math 100 Level[1]	3-4

Second Year	Credits
Fall	
ARH 140 Wood Frame Construction	3
Spring	
COM 220 Interpersonal Communication	3
Summer	
ENG 104 Freshman Composition and Literature II	3

Third Year	Credits
Fall	
BUS 138 Supervision and Management	3
Spring	
ARH 261 Professional Practice	3

Fourth Year	Credits
Fall	
Social Science Elective	3
Spring	
Liberal Arts Elective	3
Journeyman Certificate:	30
Total	60-61

Notes:

1. More advanced Math courses may be substituted with advisor approval.

Apprentice Training: Electrical (A.A.S)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 143
PHONE: (315) 498-2442, EMAIL: OCCINFO@SUNYOCC.EDU

To be eligible for this program, you must be an apprentice or journeyman electrician in a state-approved program, such as the Syracuse Joint Apprenticeship Training Committee for the electrical industry. This is a state-recognized committee jointly sponsored by the electrical industry and the International Brotherhood of Electrical Workers (IBEW), Local No. 43. To enroll, you will need a letter from IBEW Local No. 43 or from your employer (where the state-approved program is available), confirming your status as an apprentice or journeyman.

It should be noted that the program is a registered associate degree program rather than one which provides trade electrician training. Those interested in becoming electricians should contact the IBEW Local No. 43 at (315) 422-0435 or (315) 488-1388.

Those who complete the Onondaga program will be awarded the Associate in Applied Science (A.A.S.) degree as well as the opportunity to transfer credits toward a bachelor's degree at a four-year institution such as the SUNY Institute of Technology at Utica/Rome, and the Oswego Department of Vocational Education.

Program Learning Outcomes:

1. Comprehend and communicate written, verbal, and visual information as it relates to the construction process.
2. Develop mathematical knowledge and skills, with particular emphasis on problem solving, data analysis and critical reasoning.
3. Demonstrate the ability to work effectively as a team member with various construction trades and personnel.
4. Demonstrate an understanding of how interpersonal communication affects personal and professional relationships.
5. Demonstrate an understanding of the relationship between supervisory and labor positions in the construction industry.
6. Describe effectively the construction process.
7. Describe the various roles and responsibilities inherent in a successful construction project.
8. Solve practical problems that arise out of professional conflicts within the construction process.
9. Apply practical construction skills in a particular trade area. Note: this LO is related to the successful completion of the student's apprenticeship and will be measured by receipt of a Journeyman Certificate. We award credit for the Certificate.)

	Credits
Electrical Trade – Transfer Credits for Apprentice Training[1]	20
ENG 103-104 Freshman Composition and Literature I and II	6
ELT 141 Circuits I	4
CMT 171 Digital Electronics or ELT 142 Circuits II or ELT 161 Electronic Circuits I	4
MAT 114 Intermediate Algebra with Applications[2]	4
Laboratory Science	4
Social Science Electives	6
Occupation-Related Electives - Courses in Electrical, Mechanical, or Architectural Technology, Business, and Computer Science are recommended	6
General Electives	6
Physical Education Activities	2
Health Elective	1
Total Program Credits:	63

Notes:

1. If you have not received training through IBEW or a state approved program, contact the Electrical Technology department for credit-transfer information by examination.
2. Students with higher Mathematics proficiency may complete MAT 161 or MAT 162.

Architectural Technology (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 352
PHONE: (315) 498-2687, EMAIL: ARCHTECH@SUNYOCC.EDU

Graduates of the Architectural Technology program have acquired the knowledge and skills to pursue a wide variety of employment opportunities in the design and construction industry and are well-prepared to pursue a bachelor's degree in a four or five-year college or university program.

The faculty is composed of practicing architects and engineers who are in contact with today's materials and construction methods and computer technology. The Architecture department is held in high regard in the Central New York architectural community for its ability to challenge its students and instill essential technical skills that employers look for.

The program stresses the fundamentals, beginning with a three course foundation semester and continuing with three-semester studio course sequences available in both design and drafting. Students in the program have the opportunity to sample a variety of interest areas within the discipline including interior architecture, building design, graphics, computer drafting, materials and construction technology, architectural history, environmental controls, office practice, and structures. Green/sustainable practices are infused throughout the curriculum. You may begin either fall or spring semester.

The NYS Education Department Division of Professional Licensing recognizes the A.A.S. in Architectural Technology as equivalent to two years of experiential credit toward architectural licensure.

Students in the program will be required to create, transmit and present assignments using computers and other digital technology. After the completion of the first semester required classes (ARH 101, ARH 110, ARH 170), students will be required to provide his or her own laptop computer and software for all classes in the program. The laptop computer must be capable of running the required software as designated for each course.

Individual courses are available to practicing professionals who wish to update skills and to satisfy continuing education requirements.

Graduation Requirement: Students must earn a grade of C or better in core ARH courses in order to graduate.

Program Learning Outcomes

1. Demonstrate the ability to graphically communicate design ideas and concepts.
2. Demonstrate the ability to produce competent construction documents for residential building project utilizing manual and digital drafting techniques.
3. Demonstrate the ability to produce a set of competent construction documents for commercial building projects, utilizing digital software to produce written and graphic components.
4. Understand and apply integrated design and sustainable construction knowledge.

First Semester	Credits
ARH 101 Exploring Sustainability, Design, and The Built Environment,	3
ARH 110 Foundation Studio 1	4
ARH 170 Technology: Design and Production	3
MAT Elective[1]	4
ENG 103 Freshman Composition and Literature I	3
Total Credits:	17

Second Semester	Credits
ARH 120 Drafting Studio 1: Wood Frame	3
ARH 140 Wood Frame Construction	3
Professional Electives	7
ENG 104 Freshman Composition and Literature II	3
Total Credits:	16

Third Semester	Credits
ARH 121 Drafting Studio 2: Masonry	3
ARH 141 Commercial Construction	3
Professional Electives	6
Mathematics/Science Elective	4
Total Credits:	16

Fourth Semester	Credits
Professional Electives	12
Social Science Elective	3
Total Credits:	15
Total Program Credits:	64

Notes:

1. Minimum 4 hours mathematics. MAT 143 is minimum requirement. More advanced courses may be substituted with permission of advisor.

Art (A.A.S.)

OFFICE: FERRANTE HALL, ROOM 162
PHONE: (315) 498-2401, EMAIL: OCCINFO@SUNYOCC.EDU

The Art program is focused on the development of conceptual and technical skills of students in the fine arts and commercial design. Graduates of the Art program have a strong foundation for transfer to art schools and other four-year institutions, or they may apply their skills to the marketplace.

All art majors fulfill 24 credit hours of foundations including basic drawing, design, art history, color theory, concept development and an introduction to computer art software. Students then choose an area of specialization from the following:

Drawing and Painting

This specialization focuses on developing aesthetic and technical skills for drawing and painting and exploring the potential of materials.

Fine Crafts

The Fine Crafts specialization provides a broad-based foundation with emphasis on 3-dimensional exploration using the non-traditional fine arts materials of clay and glass.

Graphic Design

Graphic Design is concerned with visual communication and the design of ideas for print media and the Web. This specialization includes instruction in typography, digital image creation, design and advertising.

Multimedia Design

The Multimedia Design specialization focuses on visual communication as it applies to multimedia and interactive environments. This specialization includes instruction in animation, Web and interactive design.

Program Learning Outcomes

1. Demonstrate the ability to develop conceptual thoughts into original visual communication forms.
2. Demonstrate an appropriate level of technical competence in the production of his/her artwork.
3. Demonstrate a competence in the craftsmanship, execution and presentation of his/her artwork.
4. Exhibit use of verbal and written artisan vocabulary to communicate content of his/her/other visual compositions and processes.
5. Demonstrate a preliminary working knowledge of art history and its social relevance.

	Credits
ENG 103-104 Freshman Composition and Literature I and II	6
Social Science Electives	6
Mathematics/Science Electives	6-8
General Elective	3
Health Elective	1
Physical Education Activities	2

Art - First Year Courses: (24 credits required)	**Credits**
ART 101 Drawing I	3
ART 103 Design I	3
ART 105 History of Art I	3
ART 142 Introduction to Computer Graphics	3
ART 102 Drawing II	3
ART 104 Design II	3
ART 106 History of Art II	3
ART 152 Color and Concept Development	3

Art - Second Year Courses: (select one specialization)	**Credits**
1. Studio Arts: Painting/Drawing	
ART 201 Advanced Drawing and Painting I	3
ART 205 Figure Drawing I	3
ART 213 Painting I	3
3 credits selected from ART 202, 206 or 214	3
Art or Photography Electives	3
2. Studio Arts: Fine Craft	
ART 219 Ceramics I	3
ART 220 Ceramics II	3
6 credits selected from ART 211, 212, 226, or 227	6
Art or Photography Electives	3
3. Graphic Design	
ART 203 Typography and Layout	3

ART 204 Intermediate Computer Graphics	3
ART 240 Advanced Graphic Design	3
ART 244 Visual Design for the Web	3
Art or Photography Electives	3

4. Multimedia Design

ART 204 Intermediate Computer Graphics	3
ART 218 Art in Animation	3
ART 224 Design for Multimedia	3
ART 244 Visual Design for the Web	3
Art or Photography Electives	3

Total Program Credits	63-65

Automotive Technology (A.O.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 176
PHONE: (315) 498-7200, EMAIL: OCCINFO@SUNYOCC. EDU

As a modern automotive service technician, you will need advanced skills to perform service and maintenance on state of the art vehicles. Advanced technologies in areas such as computer controlled fuel and ignition systems, computer controlled suspension, anti-lock brakes and microcomputer-controlled heating and air conditioning systems demand the automotive technician possess a solid background in electronic systems and diagnostic procedures.

Onondaga Community College's Automotive Technology degree program allows you to earn an A.O.S. degree while training on the latest computer based diagnostic test instrumentation. Fundamental through specialized automotive hybrid courses will develop a solid foundation in this changing field. The program has extensive instruction on emissions diagnosis and drivability concerns in laboratory activities. Comprehensive instruction in applied mathematics and the sciences will allow you to have the diverse skills necessary for advancement in this exciting field.

The Automotive Technology program has both admission and graduation requirements: A) Students need to place into MAT 119 and ENG 103. B) Students must secure a cooperative work assignment at an automotive service facility approved by the Automotive Technology Department. Tools are provided for all automotive laboratory course work.

Program Learning Outcomes

1. Demonstrate the ability to service all automotive systems.
2. Demonstrate the ability to find all related system diagnostic/repair information within auto service publications.
3. Demonstrate familiarity with diagnostic service procedures; and ability to apply methodical problem-solving to understand vehicle systems.
4. Demonstrate working knowledge of automotive safety procedures while conducting service activities.

First Semester	**Credits**
ATC 115 Automotive Electrical Systems	4
ATC 103 Automotive Fundamentals	4
ENG 103 Freshman Composition and Literature I	3
MAT 119 Mathematics for Technical Disciplines I	4
Total Credits:	15

Second Semester	**Credits**
ATC 142 Fuel and Ignition Controls	4
ATC 116 Automotive Electronics	4
MAT 120 Mathematics for Technical Disciplines II	3
SCI 111 Introduction to Physics and Chemistry	4
Total Credits:	15

Summer Session	**Credits**
ATC 131 Engine Concepts	3
ATC 190 CO:Cooperative Education I	3
Total Credits:	6

Third Semester	**Credits**
ATC 207 Chassis Fundamentals	5
ATC 243 Advanced Engine Performance	4
COM 220 Interpersonal Communication	3

Total Credits:	12

Fourth Semester	Credits
ATC 222 Drivelines and Geartrains	5
ATC 271 Climate Control Systems	3
ATC 223 Hybrid, Electric and Alternative Fuel Vehicles	4
Total Credits:	12
Total Program Credits:	60

Business Administration (A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 324
PHONE: (315) 498-2435, EMAIL: OCCINFO@SUNYOCC.EDU

With a Business Administration A.S. degree from Onondaga, students will have several options upon graduation. Primarily, this degree is intended for students who will transfer to a four-year degree in their chosen field of business. Articulation agreements allow students to transfer with junior status to many public and private four-year schools.

Rather than transferring immediately, some students will choose to seek employment after finishing this degree. Upon completion of the degree these students will hold an A.S. in Business Administration, and will be well positioned to return to the academic world at a later point in their lives.

Program Learning Outcomes

1. Analyze quantitative information and draw meaningful conclusions for a business environment.
2. Identify, analyze and apply accounting principles and practices.
3. Demonstrate an understanding of general legal concepts in contracts, negotiable instruments and sales.

First Year	Credits
ENG 103-104 Freshman Composition and Literature I and II	6
MAT 115 Modeling for Decision Making[1]	3
MAT 116 Decision Making with Calculus[1]	3
BUS 243 Business Law I or BUS 244 Business Law II	3
SUNY Gen. Ed. Basic Communication Elective	3
SUNY Gen. Ed. Natural Science with Lab Elective	4
BUS Elective[2]	3
SUNY Gen. Ed. Elective[3]	3
Liberal Arts Elective	3
Total Credits:	31

Second Year	Credits
ECO 203 Principles of Macroeconomics	3
ECO 204 Principles of Microeconomics	3
BUS 105-106 Financial Accounting and Managerial Accounting	6
BUS 203 Electronic Spreadsheets for Business I	3
MAT 151 Statistics I	4
SUNY Gen. Ed. Elective[3]	3
SUNY Gen. Ed. Elective[3]	3
BUS Elective[2]	3
Liberal Arts Elective	3
Total Credits:	31
Total Program Credits:	62

Notes:

1. It is recommended that students take MAT 115 and MAT 116. Acceptable courses also include MAT 143 and MAT 161 OR MAT 143 and MAT 116 OR MAT 161 and MAT 162. Consult with your advisor.
2. Recommended Business electives: BUS 101, BUS 121, BUS 138, BUS 230 and BUS 231. To determine transferability of other Business courses, see advisor.
3. SUNY Gen. Ed. electives must include at least two of the following categories: American History, Foreign Language, Other World Civilizations, The Arts, and Western Civilization.

Business Technology (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 324
PHONE: (315) 498-2435, EMAIL: OCCINFO@SUNYOCC.EDU

The Business Technology A.A.S. degree (career degree) is designed to meet the needs of individuals who plan to seek employment immediately upon

graduation from Onondaga and/or those already employed who desire to update or develop new skill areas for professional advancement.

Individuals who intend to pursue advanced studies at four-year institutions and wish to maximize credit hour transfer should enroll in the Business Administration A.S. degree program.

Program Learning Outcomes

1. Identify, analyze and apply accounting principles and practices.
2. Effectively communicate knowledge of the business environment by verbal and/or written means.

First Year	Credits
ENG 103 and 104 Freshman Composition and Literature I and II	6
BUS 101 Introduction to Business	3
BUS 102 Mathematics of Business and Finance	3
COM 210 Public Speaking	3
MAT 118 Exploring Statistics	3
BUS 121 Marketing	3
BUS 138 Supervision and Management	3
BUS 105 Financial Accounting	3
Liberal Arts Elective	3
Total Credits:	30

Second Year	Credits
BUS 243/244 Business Law I or II	3
ECO 203 Principles of Macroeconomics/ECO 204 Principles of Microeconomics	3
BUS 203 Electronic Spreadsheets for Business I	3
BUS 204 Electronic Spreadsheets for Business II	3
BUS 212 Business Correspondence	3
Liberal Arts Elective	3
General Elective	3
Business Electives (3 courses)	9
Total Credits:	30
Total Program Credits:	60

Communication Studies (A.A.)

OFFICE: MAWHINNEY HALL, ROOM 310
PHONE: (315) 498-2313, EMAIL: OCCINFO@SUNYOCC. EDU

The Communication Studies AA degree offers students a program designed to meet their transfer needs. Working closely with an advisor, students will custom-tailor a program to achieve a seamless transfer to any college with which Onondaga has either 2 plus 2 or articulation agreement for Communication Studies. This degree allows students to fulfill such requirements as Introduction to Communication, Public Speaking, Introduction to Mass Media, Introduction to Public Relations, Interpersonal Communication, and Intercultural Communication.

Students wishing to use this degree to enhance their marketability in the workplace may certainly do so. The degree is flexible enough to allow students, again with good advising, to custom-tailor a program that will fulfill their employers' need for employees with solid communication skills.

Program Learning Outcomes

1. Demonstrate effective oral and written skills.
2. Demonstrate a basic knowledge of the components of communication studies in everyday communication interactions.
3. Demonstrate critical thinking skills as they are applied in communication contexts.
4. Demonstrate an understanding of diversity/global awareness in communication situations.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
Social Science Elective (Recommended SUNY Gen. Ed.)	3
SUNY Gen. Ed. Mathematics Elective	3-4
COM 100 Introduction to Communication	3
RDG 153 College Learning Strategies or Liberal Arts Elective[1]	3
Total Credits:	15-16

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
COM 210 Public Speaking	3

EMC 101 Mass Media Communications: An Introduction	3
SUNY Gen. Ed. (AH, WC, FL or NS)	3
SUNY Gen. Ed. Elective (Any category)	3
Total Credits:	15

Third Semester	**Credits**
Humanities Elective	3
SUNY Gen. Ed. Social Science Elective	3
SUNY Gen. Ed. The Arts Elective	3
COM Elective	3
ANT 152 Introduction to Cultural Anthropology	3
Total Credits:	15

Fourth Semester	**Credits**
COM 251 News Writing	3
COM Elective	3
Liberal Arts Elective	3
General Elective	3
General Elective	3
Total Credits:	15
Total Program Credits:	60-61

Notes:

1. RDG 153 will be waived for students who score 95 or above on the reading placement exam.

Computer Forensics (A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 230
PHONE: (315) 498-2427, EMAIL: OCCINFO@SUNYOCC.EDU

The Computer Forensics A.S. degree program at Onondaga Community College combines computer science, computer forensics, and criminal justice courses to provide students with the necessary background to transfer to a baccalaureate program in Computer Forensics or Information Security.

Program Learning Outcomes

1. Demonstrate an understanding of the security system's development life cycle.
2. Demonstrate an understanding of how to implement information security in an organization.
3. Demonstrate an understanding of the underlying technology involved in information security.
4. Demonstrate critical thinking in the understanding, evaluation and application of technology solutions to a variety of real life situations.
5. Articulate legal, ethical, and professional standards as they apply to the use of secure systems and computer-based data.
6. Understand the key elements in the forensic examination computer media.
7. Strategize for the inclusion and integration of computer forensic media examination with financial investigations and litigation.

First Semester	**Credits**
ENG 103 Freshman Composition and Literature I	3
PSY 103 General Psychology	3
MAT 118 Exploring Statistics or MAT 143 Pre-Calculus With Trigonometry	3-4
CRJ 101 Justice System	3
CFS/CIS 130 Foundations of the Internet	3
Total Credits:	15-16

Second Semester	**Credits**
SOC 103 Introductory Sociology	3
CSC 110 Program Design and Development	4
CIS 170 Network Fundamentals	3
ENG 104 Freshman Composition and Literature II	3
CFS 140 Introduction to Computer Forensics	3
Total Credits:	16

Third Semester	**Credits**

CFS/CRJ 232 Cybercrime	3
SUNY Gen. Ed. Lab Science Sequence I	4
SUNY Gen. Ed. Elective (AH, OW, FL)	3
COM 220 Interpersonal Communication	3
CSC 250 Server Administration	3
Total Credits:	16

Fourth Semester	**Credits**
SUNY Gen. Ed. Elective (AR, WC)	3
CSC 211 Computer System Organization	4
CRJ 215 Criminal Law	3
SUNY Gen. Ed. Lab Science Sequence II	4
Total Credits:	14
Total Program Credits:	61-62

Computer Information Systems (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 230
PHONE: (315) 498-2427, EMAIL: OCCINFO@SUNYOCC.EDU

A career in modern information systems management and support is possible by starting with an A.A.S. degree from Onondaga in Computer Information Systems.

As a CIS student, you will be exposed to current concepts of information processing including current application software, data communications, distributed processing, user interface, management of internets and intranets, and Web publishing using a diverse hardware environment.

The A.A.S. degree program in Computer Information Systems is oriented toward immediate employment. However, the program's curriculum is compatible with the curricula of numerous four-year computer information systems programs. If your goal is to transfer to a four-year college or university to pursue your bachelor's degree, you should work closely with an Onondaga transfer counselor to ensure your individual program meets transfer requirements. Developed in conjunction with a survey of the local community, the CIS curriculum follows the National Computing curricula guidelines of the Association of Computing Machinery.

Computer Information Systems is for the student interested in computer applications. Students interested in mathematics and science should consider the Computer Science A.S. degree.

A specialization must be chosen. Choices include: Networking, Information Technology Support, Web Technology, and Programming. Graduates with an A.A.S. degree in Computer Information Systems are prepared to work as beginning computer programmers, junior systems analysts, website managers/designers, operations trainees and network trainees. This program offers an opportunity for the currently employed computer information systems professional to update basic skills and to learn new languages, allowing for a great deal of lateral and upward mobility.

Computer Information Systems is constantly changing. Please see your advisor for the current requirements.

Program Learning Outcomes

1. Demonstrate an understanding of the components of a computer information system, including application and system software, communication protocols, and networking hardware and software.
2. Demonstrate a deeper knowledge of at least one area of computing, such as programming, networking, technical support or web technology, enabling the student to gain employment in the computing field.
3. Demonstrate critical thinking in the understanding, evaluation and application of technology solutions to a real life situation.
4. Articulate ethical and professional standards as they apply to the use of computer systems and computer based data.

Graduation Requirements

All students must earn a minimum grade of C in all required CIS/CSC courses to earn the AAS degree.

All required CIS/CSC courses must be taken within 7 years of graduation, due to the changes in technology and curriculum content.

First Semester	**Credits**
ENG 103 Freshman Composition and Literature I	3
Liberal Arts Elective	3
CIS 125 Fundamentals of Computer Information Systems	3
CIS 130 Foundations of the Internet	3
CIS 170 Network Fundamentals	3
Total Credits:	15

Second Semester	
ENG 104 Freshman Composition and Literature II	3
MAT 143 or Higher[1]	4

CSC 110 Program Design and Development	
<OR>	
CSC 162 Visual Basic I Programming[2]	4
CIS/CSC Specialization[3]	3-4
Health or Physical Education Elective	1
Total Credits:	15-16

Third Semester	**Credits**
ENG 227 Writing for Emerging Technologies	
<OR>	
ENG 259 Report and Technical Writing	3
Social Science/Humanities Elective	3
CIS/CSC Specialization[3]	4
CIS/CSC Specialization[3]	4
Health or Physical Education Elective	1
Total Credits:	15

Fourth Semester	
Social Science/Humanities Elective	3
CIS/CSC Specialization[3]	3-4
CIS/CSC Specialization[3]	3-4
CIS 286 Systems Analysis and Design	3
General Elective	3
Total Credits:	15-17
Total Program Credits:	60-63

Notes:

1. MAT 143 or higher (excluding Linear Algebra).
2. Students pursuing the Programming specialization should take CSC 110.
3. Specialization Courses must be selected from the following (a minimum grade of C is required in all CIS/CSC courses to meet degree requirements):

Networking	**Credits**
CIS 271 Internetworking I	4
CIS 272 Internetworking II	3
CIS 291 Information Technology Support I	4
CIS 231 Advanced Web Servers	4
CSC 250 Server Administration	3

Information Technology Support	
CSC 250 Server Administration	3
CIS 271 Internetworking I	4
CIS 291 Information Technology Support I	4
CIS 292 Information Technology Support II	4
CIS 231 Advanced Web Servers	4

Web Technology	
CIS 230 Website Design and Development	4
CIS 231 Advanced Web Servers	4
CSC 250 Server Administration	3
CIS 106 An Introduction to Digital Media	3
Web Technology Elective*	3-4

* Choose from ART 142, ART 224, ART 244, BUS 121, CIS 151, CIS 271, CIS 283, CSC 111, or CSC 264.

Programming	
CSC 109 Algorithm Development	1
CSC 111 Fundamentals of Computing I	4
CSC 112 Fundamentals of Computing II	4
PHI 107 Logic	3
CSC Programming Elective**	3-4
CSC Programming Elective**	3-4

** Choose from CSC 162, CSC 211, CSC 222, CSC 224, CSC 263, CSC 264, or CSC 280. Programming electives should be chosen in consultation with the advisor to meet an individual student's needs. This will include those cores that require 5 courses.

Computer Science (A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 230
PHONE: (315) 498-2427, EMAIL: OCCINFO@SUNYOCC.EDU

The Computer Science program at Onondaga Community College follows the latest ACM Guidelines for the A.S. degree. This degree program combines practical experience with current programming languages, together with a theoretical background in computer science. Choose this program if your goal is to transfer to a bachelor's degree program in computer science or software engineering.

Curriculum

You will be required to earn a minimum grade of C in all required CSC courses to receive your A.S. degree.

Program Learning Outcomes

1. Demonstrate an understanding of the software engineering process, including algorithm development, coding, and testing.
2. Demonstrate an understanding of sophisticated data structures and how those structures are utilized in modern software engineering.
3. Demonstrate an understanding of the underlying technology of the computer architecture as it affects software engineering.
4. Demonstrate critical thinking in the understanding, evaluation and application of technology solutions to a variety of real life situations.
5. Articulate ethical and professional standards as they apply to the use of computer systems and computer based data.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
MAT 161 Calculus I[1]	4
COM 210 Public Speaking or COM 100 Introduction to Communication	3
CSC 109 Algorithm Development	1
CSC 111 Fundamentals of Computing I	4
Total Credits:	15

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
MAT 162 Calculus II or MAT 251 Discrete Mathematics[1]	3-4
CSC 112 Fundamentals of Computing II	4
SUNY Gen. Ed. Elective[2]	3
SUNY Gen. Ed. Elective[2]	3
Total Credits:	16-17

Third Semester	Credits
CSC 211 Computer System Organization	4
CSC Elective[3]	3-4
SUNY Gen. Ed. Natural Science with Lab Sequence I[4]	4
PHI 107 Logic	3
Total Credits:	14-15

Fourth Semester	Credits
SUNY Gen. Ed. Elective[2]	3
SUNY Gen. Ed. Natural Science with Lab Sequence II[4]	4
CSC Elective[3]	3-4
General Elective	3
CSC/CIS/CFS course if needed for 61 credit minimum	3-4
Total Credits:	16-18
Total Program Credits:	61-65

Notes:

1. The mathematics requirement is fulfilled by completion of MAT 161 and either MAT 162 or MAT 251. All three courses are recommended and additional mathematics courses may be applied to the general elective.
2. Students must pick from three of the following categories: Social Science, American History, Western Civilization, Other World Civilization, The Arts, and Foreign Language.
3. CSC curriculum elective must be completed from the following list: CSC 162, CSC 222, CSC 224, CSC 250, CSC 255, CSC 263, CSC 264, or CSC 280. CSC 110 will be allowed as a curriculum elective only if taken prior to students successfully completing CSC 111.
4. Eight (8) credits of a laboratory science sequence must be completed. PHY 105 and PHY 205 are recommended for transfer. Eight (8) credits of sequential laboratory science from one of the disciplines listed below will fulfill degree requirements, but may not transfer.

   Biology: BIO 151 and BIO 152

   Geology: GEO 151 and GEO 152

Physics: PHY 103 and PHY 104 / PHY 105 and PHY 205

Chemistry: CHE 171 and CHE 172

Criminal Justice (A.S.)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-2341, EMAIL: OCCINFO@SUNYOCC.EDU

If you picture yourself playing a positive role in the criminal justice system, Onondaga Community College's Criminal Justice A.S. degree can help you develop the skills you will need in this challenging environment.

This degree lays the foundation for a four-year degree in a related field. If you are already employed in the criminal justice system, the degree can sharpen your skills and advance your career. If you have a special interest in issues related to juvenile justice, Onondaga offers a 12-credit minor in this critically important and relevant area.

The CRJ A.S. program provides an overview of the entire criminal justice system, including the court system, criminal law, police-community relations, ethics, juvenile justice, probation, parole, law, evidence, and criminology. If you plan to continue your studies in a related field, the A.S. degree is designed for a seamless transition into a four-year college or university program. If your plans change and you decide to enter the workforce after finishing your A.S. degree in Criminal Justice, you will be prepared for a variety of challenging positions.

We have highly experienced faculty which includes criminal justice experts from throughout Central New York, including professionals from the Syracuse Police Department, Onondaga County Sheriff's Department, DeWitt Police Department and the New York State Police. Prominent local attorneys teach criminal law courses. In addition, experts in the field of criminalistics, juvenile delinquency and the investigation of child abuse serve on our faculty.

Program Learning Outcomes:

1. Demonstrate knowledge of core content areas within the field.
2. Demonstrate critical-thinking skills by evaluating and synthesizing primary theories and concepts underlying the criminal justice field.
3. Articulate ethical issues and describe appropriate responses for practitioners or criminal justicians in a diverse society.
4. Demonstrate information literacy by preparing research reports using electronic databases and online academic sources.

Program Prerequisites

All students will be required to achieve placement at the ENG 103 and RDG 153 levels or concurrently be enrolled in ENG 099 and RGD 093 if placement is not as the college level to enroll in any CRJ course.

Completion Requirements

A final grade of C or better must be achieved in every criminal justice course to earn the A.S. degree in Criminal Justice.

Transfer Credit

Only credit from institutions that are accredited by their regional higher education accrediting body is accepted for transfer into the Criminal Justice program. No academic credit is awarded by the Criminal Justice program for life experience or for military, or other professional training. No credit toward graduation is awarded for pre-collegiate level or remedial work designed to prepare the student for collegiate study. No criminal justice major credits are to be completed through knowledge-based examinations (e.g., CLEP).

First Semester	Credits
COM 100 Introduction to Communication OR COM 210 Public Speaking	3
CRJ 101 Justice System	3
MAT 118 Exploring Statistics	3
ENG 103 Freshman Composition and Literature I	3
SOC 103 Introductory Sociology	3
Total Credits:	15

Second Semester	Credits
CRJ 226 Law Enforcement Process	3
ENG 104 Freshman Composition and Literature II	3
PSY 103 General Psychology	3
CRJ 215 Criminal Law	3
HIS 104 History of Western Civilization or HIS 107 Modern American History	3
Total Program Credits:	15

Third Semester	Credits
CRJ 220 Corrections Process	3
CRJ 201 Criminology	3
SUNY Gen. Ed. (Foreign Language, Other World Civilizations, or The Arts)	3
SUNY Gen. Ed. Natural Science with Lab	4
PHI 108 Ethics (recommended) or CRJ 202 Ethics and Criminal Justice	3

Total Credits:	16

Fourth Semester	Credits
Criminal Justice Elective or SUNY Gen. Ed. Elective (if CRJ 202 taken)	3
SUNY Gen. Ed. Elective	3
Criminal Justice Elective	3
Liberal Arts Elective	3
English Elective (200 level Literature course)	3
Total Credits:	15
Total Program Credits:	61

Early Child Care (Certificate)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-2341, EMAIL: OCCINFO@SUNYOCC.EDU

If your goal is to work with children from birth through age eight in day care, pre-school, or school age programs, the one-year Early Child Care certificate program may be of interest to you. You will gain understanding of child development, plan developmentally appropriate activities and practice the responsibilities of assistant teachers.

You may enroll for this program on a part-time or full-time basis. It is recommended that students in full-time jobs take no more than two courses per semester. Special program costs may include transportation to and from fieldwork sites. You may be required to have a medical exam, a tuberculin test, and a background check before beginning your fieldwork.

Program Learning Outcomes

1. Students will demonstrate knowledge base theory specific to the early childhood discipline.
2. Students will apply knowledge base theory to practice.
3. Students will demonstrate awareness of the NAEYC Code of Ethical Conduct.
4. Students will demonstrate cultural and diversity awareness, and sensitivity to social justice.

Essential Skills and Dispositions

The following skills and dispositions, with or without reasonable accommodations, are expected of students enrolled in the Early Child Care Certificate program.

1. Emotional stability and psychological health to work with children, families, clients, colleagues and college personnel.
2. Interpersonal skills sufficient to establish a professional relationship with individuals and families from a variety of cultural, social, emotional, and intellectual backgrounds.
3. Effective written and oral communication skills.
4. Critical thinking for assessment and decision making in field placement.
5. Ability to carry out duties and responsibilities in the Early Childhood fieldwork placement, including observation and assessment; monitoring safety needs; moving quickly to ensure children's safety; and lifting children, equipment and supplies up to 50 pounds.
6. Sufficient stamina to carry out the duties and responsibilities in the Early Childhood fieldwork placement.
7. Character dispositions such as honesty, integrity, caring and empathy.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
PSY 103 General Psychology	3
Liberal Arts Elective	3
EDU 155 Developmental Care of Infants and Toddlers and EDU 158 Infant-Toddler Development < OR > EDU 180 Early Childhood Education: An Introduction and EDU 182 Child Growth and Development	6
Total Credits:	15

Second Semester	Credits
EDU 183 Observation and Assessment of Young Children	3
EDU 184 Early Childhood Field Instruction and Seminar I	3
EDU 280 Language and Literacy Development in Young Children	3
EDU 281 Curriculum Development	3

Liberal Arts Elective	3
Total Credits:	15
Total Program Credits:	30

Early Childhood (A.A.S.)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-2341, EMAIL: OCCINFO@SUNYOCC.EDU

The Early Childhood A.A.S. degree prepares students for employment as an assistant or head teacher in a program working with children from birth to Grade 2, as a teaching assistant in a public school, Head Start, family child care provider or nanny.

Completing 9 credit hours in early childhood education (and experience related to caring for children) meets the qualifications for head of group for preschoolers and school-aged children required by the New York State Department of Social Services day care Licensing Regulations. Courses within this area also meet the formal training requirement for the Child Development Associate (CDA) credential awarded by the Council for Early Childhood Professional Recognition in Washington, D.C. Prospective students with a current Child Development Associate (CDA) credential may receive three transfer credits toward the Early Childhood A.A.S. degree.

The program includes two 100- hour field placements in an approved early childhood program. Students may be required to have a medical exam, tuberculin test, background check and fingerprinting before beginning field placements.

Students wishing to transfer to the Early Childhood A.A.S. program from another Onondaga curriculum must have at least a 2.0 cumulative average.

Onondaga also offers a 30-credit hour Early Child Care Certificate. All of the credits earned in the certificate program can be applied to the Early Childhood A.A.S.

Graduates of the Early Childhood A.A.S. program may also choose transfer to four-year teacher transfer institution upon graduation.

The Early Childhood A.A.S. degree is accredited by the National Association for the Education of Young Children (NAEYC).

Program Learning Outcomes

1. Students will demonstrate knowledge base theory specific to the early childhood discipline.
2. Students will apply knowledge base theory to practice.
3. Students will demonstrate awareness of the NAEYC Code of Ethical Conduct.
4. Students will demonstrate cultural and diversity awareness, and sensitivity to social justice.

First Year	Credits
ENG 103 Freshman Composition and Literature I	3
ENG 104 Freshman Composition and Literature II	3
COM 100 Introduction to Communication or COM 210 Public Speaking	3
Social Science Elective[1]	3
General Elective or RDG 153[2]	3
Mathematics Elective[1]	3
EDU 180 Early Childhood Education: An Introduction	3
EDU 182 Child Growth and Development	3
EDU 183 Observation and Assessment of Young Children	3
EDU Elective[1]	3
Total Credits:	30

Second Year	Credits
Social Science Elective[1]	3
History or Political Science Elective[1]	6
Science Elective[1]	3
Liberal Arts Elective	6
EDU 184 Early Childhood Field Instruction and Seminar I	3
EDU 281 Curriculum Development	3
EDU 283 Early Childhood Field Instruction and Seminar II	3
EDU 285 Early Child Special Education: Introduction	3
EDU Elective[1]	3
Total Credits	33
Total Program Credits	63

Notes:
1. Consult with an EDU advisor to plan your SUNY General Education and EDU electives if you plan to transfer to a SUNY four-year institution.
2. RDG 153 is required for students with a reading placement score <95.

Electrical Engineering Technology (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 143
PHONE: (315) 498-2451, EMAIL: OCCINFO@SUNYOCC.EDU

Today's emphasis on sophisticated electronic hardware techniques requires that the two-year Electrical Engineering Technology (ELT) graduate be well schooled in fundamental concepts relating to AC and DC circuit analysis, electronics, special devices, power, and communications, as well as digital hardware and software techniques.

As an engineering technician, you will work with engineers in the area of research and development, design, and modern manufacturing methods.

As an ELT student at Onondaga, you will receive a solid background in the liberal arts in addition to courses in your field of specialization. Onondaga's faculty has relevant industrial experience in addition to advanced engineering degrees.

To enroll in the Electrical Engineering Technology A.A.S. program, you will need two years of high school mathematics. Once you graduate with an A.A.S. degree in Electrical Engineering Technology from Onondaga, you will be prepared to seek employment opportunities in the field or pursue a bachelor's degree (B.S). A wide range of employment possibilities exists in the area of design, manufacturing, sales, and service. If you wish to pursue a B.S. degree in engineering technology you can be accepted as a third-year student at many four-year colleges.

Program Learning Outcomes

1. Demonstrate the ability to analyze electrical circuit diagrams and systems to solve for appropriate electrical data and specifications.
2. Demonstrate the ability to construct (real and computer stimulated) electrical circuits from schematic diagrams, and to analyze the circuits for faults using the appropriate measurement techniques and equipment.
3. Demonstrate the ability to design electrical circuits and systems from given data and specifications.
4. Demonstrate the ability to use the computer and design and analyze electrical circuits and systems.
5. Demonstrate the ability to create the appropriate supporting design and analysis documentation for lab journals and technical reports.

Graduation Requirement: All students in the Electrical Technology program must have a minimum grade of C- in the following courses: ELT 141, 142, 161, 261 and CMT 171, 190.

Please note: If you wish to pursue a B.S.E.E. degree in electrical or computer engineering, you should consult with an advisor.

This program is accredited by Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC of ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 Telephone: (410) 347-7700. See page IV.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
CMT 101 Introduction to Computers and Applications	4
ELT 141 Circuits I	4
MAT 119 Mathematics for Technical Disciplines I[1]	4
Total Credits:	15

Second Semester	Credits
MAT 120 Mathematics for Technical Disciplines II[1]	3
CMT 171 Digital Electronics	4
ELT 142 Circuits II	4
ELT 161 Electronic Circuits I	4
Total Credits:	15

Third Semester	Credits
ELT 261 Electronic Circuits II	4
CMT 190 Introduction to Microprocessors	4
ELT Elective (200 level ELT or CMT course) [2]	4
ENG 104 Freshman Composition and Literature II or SUNY Gen. Ed. Basic Communication COM Elective	3
Total Credits:	15

Fourth Semester	Credits
ELT Elective (200 level ELT or CMT course) [2]	4
Career Elective[3]	3
SUNY Gen. Ed. Natural Science with Lab[4]	4
Social Science Elective or PHI Elective[5]	3

General Elective[6]	1
Total Credits:	15
Total Program Credits:	60

Notes:

1. Students intending to pursue a 4-year ELT degree should take MAT 143 and MAT 161. Other variations are also acceptable based upon advisor approval.
2. Students should consult with advisor to select courses from: CMT 292, ELT 201, ELT 215, ELT 221, ELT 222, ELT 285, ELT 289 and MET 270.
3. Any 3 or 4 credit course that reasonably contributes to the student's career goal. CMT, ELT, MET, NET, CIS or CSC (programming language) recommended. Other options are also available based upon advisor approval.
4. Students intending to pursue a 4-year ELT degree should take CHE 171 or PHY 103. Students who have completed calculus can take PHY 105. PHY 101 cannot be used since the SUNY Gen Ed Natural Science elective must also be a Liberal Art.
5. PHI 120 is strongly recommended.
6. HEA 106, HFA 204, HFA 215, HUM 270, or PEH are recommended.

Electronic Media Communications (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM I5O
PHONE: (315) 498-2321, EMAIL: OCCINFO@SUNYOCC.EDU

The OCC Electronic Media Communications A.A.S. program prepares you for a career in the varied fields of electronic media communications and/or continuation at a four-year institution. As an EMC student, you'll obtain the fundamental skills necessary to perform as an electronic media professional. Through coursework, you'll learn to develop, design, write, produce and direct both independent and team-based programs and projects. Faculty will work closely with students to ensure a deep understanding of the creative, intellectual and technical aspects of the production process. At the same time, you'll receive a well-rounded education that incorporates the broader historical, ethical, and business aspects of media and its impact on both the individual and a global society.

Classes are taught in state-of-the-art production facilities. These include digital audio and video editing labs, a professional television studio, and an internet radio station.

Classes are kept to a manageable size to allow extensive hands-on training. You may also take advantage of professional opportunities through an internship. The EMC Department maintains close ties with media outlets that provide internships for OCC EMC students.

OCC EMC graduates are employed in radio and television stations, cable TV companies, sound recording facilities, audio/video production companies, advertising agencies and the entertainment industry in Central New York and throughout the United States. Graduates have transferred to such prestigious programs as the S.I. Newhouse School of Public Communications at Syracuse University and the Park School of Communications at Ithaca College, and institutions such as Emerson College, and SUNY institutions such as Oswego, Fredonia, Buffalo State, and Plattsburgh.

Radio/Audio Production Specialization:
If your interests lie in the career field of audio/radio electronic media, this specialization will prepare you for a career leading to:

- On-air announcing
- Radio news reporting
- Radio programming
- Radio promotions
- Sound recording
- Sound design and production

Success in this program will allow you to obtain an entry level position as an on-air announcer, radio production person, sound recording production assistant, radio programming/promotion assistant, audio mixing console operator, or audio editor. You may also choose to transfer to a four-year school that offers advanced training in either audio and radio production or sound recording technology. Audio Specialization majors also produce, write and create programming for OCC's Internet radio station.

Television/Video Production Specialization:
If you'd like to pursue a career in television broadcasting or video production, this specialization will prepare you for a career in:

- Multi-camera studio producing and directing,
- TV news and sports producing and reporting
- Film-style video field production and editing
- Commercial, corporate or educational video production

Your A.A.S degree will provide you with the skills needed to gain an entry level position in TV studio production, video field production and post-production, news videography and editing. You may also choose to transfer to a four-year school that offers advanced training in producing, announcing and performing for television, video and film.

Digital Media Specialization:
As the field of media becomes more integrated with digital technology, this specialization provides students with a breadth of knowledge of the many phases of digital media production and the delivery processes. You'll receive an inclusive education studying multiple disciplines: computer courses in the Internet and managing web pages and servers, art courses in computer graphics and multimedia design, courses in digital audio, video production, and DVD authoring. Students in the Digital Media Specialization are prepared for careers in:

- Graphic design for television and the Internet
- Television station creative services and promotions production

- Video editing
- DVD authoring
- Producing audio and video materials for distribution via the Internet

You may also opt to transfer to a four-year institution that offers advanced training in multi-media production and delivery.

Program Requirements

1. Students must earn a minimum grade of C in all courses with an EMC prefix.
2. Students must maintain an overall GPA of 2.0 to remain in good standing.

EMC courses are valid as pre-requisites for continuation of courses for three academic years. This is necessary to ensure that students have a skill level that is relevant to current practices and technologies used in the field of electronic media.

Program Learning Outcomes:

1. Demonstrate knowledge of the historical, legal, and ethical aspects of media creative/business practices.
2. Demonstrate oral and written communication, critical-thinking, visual and aural literacy, and ability to meet deadlines.
3. Demonstrate technical proficiency and problem-solving skills in the audio and video production environment.
4. Demonstrate the ability to function effectively in a team work environment.
5. Demonstrate qualities of professional conduct that include attitude, work ethic, and dependability.

EMC: Digital Media (A.A.S.)

First Semester	Credits
EMC 101 Mass Media Communications: An Introduction	3
EMC 144 Audio/Video Production: An Introduction	4
CIS 100 Information and Computer Literacy	3
ENG 103 Freshman Composition and Literature I	3
Mathematics/Science Elective (SUNY Gen. Ed. recommended)	3-4
Total Credits:	16-17

Second Semester	Credits
EMC 155 Digital Audio Production	3
EMC 169 Video Field Production	3
ART 142 Introduction to Computer Graphics	3
CIS 130 Foundations of the Internet	3
ENG/COM 157 Electronic Media Writing	3
Total Credits:	15

Third Semester	Credits
EMC 259 Digital Video Editing	4
EMC 265 Sound Design and Production for Digital Media	3
ENG 104 Freshman Composition and Literature II	3
CIS 230 Web Site Design and Development	4
General Elective (SUNY Gen. Ed. recommended)	3
Total Credits:	17

Fourth Semester	Credits
EMC 286 DVD Authoring	4
ART 224 Design for Multimedia	3
Social Science Elective (SUNY Gen. Ed Social Science recommended)	3
General Elective (SUNY Gen. Ed. recommended)	3
Total Credits:	13
Total Program Credits:	61-62

EMC: Radio/Audio Production (A.A.S.)

First Semester	Credits
EMC 101 Mass Media Communications: An Introduction	3
EMC 144 Audio/Video Production: An Introduction	4
CIS 100 Information and Computer Literacy	3

ENG 103 Freshman Composition and Literature I	3
COM 210 Public Speaking	3
Total Credits:	16

Second Semester	**Credits**
EMC 155 Digital Audio Production	3
EMC 160 Radio Station: An Introduction	3
EMC Elective	3-4
ENG/COM 157 Electronic Media Writing	3
Social Science Elective (SUNY Gen. Ed Social Science recommended)	3
Total Credits:	15-16

Third Semester	**Credits**
EMC 260 Radio Station Operations	3
EMC 265 Sound Design and Production for Digital Media	3
ENG 104 Freshman Composition and Literature II	3
EMC Elective	3-4
Mathematics/Science Elective (SUNY Gen. Ed. recommended)	3-4
Total Credits:	15-17

Fourth Semester	**Credits**
EMC 275 Producing for Radio	4
Social Science Elective (SUNY Gen. Ed. Social Science recommended)	3
Social Science Elective (SUNY Gen. Ed. Social Science recommended)	3
General Elective (SUNY Gen. Ed. recommended)	3
General Elective (SUNY Gen. Ed. recommended)	3
Total Credits:	16
Total Program Credits:	62-65

EMC: Television/Video Production (A.A.S.)

First Semester	**Credits**
EMC 101 Mass Media Communications: An Introduction	3
EMC 144 Audio/Video Production: An Introduction	4
CIS 100 Information and Computer Literacy	3
ENG 103 Freshman Composition and Literature I	3
COM 210 Public Speaking	3
Total Credits:	16

Second Semester	**Credits**
EMC 155 Digital Audio Production	3
EMC 159 Television Studio Production	4
EMC 169 Video Field Production	3
Social Science Elective (SUNY Gen. Ed. Social Science recommended)	3
ENG/COM 157 Electronic Media Writing	3
Total Credits:	16

Third Semester	**Credits**
EMC 249 Electronic News Gathering: An Introduction	3
EMC 259 Digital Video Editing	4
ENG 104 Freshman Composition and Literature II	3
EMC Elective	3-4
Mathematics/Science Elective (SUNY Gen. Ed. recommended)	3-4
Total Credits:	16-18

Fourth Semester	**Credits**

EMC 269 Television News Production	4
EMC 289 Television Producing and Directing	4
Social Science Elective (SUNY Gen. Ed. Social Science recommended)	3
General Elective (2) (SUNY Gen. Ed. recommended)	6
Total Credits:	17
Total Program Credits:	65-67

Emergency Management (A.A.S.)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-6046, EMAIL: OCCINFO@SUNYOCC.EDU

The Homeland Security and Disaster Preparedness A.A.S. degree prepares graduates to react appropriately and professionally to situations in which the public might be put at risk by natural or manmade emergencies. Students are trained to assess, plan, mitigate, command and control professional responses to emergency situations. They also are trained to coordinate and evaluate the efforts of resource and operations personnel who deal with emergency situations and their aftermaths.

The Homeland Security and Disaster Preparedness degree has been developed in conjunction with the Federal Department of Homeland Security, the Federal Emergency Management Agency (FEMA), and the New York State Emergency Management Office. Further, the degree addresses the current organization of emergency management, such as the National Incident Management System (NIMS) and the National Response Plan, and reflects the current approach to providing emergency management services.

Program Learning Outcomes

1. Communicate effectively a knowledge of emergency management content areas to include preparation, response, recovery and planning.
2. Present emergency public information in a crisis situation using skills developed in public information officer class.
3. Exhibit an increase in understanding the key elements of courses based on before and after survey questions.
4. Demonstrate critical thinking, communication and management skills necessary to create hazard analysis and develop an emergency operations plan.

First Semester	Credits
COM 220 Interpersonal Communication	3
ENG 103 Freshman Composition and Literature I	3
EMG 150 Principles of Emergency Management	3
Emergency Management Elective	3
Social Science Elective	3
Physical Education Activity	1
Total Credits:	16

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
POS 102 State and Local Politics	3
EMG 178 Emergency Response Planning	3
Emergency Management Elective	3
Science Elective[1]	3-4
Total Credits:	15-16

Third Semester	Credits
CIS 100 Information and Computer Literacy	3
EMG 252 Disaster Response and Recovery	3
Emergency Management Electives	3
Curriculum-Related Electives[2]	3
Health Elective	1
Mathematics Elective[3]	3
Total Credits:	16

Fourth Semester	Credits
EMG 280 Emergency Exercise Program Management	3
EMG 283 Practical Applications of Incident Management	3
Emergency Management Electives	3
Curriculum-Related Electives[2]	3

Physical Education Activity	1
Total Credits:	13
Total Program Credits:	60-61

Notes:

1. While any 3 or 4 credit science course will satisfy degree requirements, SCI 100 Meteorology is strongly recommended.
2. For students transferring into the EMG program, up to 6 credits of COR or PSD courses may be applied as curriculum related electives.
3. Any credit-bearing MAT course will satisfy degree requirements.

Engineering Science (A.S.)

OFFICE: FERRANTE HALL, ROOM 378
PHONE: (315) 498-2439, EMAIL: CAMEROTE@SUNYOCC.EDU

Engineering Science is a two-year college-parallel curriculum offering the basic first two years of a bachelor-level engineering program. By successfully completing the requirements for this curriculum, you can expect to transfer to a four-year engineering college to continue work in one of many branches of engineering (e.g., aeronautical, chemical, electrical, mechanical).

To apply for this program, you should be in the upper third of your high school graduating class, and should have an interest, aptitude and good high school performance in mathematics and the physical sciences. A minimum preparation of three and one-half years of mathematics, chemistry, and physics is expected.

By successfully completing an A.S. degree in Engineering Science, you may transfer to a four-year engineering institution with junior-level status. This program has general articulation agreements between the two-year Engineering Science Association and the Association of Engineering Colleges of New York State. These two associations represent the two-year engineering colleges and the four-year institutions, respectively.

Program Learning Outcomes:

1. Show proficiency in mathematics – including basic theory and the ability to apply that theory to engineering problems.
2. Demonstrate an ability to apply the basic principles of engineering through the use of science and mathematics combined with a logical and methodical thought process.
3. Show proficiency in the sciences – including chemistry & physics; and the ability to apply the theoretical concepts/laboratory experience to solve engineering problems.

First Semester	**Credits**
ENG 103 Freshman Composition and Literature I	3
MAT 161 Calculus I	4
CHE 171 General Chemistry I and CHE 171L General Chemistry I Laboratory	3+1
PHY 105 Physics I-Mechanics	4
Total Credits:	15

Second Semester	**Credits**
ENG 104 Freshman Composition and Literature II	3
MAT 162 Calculus II	4
PHY 205 Physics II-Electricity and Magnetism	4
ENS 150 Introduction to Engineering	3
Technical Elective[1]	3
Total Credits:	17

Third Semester	**Credits**
MAT 263 Calculus III	4
PHY 206 Physics III-Thermodynamics and Waves	4
ENS 207 Engineering Mechanics I (Statics)	3
COM 210 Public Speaking	3
Technical Elective[1]	3
Total Credits:	17

Fourth Semester	**Credits**
MAT 264 Differential Equations	4
ENS 208 Engineering Mechanics II (Dynamics)	3
Higher Programming Language Elective[2]	4
SUNY Gen. Ed. Elective[3]	3
Technical Elective[1]	3

Total Credits:	17
Total Program Credits:	66

Notes:

1. Technical Electives:
   MAT 241 Linear Algebra
   ENS 201 Digital Logic Design/CMT 171 Digital Electronics
   ENS 210 Electrical Circuit Analysis
   ENS 212 Mechanics of Materials
   MET 261 Introduction to CAD or MET 270 Solid Modeling
   CHE 172 General Chemistry II and CHE 172L General Chemistry II Laboratory
   CHE 205 Organic Chemistry I and CHE 205L Organic Chemistry I Laboratory
   CHE 206 Organic Chemistry II and CHE 206L Organic Chemistry II Laboratory
   BIO 151 General Biology I

2. Higher Programming Language: CSC 110 Program Design and Development or CSC 111 Fundamentals of Computing I are recommended.

3. Students are required to take one SUNY General Education course. This course must be from the following categories: American History, Western Civilization, Other World Civilizations, Foreign Language and/or the Arts.

Environmental Technology (A.A.S.)

OFFICE: FERRANTE HALL, ROOM 369
PHONE: (315) 498-2722, EMAIL: MCANINCB@SUNYOCC.EDU

The Environmental Technology A.A.S. degree is designed to provide students with the skills needed to work in the environmental field or transfer successfully to a 4-year school to continue study in the environmental field. Courses in the program provide skills in statistics, graphical and mathematical analysis, chemical and biotechnical analysis, computer based GIS mapping, and technical writing necessary for the analysis and preparation of scientific reports. In learning these skills, students will be using the latest soil, water, and laboratory testing/monitoring technology and instrumental software to practice proper sampling procedures and documentation methods. In addition, the program offers a range of internship opportunities as part of the coursework so students can continue their hands-on learning. To support these internship opportunities the program offers a 40-hour HazWoper (OSHA) certification.

The program has a core set of foundational courses. Additionally, students have the choice between two specializations: Geoscience or Biotechnology.

- The Geoscience specialization has advanced courses in hydrology, and either the geosciences and/or geographic information systems (GIS).
- The Biotechnology specialization has courses in applied biotechnology, other renewable energy sources, and the biological sciences.

Both specializations have electives that allow for some freedom of course selection.

Program Learning Outcomes

1. Learn proper field techniques for collecting and analyzing environmental data. This includes the collection, logging and monitoring of field samples (various media); the drilling and logging of soil-boring(s); the collection stream flow data; and may include other hydrological data. Proficiency of these techniques supports primarily the employment goal for this program; however, many 4-year environmental programs require some proficiency of field techniques.

2. Acquire skills for working with other investigators through experiential learning activities. Proficiency in working with other individuals supports the employment goal of this program.

3. Demonstrate basic GIS skills, these should include the ability to acquire raster images for maps, create and edit geographic data on a map, and collect & process GPS data, and add labels to a map. Proficiency in GIS mapping supports both of the goals of this program (this is further explained under relevant associations).

4. Obtain receipt of federal OSHA HazWoper certification, involving training under OSHA workplace hazard communication standard for workers at hazardous waste sites (Hazardous Waste Operations & Emergency Response - HazWoper). Certification supports the employment goal of this program, however, it also supports students obtaining useful internships while as a student here at Onondaga).

5. Students graduating from the program should be able to analyze scientific data and demonstrate this by preparing a laboratory report. This outcome also demonstrates skills in mathematics, graphical analysis, contaminant transport analysis, critical thinking, and technical writing. Proficiency with these skills supports primarily the ability of students to transfer to 4-year environmental, geoscience and/or biotechnology programs.

6. Complete 40-hour internship allows students engage in non-classroom learning activities. Proficiency in this outcome supports both the employment goal for this program and the transfer to a 4-year program goal for the program. For students interested in employment, this allows contact with one or more possible employers in the outside community. For students interested in transferring to a 4 -year institution, this allows students to pursue college-level research that can help support their transfer applications.

Geoscience Specialization

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
CHE 171 General Chemistry I and CHE 171L	3+1
MAT 143 Pre-Calculus With Trigonometry OR	
MAT 161 Calculus I	4
ENV 101 Introduction to Environmental Technology	4

ENV 110 Field Experience in Environmental Technology - Geoscience	1
Total Credits:	16

Winter Intersession	**Credits**
ENV 165 Hazardous Waste Operations and Emergency Response	2
Total Credits:	2

Second Semester	**Credits**
ENG 104 Freshman Composition and Literature II	3
CHE 172 General Chemistry II and CHE 172L	3 + 1
MAT 118 Exploring Statistics OR MAT 151 Statistics I OR MAT 162 Calculus II	3-4
ENV 103 Introduction to GIS	3
Health Elective	1
Total Credits:	14-15

Third Semester	**Credits**
ENG 259 Report and Technical Writing	3
PHY 103 General Physics I	4
GEO 151 Physical Geology OR ENV 104 Applied GIS	3-4
Social Science Elective	3
Physical Education Activity	1
Total Credits:	14-15

Fourth Semester	**Credits**
CHE 203 Quantitative Analysis	4
ENV 201 Internship in Environmental Technology/Geoscience	2
GEO 205 Hydrology	4
POS 260 New York State Environmental Regulation	3
Specialization Elective[1]	3-5
Physical Education Activity	1
Total Credits:	17-19
Total Program Credits:	63-67

Notes:

1. Specialization electives: BIO 131, BIO 151, BIO 152, BIO 161, CHE 205, CHE 206, ENV 104, ENV 162, GEO 151 , GEO 152, GEO 106, GEO 290, PHY 104.

Biotechnology Specialization

First Semester	**Credits**
ENG 103 Freshman Composition and Literature I	3
CHE 171 General Chemistry I and CHE 171L	3+1
MAT 143 Pre-Calculus With Trigonometry OR MAT 161 Calculus I	4
ENV 101 Introduction to Environmental Technology	4
ENV 110 Field Experience in Environmental Technology - Geoscience	1
Total Credits:	16

Winter Intersession	**Credits**
ENV 165 Hazardous Waste Operations and Emergency Response	2
Total Credits:	2

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
CHE 172 General Chemistry II and CHE 172L	3+1
MAT 118 Exploring Statistics OR MAT 151 Statistics I OR	
MAT 162 Calculus II	3-4
ENV 103 Introduction to GIS	3
Health Elective	1
Total Credits:	14-15

Third Semester	Credits
ENG 259 Report and Technical Writing	3
PHY 103 General Physics I	4
BIO 161 Applied Environmental Biotechnology	4
Social Science Elective	3
Physical Education Activity	1
Total Credits:	15

Fourth Semester	Credits
CHE 203 Quantitative Analysis	4
ENV 162 Biofuels, Biomaterials and Alternative Energy Technologies	3
ENV 201 Internship in Environmental Technology/Geoscience	2
POS 260 New York State Environmental Regulation	3
Specialization Elective[1]	3-5
Physical Education Activity	1
Total Credits:	16-18
Total Program Credits:	63-66

Notes:

1. Specialization electives: BIO 131, BIO 152, CHE 205, CHE 206, ENV 104, GEO 151, GEO 152, GEO 106, GEO 205, GEO 290, PHY 104.

Fire Protection Technology (A.A.S.)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-6046, EMAIL: OCCINFO@SUNYOCC.EDU

The increasing complexity and technological advances in today's society have placed an increased demand for extensive and in-depth education and training on those individuals involved in the delivery of emergency fire services, fire protection and safety and associated professions. Sophisticated fire protection equipment; advancements in building construction and materials; new concepts in emergency fire services, tactics, and administration; hazardous materials control; and effective prevention, safety and risk analysis planning are a few of the areas in which advanced training and specialized education have become a requirement.

The duties and responsibilities of the modern firefighter and those involved in the design, delivery and management of fire protection services require a continual upgrading of these skills and awareness of new developments and trends. Because of the increasing complexities in fire technology tactics and management/command skills, and the resultant emphasis on advanced education and expertise, the Fire Protection Technology A.A.S. program was originally developed at the request of the Syracuse Fire Department. The program has subsequently grown to encompass not only the thousands of career and volunteer firefighters and fire service personnel within the Central New York region, but also those involved in industrial/plant protection, safety training and inspection, and building construction and design, as well as people in the insurance, law enforcement, and codes and standards professions.

The objective of this program is to impart the fire skills, knowledge and understanding necessary to handle the challenges and demands of the fire protection profession. The program emphasizes effective fire awareness, tactics, and operations; qualities necessary for fire administration, command and managerial positions; and the development of advanced skills to allow you to assume a contributing role in the delivery of fire protection services.

A "bunk-in" program has been established for those students who live outside Onondaga County and who enroll in the Fire Protection program. Students are given free housing in one of the participating local volunteer fire stations. In turn, the students provide staffing for emergency responses and perform light maintenance work for the host department.

Fire protection courses are also offered through a cable television network. Programming is live with two-way interaction between students and instructors available via local telephone systems. If you are associated with a fire department which would be interested in pursuing instruction for your personnel in this manner, we invite you to contact us.

Scholarships are periodically available through state and local fire service organizations, offering financial assistance for fire protection students.

Program Learning Outcomes

1. Demonstrate efficient and effective oral, written, and mobile data communication skills.
2. Apply safety principles and practices to both emergency and non-emergency situations.

3. Recall selected standards on which fire service practices are based.
4. Demonstrate critical skills necessary to demonstrate a comprehensive understanding of the field.
5. Recall facts and concepts necessary to demonstrate a comprehensive understanding of the field.

Liberal Arts Component	**Credits**
ENG 103-104 Freshman Composition and Literature I and II	6
Mathematics Elective[1]	3
SOC 103 Introductory Sociology	3
POS Elective (POS 102 recommended)	3
PSY 103 General Psychology	3
General Elective	3-4
Total Credits:	21-22

Science Component[2]	**Credits**
FPT 158-159 General Chemistry for Fire Science	6
FPT 160 General Physics for Fire Science	3
Total Credits:	9

Fire Protection Technology Component[2]	**Credits**
FPT 150 Introduction to Fire Protection[3]	3
FPT 151 Building Construction	3
FPT 152 Fire Fighting Tactics and Strategy	3
FPT 153 Legal Aspects of Fire Protection	3
FPT 155 Hazardous Materials	3
FPT 156 Fire Hazards and Their Control	3
FPT 157 Fire Hydraulics	3
FPT 162 Introduction to Incident Safety	3
FPT 163 Introduction to Occupational Safety and Health	3
FPT 250 Fire Department Administration	3
FPT 251 Fire Protection Systems	3
FPT 252 Fire Investigation	3
FPT 253 Fire Prevention and Inspection	3
Total Credits:	30[3]
Total Program Credits:	60-61

Notes:

1. Any credit-bearing MAT course will satisfy degree requirements.
2. FPT courses are offered only in evening.
3. Select FPT courses to equal 30 credit hours from the choices listed. FPT 150 is required.

Fire Protection Technology (Certificate)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-6046, EMAIL: OCCINFO@SUNYOCC.EDU

If you wish to receive academic recognition and advance your career and promotional opportunities, a 30-credit-hour certificate program in Fire Protection Technology may be of interest to you. It was developed to provide academic recognition for the content of courses rather than the completion of the A.A.S. degree in Fire Protection Technology.

Completion of this certificate may enable transfer to the A.A.S. program. Please check with your advisor.

Program Learning Outcomes

1. Demonstrate efficient and effective oral, written, and mobile data communication skills.
2. Apply safety principles and practices to both emergency and non-emergency situations.
3. Recall selected standards on which fire service practices are based.
4. Demonstrate critical skills necessary to demonstrate a comprehensive understanding of the field.
5. Recall facts and concepts necessary to demonstrate a comprehensive understanding of the field.

	Credits
ENG 103 Freshman Composition and Literature I	3

Social Science Electives	6
Fire Protection Technology or Safety Electives	18
General Elective[1]	3
Total Program Credits:	30

Notes:

1. Any three credit college course (except Physical Education Activity/Aquatics) may be used to fulfill this elective requirement. Electives are chosen in consultation with an advisor.

Health Information Technology / Medical Records (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 324
PHONE: (315) 498-2435, EMAIL: OCCINFO@SUNYOCC.EDU

As a health information technician, you will be a member of the allied health team specifically trained in the technical areas of health information. These areas include the collection, analysis, dissemination, and maintenance of health care and patient-related data including medical records. Health information technicians are also trained in basic management and supervisory principles for health information services, quality improvement and utilization management.

The Health Information Technology program at Onondaga will prepare you in the areas of:

- Basic information principles;
- Numbering, filing, storage and retrieval systems in health care information;
- Review of the health care record for accuracy and completeness;
- Computer applications in health information management;
- Legal aspects of maintaining and releasing health care information;
- Health care legislation and its impact on health information services;
- Standardized coding procedures;
- Case-mix groups and other reimbursement systems;
- Utilization management;
- Risk Management
- Corporate compliance
- Quality and performance improvement and peer review functions;
- Management and supervisory issues in health information services;
- Analysis and display of health care data;
- Maintaining requirements/standards for accrediting and certifying agencies;
- Calculating and displaying health care statistics.

Employment opportunities continue to expand in ambulatory care, long-term care, home care, HMOs, psychiatric facilities, industrial clinics, physicians' offices, law offices, insurance companies, sales of health-related products and services, residential care, and state and federal health agencies as well as a number of other areas.

Professional Practice

The Health Information Technology program at Onondaga will allow you to put classroom theory into actual practice through professional practice courses. You will be required to complete two clinical practicums.

Professional Practice Experience I, for one credit hour, is taken in the second semester and consists of placements in a minimum of five clinical sites for a total of 40 hours.

Professional Practice Experience II, for three credit hours, is taken in the final semester. This involves spending three weeks, full time, at a clinical site gaining experience in the basic technical aspects of health information services.

Students will be required to submit documentation of a current physical examination, PPD, titers and immunizations prior to being placed in a clinical site. Additional expenses may be incurred during clinical practicums due to the need for transportation, parking and proper work attire. Such expenses are the student's responsibility.

Admissions Requirements

The following requirements must be met before you can be considered for admission to the HIT program:

- A high school diploma or equivalent
- One year of high school algebra or MAT 087 (noncredit) at Onondaga
- One year of high school biology or one semester of college biology
- Grade of C or better for all required courses used to meet admission requirements

Program: The A.A.S. degree in Health Information Technology emphasizes concentrated studies in health information supported by clinical experiences in cooperating health care facilities and agencies. The HIT program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Graduates qualify for certification in the health information technology field by passing the national credentialing examination required by AHIMA. Graduates may transfer to a four-year college to pursue a baccalaureate degree in health information management.

Graduation Requirements: BIO 171, BIO 172, BIO 221 and all required HIT courses completed with a C or higher.

Program Learning Outcomes

1. Students will successfully complete supervised professional practice assignments.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
BIO 171 Anatomy and Physiology I	4
HIT 101 Introduction to Health Information Technology	3
HIT 102 Legal Aspects of Health Information	3
HIT 120 Medical Terminology	3
Total Credits:	16

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
BIO 172 Anatomy and Physiology II	4
CIS 100 Information and Computer Literacy	3
HIT 103 Health Information Systems in Non-Hospital Settings	3
HIT 110 Coding and Classification Systems I	3
HIT 223 Professional Practice Experience I	1
Total Credits:	17

Third Semester	Credits
BIO 221 Pathology	3
HIT 201 Health Statistics and Data Analysis	3
HIT 205 Computer Applications in Health Information Management	3
HIT 212 ICD-10-CM/PCS	4
Specified Elective	3
Total Credits:	16

Fourth Semester	Credits
HIT 202 Management of Health Information Service	3
HIT 215 Healthcare Reimbursement	3
HIT 229 Professional Practice Experience II	3
HIT 230 Advanced Seminar in Health Information	1
Health Elective	1
Liberal Arts Elective	3
Total Credits:	14
Total Program Credits:	63

Hospitality Management (A.A.S.)

OFFICE: GORDON STUDENT CENTER, ROOM 107A
PHONE: (315) 498-223I, EMAIL: OCCINFO@SUNYOCC.EDU

Hospitality – Showing kindness to visitors

Management – The organizing and controlling of business

Growth in the Hospitality Industry continues at an undaunted pace with endless career possibilities. The Hospitality Management program offers four different specializations to give students the skills necessary to excel in this exciting field:

- Culinary Management
- Food Service / Institutional Management
- Hotel Management
- Restaurant Management

All Hospitality Management students take a group of core courses that develop skills and knowledge in Sanitation, Nutrition, Basic Culinary Skills and Serving, Restaurant Operation, and Hospitality and Human Resources Management. Students are also required to complete 400 hours of work experience in the Hospitality Industry while matriculated in the Hospitality Management program. Students are encouraged to consider the Walt Disney World College Program, not only to fulfill the work requirements but for the experience of working for a world-renowned organization.

Additional expenses will be incurred for an approved uniform and shoes, and optional trips to the International Hotel/Motel and Restaurant show in NYC in the fall and spring.

Many of the Hospitality faculty are members of the American Culinary Federation (ACF) and involve students in numerous ACF activities. Our student's

classroom education is further enhanced by off campus field trips to local beef and produce farms as well as tours of area restaurants, hotels and other Hospitality Industry operations.

Program Learning Outcomes

1. Hospitality Management Core: Demonstrate the ability to accurately produce a food production plan; prepare food items; garnish and display items; garnish and display items for small and large volume food production.
2. Required for Culinary Management, Restaurant Management and Food Service/Institutional Management specialization: Demonstrate the knowledge of food and beverage products, including product identification and specifications.
3. Hospitality Management core: demonstrate the understanding and knowledge of essential nutrients, appropriate combinations of food for individual meals as well as full scale menus and be able to write a nutritional well-balanced diet which has customer appeal.
4. Hospitality Management core: Understand and apply management theory in order to operate a hospitality-related operation.
5. Required for Culinary Management, Restaurant Management and Food Service/Institutional Management specialization: Explain and apply cost control techniques for hospitality operations.
6. Required for Culinary Management, Restaurant Management and Food Service/Institutional Management specialization: Develop a menu and select/design the appropriate equipment and facility layout to produce that menu.
7. Required for Food Service/Institutional Management specialization: Demonstrate the knowledge of meal planning and nutrient density and therapeutic diets.
8. Required for Hotel Management specialization: Demonstrate the knowledge of front office operations of the major types of lodging properties. This course is taught by adjunct access to test materials will not be available until the Fall semester.
9. Required for Hotel Management specialization: Demonstrate the knowledge of services provided in a lodging operation including events planning.
10. Required for Culinary Management specialization: Demonstrate advanced level culinary skills through the presentation of a final product at the conclusion of each course taken.

Specialization: Culinary Management

If a fast pace is your pace, and you have never been in a kitchen that was too hot, than consider a career as a commercial cook, caterer or kitchen manager. Your passion for cooking and your creative edge will be sharpened by course work in commercial cooking and advanced culinary skills. Courses such as Artisanal Bread Baking, Pastries, Tortes, Chocolate Work, Advanced Plating or International Cuisines, are just some of the courses we offer. Course work in cost controls, menu planning, human resource management and purchasing prepares you to not only cook but be in charge of a commercial kitchen.

Specialization: Food Service / Institutional Management

The Food Service / Institutional Management specialization includes course work in diet therapy, menu design, food and equipment purchasing, and cost control which will help you in a career as a diet technician, food service manager or dietary supervisor. People in these professions are part of a team that serves nutritious, wholesome and tasty food to the public in child care centers, schools, hospitals, nursing homes, business and industry facilities, and senior centers.

Specialization: Hotel Management

Country Inns, large metropolitan hotels, and facilities any size in between all need a management team to help them meet their guests' expectations. The Hotel Management specialization includes courses in housekeeping and properties management, front office management and events coordinating. Career choices include front office supervisor or manager, housekeeping supervisor, assistant hotel manager, hotel manager, and events/convention coordinator.

Specialization: Restaurant Management

If you are interested in managing a restaurant, owning your own restaurant, managing a private or public club, or managing a catering operation, the Restaurant Management specialization will give you skills for success in cost control, purchasing food, menu writing, restaurant design, and catering special events.

Culinary Management (A.A.S.)

First Year	Credits
ENG 103-104 Freshman Composition and Literature I and II	6
CIS 100 Information and Computer Literacy	3
FSA 100 Food Service Sanitation	2
NTR 102 Basic Nutrition	3
FSA 103 Basic Food Preparation	4
FSA 104 Restaurant Operations	4
FSA Specialization Elective(s)[1]	2
Liberal Arts Elective	3
BUS 102 Mathematics of Business and Finance	3
Physical Education Elective	1
Total Credits:	31

Second Year	Credits
FSA 201 Hospitality Management	3
FSA 202 Food Service Cost Controls	3
FSA 204 Purchasing, Storage and Handling	3

FSA 207 Meal Planning and Equipment Selection	3
FSA 210 Catering and Advanced Culinary Arts	4
FSA Specialization Elective[1]	1
BUS 105 Financial Accounting	3
Science Elective	3
Liberal Arts Electives	6
General Elective	3
Total Credits:	32
Total Program Credits:	63

Notes:

1. Culinary Management electives may be chosen from the following for a total of 3 credits: FSA 112, 114, 116, 217, 218, 219, 220.

Food Service/Institutional Management (A.A.S.)

First Year	Credits
ENG 103-104 Freshman Composition and Literature I and II	6
CIS 100 Information and Computer Literacy	3
FSA 100 Food Service Sanitation	2
NTR 102 Basic Nutrition	3
FSA 103 Basic Food Preparation	4
FSA 104 Restaurant Operations	4
Specialization Elective[1]	3-4
BUS 102 Mathematics of Business and Finance	3
Liberal Arts Elective	3
Physical Education Elective	1
Total Credits:	32-33

Second Year	Credits
FSA 201 Hospitality Management	3
FSA 202 Food Service Cost Controls	3
FSA 204 Purchasing, Storage and Handling	3
NTR 206 Diet Therapy	3
FSA 207 Meal Planning and Equipment Selection	3
BUS 105 Financial Accounting	3
Liberal Arts Electives	6
Science Elective	3
General Elective	3
Total Credits:	30
Total Program Credits:	62-63

Notes:

1. Food Service / Institutional Management electives may be chosen from the following: BUS 243, FSA 210, HTL 234, any Modern Language, any 200 level Psychology, any 200 level Sociology or ECO 203.

Hotel Management (A.A.S.)

First Year	Credits
ENG 103-104 Freshman Composition and Literature I and II	6
CIS 100 Information and Computer Literacy	3
FSA 100 Food Service Sanitation	2
NTR 102 Basic Nutrition	3
FSA 103 Basic Food Preparation	4
FSA 104 Restaurant Operations	4
HTL 230 Housekeeping and Properties Management	3
BUS 102 Mathematics of Business and Finance	3
Liberal Arts Elective	3
Physical Education Elective	1
Total Credits:	32

Second Year	Credits
FSA 201 Hospitality Management	3

HTL 232 Front Office Management	3
HTL 234 Meeting Management Planning	3
Specialization Elective[1]	3-4
BUS 105 Financial Accounting	3
BUS 106 Managerial Accounting	3
Liberal Arts Electives	6
Science Elective	3
General Elective	3
Total Credits:	30-31
Total Program Credits:	62-63

Notes:

1. Hotel Management electives may be chosen from: BUS 121, BUS 203, BUS 212, BUS 243, FSA 210, any Modern Language, any 200 level Psychology, any 200 level Sociology or ECO 203.

Restaurant Management (A.A.S.)

First Year	Credits
ENG 103-104 Freshman Composition and Literature I and II	6
CIS 100 Information and Computer Literacy	3
FSA 100 Food Service Sanitation	2
NTR 102 Basic Nutrition	3
FSA 103 Basic Food Preparation	4
FSA 104 Restaurant Operations	4
Specialization Elective[1]	3
BUS 102 Mathematics of Business and Finance	3
Liberal Arts Elective	3
Physical Education Elective	1
Total Credits:	32

Second Year	Credits
FSA 201 Hospitality Management	3
FSA 202 Food Service Cost Controls	3
FSA 204 Purchasing, Storage and Handling	3
FSA 207 Meal Planning and Equipment Selection	3
FSA 210 Catering and Advanced Culinary Arts	4
BUS 105 Financial Accounting	3
Liberal Arts Electives	6
Science Elective	3
General Elective	3
Total Credits:	31
Total Program Credits:	63

Notes:

1. Restaurant Management electives may be chosen from: BUS 121, BUS 243, FSA 112*, 114*, 116*, 217*, 218*, 219*, 220*, HTL 234, any Modern Language, any 200 level Psychology, any 200 level Sociology or ECO 203 (* Taken together for a 3-credit total).

Human Services (A.S.)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-2341, EMAIL: OCCINFO@SUNYOCC.EDU

Upon completion of your HUM A.S. degree, you will be prepared for an entry-level position in a Human Services or Social Services agency, or you may choose to transfer to a four-year institution.

Students complete two introductory Human Services (HUM) courses, a 3-credit Human Services theories and methods of practice course, (HUM 162, 165 or 260), three 3-credit HUM elective courses and a fieldwork course, HUM 164 Human Services Field Instruction and Seminar I.

A personal interview may be required before being admitted to the Human Services program. Your academic and professional competence will be periodically reviewed by the faculty. Enrollment and continuation in the Human Services program are subject to faculty approval. You must earn a grade of C or better in HUM/ASA or EDU courses and have a GPA of 2.0 to take fieldwork courses and to graduate from the program.

Special program costs include bus or car expenses for transportation to and from fieldwork sites. A medical examination, a tuberculin test, a background

check, and fingerprinting may be required before beginning field work placements and may require additional costs.

Program Learning Outcomes

1. Students will demonstrate a knowledge base of theory specific to Human Services.
2. Students will apply the knowledge base of theory to practice.
3. Students will demonstrate awareness of the code of ethical conduct.
4. Students will demonstrate cultural and diversity awareness and sensitivity to social justice.

Essential Skills and Dispositions

The following skills and dispositions, with or without reasonable accommodations, are expected of all students enrolled in the Human Services A.S. program.

1. Emotional stability and psychological health to work with children, families, individuals, colleagues and college personnel.
2. Interpersonal skills sufficient to establish a professional relationship with individuals, families, and clients from a variety of cultural, social, emotional, and intellectual backgrounds.
3. Effective written and oral communication skills.
4. Critical thinking for assessment and decision-making in field placements.
5. Ability to comprehend and implement duties and responsibilities in Human Services fieldwork.
6. Emotional and behavioral self-regulation sufficient to carry out the duties and responsibilities in Human Services fieldwork placements.
7. Character dispositions such as honesty, integrity, caring and empathy.

Graduation Requirement: Students must earn a grade of C or better in each HUM or EDU course in order to graduate.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
SOC 103 Introductory Sociology	3
HUM 150 Human Services Theory, Skills, and Resources	3
General Elective	3
Liberal Arts Elective (Choose Liberal Art from SUNY Gen. Ed. FL, AR, OWC)	3
Total Credits:	15

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
SUNY Gen. Ed. Mathematics	3-4
HIS 107 Modern American History	3
HUM Elective	3
HUM 152 Human Services: Beginning Skills and Competencies	3
Total Credits:	15-16

Third Semester	Credits
SUNY Gen. Ed. Social Science	3
SUNY Gen. Ed. Natural Science	3-4
HUM Theory and Practice (HUM 162, HUM 165, or HUM 260)	3
COM Elective (SUNY Gen. Ed. Basic Communication)	3
HUM Elective	3
Total Credits:	15-16

Fourth Semester	Credits
HIS/POS Elective	3
Liberal Arts Elective (Choose Liberal Art from any SUNY Gen. Ed. category)	3
General Elective	3
HUM Elective	3
HUM 164 Human Services Field Instruction and Seminar I	3
Total Credits:	15
Total Program Credits:	60-62

Human Services (Certificate)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-2341, EMAIL: OCCINFO@SUNYOCC.EDU

If your goal is to work in a Human Services program in the future or if you are currently employed in an agency, the one-year Human Services Certificate may be of interest to you. The Human Services Certificate prepares students for entry-level positions in Human Services programs and/or matriculation into the Social Work or Alcohol and Substance Abuse Counseling options in the Human Services Associate Degree Program. The program introduces students to Human Services or Alcohol and Substance Abuse Counseling theories and to the integration of theory and practice.

All of the credits earned in the Human Services Certificate program may be applied to the Human Services A.S. program.

Special program costs include bus or car expenses for transportation to and from the field work sites. You may be required to have a medical examination, a tuberculin test, a background check, and fingerprinting before beginning your field work internship.

Program Learning Outcomes

1. Demonstrate knowledge base theory specific to social work; or alcohol and substance abuse counseling.
2. Apply knowledge base theory to practice.
3. Demonstrate awareness of the code of ethics (social work or alcohol/substance abuse counseling) in professional behavior and decision-making.

Essential Skills and Dispositions

The following skills and dispositions, with or without reasonable accommodations, are expected of all students enrolled in Human Services - Social Work and Alcohol and Substance Abuse Counseling (HUM) and Early Childhood - Early Childhood and Teacher Assistant (EDU).

1. Emotional stability and psychological health to work with children, families, clients, colleagues and college personnel.
2. Interpersonal skills sufficient to establish a professional relationship with individuals, families, and clients from a variety of cultural, social, emotional, and intellectual backgrounds.
3. Effective written and oral communication skills.
4. Critical thinking for assessment and decision-making in field placements.
5. Ability to carry out duties and responsibilities in Human Services or Early Childhood fieldwork, including observation and assessment; monitoring safety needs; moving quickly to ensure children's safety; and lifting children, equipment and supplies up to 50 pounds.
6. Sufficient stamina to carry out the duties and responsibilities in Human Services or Early Childhood fieldwork placements.
7. Character dispositions such as honesty, integrity, caring and empathy.

Graduation Requirement: Students must earn a grade of C or better in each HUM or EDU course in order to graduate.

	Credits
ENG 103 Freshman Composition and Literature I	3
COM 220 Interpersonal Communication	3
PSY 103 General Psychology	3
Liberal Arts Elective	3
HUM 150 Human Services Theory, Skills and Resources	3
and	
HUM Applied Theory Elective	3
<OR>	
ASA 159 Chemical Dependencies	
and	
ASA 268 Clinical Skills for Alcohol & Substance Abuse Counselors	
HUM 164 Human Services Field Instruction and Seminar I	3
HUM or ASA Electives	9
Total Program Credits:	30

Interior Design (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 352
PHONE: (315) 498-2687, EMAIL: ARCHTECH@SUNYOCC.EDU

The Interior Design program emphasizes the design of functional, aesthetic, and technically proficient environments that meet the needs of people in spaces that are both safe and universally accessible. As an interior design professional, you will work collaboratively with architects and engineers in design teams lending your particular expertise to the design and construction process. Given these close professional ties, you should not be surprised to find yourself in studios and classes with architecture students.

As a prospective interior design student, you should not confuse this program with interior decoration, although elements of decoration are inherent in any interior design program. To ensure a more positive understanding of the program, please note that similar programs at other schools are identified as programs in interior architecture.

Onondaga's Interior Design faculty is composed of practicing architects, designers, and engineers with up-to-date design and construction experience in a variety of residential and commercial projects including historic preservation, additions and renovations, and contemporary new construction.

Admission requirements are flexible. Evidence of studio courses in art or three-dimensional design is desirable, but not mandatory. A personal interview is recommended. You may begin in either the fall or spring semester.

The work of the interior designer has taken on new significance as many states, including New York, have established interior design as a licensed profession.

The Interior Design curriculum at Onondaga is one of the registered A.A.S. programs recognized by the NYS Education Department as creditable towards the education/experience requirement necessary for certification to use the title "certified interior designer." The Interior Design Curriculum closely matches the NYS Education Department List of content areas required for associate degrees as follows:

- drafting and presentation techniques;
- fundamentals of space planning and design;
- materials and methods of construction;
- furniture, finishes, and equipment;
- history of architecture and the decorative arts;
- codes – construction, fire, safety and accessibility.

Students in the program will be required to create, transmit and present assignments using computers and other digital technology. After the completion of the first semester required classes (IND 101, 110 and 170), students will be required to provide their own laptop computer and software for all classes in the program. The laptop computer must be capable of running the required software as designated for each course.

Courses in color theory, computer drafting, environmental controls, and professional practice are also available. Individual courses are available to practicing professionals who wish to update skills and to satisfy continuing education requirements.

Graduation Requirement: Students must earn a grade of C or better in core IND courses in order to graduate.

Program Learning Outcomes

1. Understand and apply design process and design principles in order to solve abstract and real interior design problems.
2. Demonstrate the ability to graphically communicate design ideas and concepts.
3. Demonstrate the ability to produce competent construction documents for residential building project utilizing manual and digital drafting techniques.
4. Understand, apply, and orally and graphically present methods and materials of interior finishes and furnishings for commercial interior design projects.
5. Understand, apply, and orally and graphically present methods and materials of interior finishes and furnishings for residential interior design projects.

First Semester	Credits
IND 101 Exploring Sustainability, Design, and The Built Environment	3
IND 110 Foundation Studio 1	4
IND 170 Technology: Design and Production	3
ENG 103 Freshman Composition and Literature I	3
Mathematics Elective[1]	3
Total Credits:	16

Second Semester	Credits
IND 111 Design Studio 2	4
IND 120 Drafting Studio 1: Wood Frame	3
IND 140 Wood Frame Construction	3
Professional Elective	3
ENG 104 Freshman Composition and Literature II	3
Total Credits:	16

Third Semester	Credits
IND 215 Design Studio: Commercial	4
IND 246 Interior Finish Systems and Furnishings	3
IND 256 Graphic Communications	3
Liberal Arts Elective	3
Professional Elective	3
Total Credits:	16

Fourth Semester	Credits
IND 216 Design Studio: Residential	4
IND 231 History of Architecture and Interiors 2	3
IND 247 Kitchen and Bath Fundamentals	3
Social Science Elective	3
Mathematics[1]/Science Elective	3
Total Credits:	16
Total Program Credits:	64

Notes:

1. Minimum 3-4 credits of 100-level MAT. More advanced courses may be substituted with permission of the student's advisor.

Law Enforcement Certificate

OFFICE: MULROY HALL, ROOM 125
PHONE: (315) 498-6046, WWW.PSTC.SUNYOCC.EDU

Do you enjoy a challenge? Do you want a career that places you on the front lines of protecting your community? Do you want to receive your training at a nationally recognized training facility? If so, the Public Safety Training Center at Onondaga Community College has the right program for you.

The Pre-Employment Basic Course for Police Officers will prepare you to succeed in a rewarding career as a police officer. Students will learn the tactics, theory and skills required of today's law enforcement professional. Examples of topics include basic law, arrest techniques, public safety procedures, investigation techniques, community relations, etc.

Successful completion of the Phase I Basic Course for Police Officers fulfills the requirement of the New York State Division of Criminal Justice Services that all police officers complete the Basic Course for Police Officers within one year of their employment. Once employed by a police agency, you will receive the remaining training to fully qualify you for this career.

All instructors in the program are certified by New York State as police instructors. Graduates of the program will receive a Law Enforcement certificate. In addition, successful candidates will be certified by the New York State Division of Criminal Justice Services for a period of two years as having satisfied the requirements for Phase 1 training.

The Public Safety Training Center at Onondaga Community College is a nationally recognized leader among educational providers in first responder education and training.

Program Learning Outcomes

1. Demonstrate efficient and effective oral, written, and mobile data communication skills.
2. Apply safety principles and practices to both emergency and non-emergency situations.
3. Recall selected standards on which Police service practices are based.
4. Demonstrate critical skills necessary to demonstrate a comprehensive understanding of the field.
5. Recall facts and concepts necessary to demonstrate a comprehensive understanding of the field.

Admission Requirements

In addition to Onondaga Community College's general admission requirements, students must place into (or complete prerequisite coursework for) a minimum level of ENG 103 indicating they can be successful in college credit-bearing coursework.

First Semester	Credits
LEC 103 Principles of Law for Law Enforcement Officers	7
LEC 105 Law Enforcement Procedures	8
ENG 103 Freshman Composition and Literature I	3
Total Credits:	18

Second Semester	Credits
LEC 105L Law Enforcement Procedures - Proficiency	5
LEC 109 Law Enforcement Investigation Techniques	4
LEC 111 Community Relations for Law Enforcement Officers	2
LEC 120 EMS Certified First Responder	3
Total Credits:	14
Total Program Credits	32

Liberal Arts & Sciences: Adolescence Education–Grade 7-12 (A.A.) (Teacher Education Transfer)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-2341, EMAIL: OCCINFO@SUNYOCC.EDU

If your goal is to become a certified teacher in Grades 7-12, you will be interested in the Liberal
Arts and Sciences: Adolescence Education (Teacher Education Transfer) Associate of Arts degree program. This program prepares students for transfer to a four-year SUNY institution to pursue initial NYS certification in Adolescence Education (Grades 7-12). With careful advisement, students may complete SUNY General Education requirements and 12 credits of a major concentration required by four-year teaching degree institutions. Students should consult Teacher Education advisor to select a major concentration that will transfer to the four-year institution of the student's choice.

This program also provides thirty clock hours of guided field observation, and six credit hours of Professional Preparation courses. Please call a Teacher Education advisor in the Human Services and Teacher Education department for more information.

Please Note: Students can graduate from the Liberal Arts and Sciences: Adolescence Education (Teacher Education Transfer) program with a 2.0 GPA. However, a higher GPA may be required for transfer to a SUNY four-year teacher preparation program. Students should meet with SUNY four-year advisors to determine the admission requirement for the desired program.

Program Learning Outcomes

1. Demonstrate a knowledge base of theory specific to adolescence (7-12th grade) education.
2. Identify their philosophy of teaching.
3. Apply the knowledge base of theory to practice through thoughtful reflections on classroom observations.
4. Demonstrate cultural and diversity awareness, and sensitivity to social justice.
5. Demonstrate awareness of the NEA/NAEYC Code of Ethics in professional behavior and decision-making.

Essential Skills and Dispositions

The following skills and standards, with or without reasonable accommodations, are expected of students enrolled in the Liberal Arts and Sciences A.A.: Adolescence Education program (EDA).

1. Emotional stability and psychological health to work with adolescents, families, colleagues and college personnel.
2. Interpersonal skills sufficient to establish a professional relationship with individuals, adolescents and families from a variety of cultural, social, emotional, and intellectual backgrounds.
3. Effective written and oral communication skills.
4. Critical thinking for assessment and decision making in the classroom.
5. Character dispositions such as honesty, integrity, caring and empathy.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
COM 100 Introduction to Communication or 210 Public Speaking	3
HIS 105 OR 106 OR 107 American History	3
PSY 103 General Psychology	3
Foreign Language[1]	3
Total Credits:	15

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
HIS 103 or 104 Western Civilization	3
PSY 207 Adolescent Psychology	3
Liberal Arts/Humanities Elective	3
Foreign Language[1]	3
Total Credits:	15

Third Semester	Credits
Liberal Arts/Humanities Elective	3
EDU 275 Cultural Foundations of Education	3
Natural Science with Lab[1]	4
Specialization Elective[2]	3
General Elective	3
Total Credits:	16

Fourth Semester	Credits
Specialization[2]	9
Science Elective[1]	3
MAT 118 or Higher	3
Total Credits:	15
Total Program Credits:	61

Notes:

1. See advisor for selection of appropriate SUNY General Education courses.

2. In consultation with advisor, students select courses towards completing specialization required by the 4-yr institution.

Liberal Arts & Sciences: Childhood Education- Grade 1-6 (A.A.) (Teacher Education Transfer)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-2341, EMAIL: OCCINFO@SUNYOCC.EDU

If your goal is to become a certified teacher in Grades 1-6, you will be interested in the Liberal Arts and Sciences: Childhood Education (Teacher Education Transfer) Associate of Arts degree program. This program prepares students for transfer to a four-year SUNY institution to pursue initial NYS certification in Childhood Education (Grades 1- 6). With careful advisement, students may complete SUNY General Education requirements and 12 credits of a major concentration required by four-year teaching degree institutions. Students should consult Teacher Education advisor to select a major concentration that will transfer to the four-year institution of the student's choice. This program also provides thirty clock hours of guided field observation, and six credit hours of Professional Preparation courses. Please call a Teacher Education advisor in the Human Services and Teacher Education department for more information.

Please Note: Students can graduate from the Liberal Arts and Sciences: Childhood Education (Teacher Education Transfer) program with a 2.0 GPA. However, a higher GPA may be required for transfer to a SUNY four-year teacher preparation program. Students should meet with SUNY four-year advisors to determine the admission requirement for the desired program.

Program Learning Outcomes

1. Demonstrate a knowledge base of theory specific to childhood (1st-6th grade) education.
2. Identify their philosophy of teaching.
3. Apply the knowledge base of theory to practice through thoughtful reflections on classroom observations.
4. Demonstrate cultural and diversity awareness, and sensitivity to social justice.
5. Demonstrate awareness of the NEA/NAEYC Code of Ethics in professional behavior and decision-making.

Essential Skills and Dispositions

The following skills and dispositions, with or without reasonable accommodations, are expected of students enrolled in the Liberal Arts and Sciences A.A.: Childhood Education program (EDC).

1. Emotional stability and psychological health to work with children, families, colleagues and college personnel.
2. Interpersonal skills sufficient to establish a professional relationship with individuals, children and families from a variety of cultural, social, emotional, and intellectual backgrounds.
3. Effective written and oral communication skills.
4. Critical thinking for assessment and decision making in classrooms.
5. Character dispositions such as honesty, integrity, caring and empathy.

First Semester	**Credits**
ENG 103 Freshman Composition and Literature I	3
MAT 121 Math for Elementary Teachers	4
HIS 105 OR 106 OR 107 American History	3
PSY 103 General Psychology	3
Foreign Language[1]	3
Total Credits:	16

Second Semester	**Credits**
ENG 104 Freshman Composition and Literature II	3
MAT 122 Math for Elementary Teachers II	4
HIS 103 OR 104 Western Civilization	3
PSY 204 Child Psychology	3
<OR>	
EDU 182 Child Growth and Development	
Foreign Language[1]	3
Total Credits:	16

Third Semester	**Credits**
COM 100 Introduction to Communication OR COM 210 Public Speaking	3
EDU 275 Cultural Foundations of Education	3
Natural Science with Lab[1]	4
Specialization Elective[2]	3
Total Credits:	13

Fourth Semester	**Credits**
Specialization Elective[2]	9
Science Elective[1]	3
EDU 285 Early Child Special Education: Introduction	3
Total Credits:	15
Total Program Credits:	60

Notes:

1. See advisor for selection of appropriate SUNY General Education courses.
2. In consultation with advisor, students select liberal arts electives towards completing major/specialization required by the 4-yr institution.

Liberal Arts & Sciences: General Studies (A.A.)

OFFICE: MAWHINNEY HALL, ROOM 280
PHONE: (315) 498-2333, EMAIL: OCCINFO@SUNYOCC.EDU

If you would like the opportunity to better understand your career options, you may be interested in earning a transfer-oriented associate of arts (A.A.) degree in liberal arts through Onondaga's General Studies program. Although some General Studies students prepare for a specific occupation, others select this program in order to meet the Liberal Arts/General Education requirements for a variety of programs at many four-year colleges and universities. You will specifically complete the 30 credits of SUNY General Education. You can choose elective courses along with your required courses in order to structure an individualized specialization or complete one of the SUNY Seamless Transfer Pathways.

By choosing from a list of courses each semester, you can individualize your education in order to achieve a balance between developing known interests and exploring new subject areas. At the same time, you will study liberal arts courses such as English composition and literature, history, social sciences, humanities, communication and science. You will be encouraged to investigate a diversity of vocational options to provide yourself with a knowledgeable basis for future commitments. The key objectives of the program are to provide you with an introduction to career education through a sequence of interrelated courses during the freshman year, and to advise and assist you in accomplishing these goals through supportive seminar classes with General Studies faculty.

Through the completion of degree requirements and with careful advisement in selecting electives, you may be able to complete a minor in a specific area of study. (Please see the section on Minors beginning on page 102 of this Catalog.)

After completing your associate of arts degree requirements at Onondaga Community College, you may choose to transfer to a four-year upper-division college or university to earn a baccalaureate degree, or you may choose to secure employment directly upon graduating. Our graduates may secure placement in private industries and businesses, public service, or government agencies at federal, state and local levels. Regardless of the goals you decide to pursue, the broad background provided through General Studies offers the rewards and opportunities of a diversified education.

Program Learning Outcomes:

1. Demonstrate how information about personal values, skills and aptitudes are used to make decisions about career interests and options.
2. Demonstrate knowledge and understanding of the skills needed to adjust and succeed in life.
3. Demonstrate critical thinking by comparing, contrasting and drawing meaningful conclusions.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
MAT Elective (SUNY Gen. Ed. Mathematics)	3
GEN 152 Human Adjustment	3
History Elective (SUNY Gen. Ed. American History or Western Civilization)	3
Reading Elective 153 or General Elective[1]	3
Total Credits:	15

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
GEN 154 Comparative Vocational Planning	3
Natural Science with Lab (SUNY Gen. Ed. Natural Science)	4
COM Elective (SUNY Gen. Ed. Basic Communication)	3
Liberal Arts Elective	3
Total Credits:	16

Third Semester	Credits
SUNY Gen. Ed. Elective (The Arts, Foreign Language, or Other World Civ.)[2]	3
Social Science Elective (SUNY Gen. Ed. Social Science)	3
English Elective (Above ENG 104)	3
Liberal Arts Elective	3
General Elective	3
Total Credits:	15

Fourth Semester	Credits
SUNY Gen. Ed Elective[3]	3
Liberal Arts Electives	6
General Electives	5
Total Credits:	14
Total Program Credits:	60

Notes:

1. Students who score a 95 or above on the reading placement test will be waived from the RDG requirement and will instead need to complete a three-credit general elective.
2. SUNY Gen. Ed. The Arts courses must be Art/Music History or Appreciation courses.
3. SUNY Gen. Ed. elective must be a Liberal Arts designated course.

Liberal Arts & Sciences: Humanities and Social Sciences (A.A.)

OFFICE: MAWHINNEY HALL, ROOM 294
PHONE: (315) 498-2551, EMAIL: OCCINFO@SUNYOCC.EDU

If you're looking for a traditional course of study that exposes you to a broad spectrum of subjects - and also teaches you to reason, question, and communicate - Onondaga's associate of arts (A.A.) degree in Humanities and Social Sciences provides this experience.

In addition, this program satisfies the General Education Liberal Arts requirements at many four-year colleges and universities, enabling you to move seamlessly into any major course of study once you transfer.

Graduates of this program have earned four-year degrees in liberal arts in pre-professional areas such as journalism, history, English literature, political science, modern languages, psychology, philosophy, economics, sociology, anthropology and more.

You will study the same liberal arts courses that freshmen and sophomore students typically study at colleges across the country: English composition and literature, history, mathematics, science, philosophy, fine arts, global awareness and languages, plus social sciences such as political science, psychology, anthropology, geography, sociology, and economics. This diverse exposure broadens your perspective on life and helps you make informed decisions about your career direction and future course of study.

This program also includes a generous choice of electives, enabling you to explore new ideas and then focus on the area that most appeals to you: music, art, business, journalism, communication, computer science and more.

Through the completion of degree requirements and with careful advisement in selecting electives, you may be able to complete a minor in a specific area of study. (Please see the section on Minors beginning on page 102 of this Catalog.)

If you wish to enter the workforce after graduation from Onondaga, this degree tells employers that you have a broad-based education – and that you have learned how to learn. Many employers prefer to hire generalists who have solid reasoning and communication skills and therefore usually make good candidates for specialized, on-the-job training.

Humanities curriculum outline sheets specify the requirements in detail and are available from the Counseling department as well as from the English, Social Science and Modern Languages offices located in Mawhinney Hall.

The department of English, Reading and Communication offers courses in writing, literature, reading, communication, journalism and cinema studies. Students must complete English 103 and English 104 before taking upper-level English electives. A wide range of upper-division (200-level) writing and literature courses are available, including creative writing, report and technical writing, surveys of British and American Literature, literature by women, folklore, and science fiction.

The **Reading** discipline offers a variety of non-credit and credit courses. Non-credit courses are designed to help students develop their reading skills to meet the demands of college-level classes. Credit courses are available for students who would like to enhance their academic performance in college. Students may choose to focus on developing their vocabulary or improving their critical reading and study skills.

The **Communication** discipline offers courses in basic communication skills, public speaking, argumentation, interpersonal communication, gender communication, and small groups. Communication courses which respond specifically to the needs of international students are also available.

The Social Sciences department houses history and philosophy as well as the social sciences. The social sciences involve the study of human behavior and interactions. These sciences are anthropology, economics, geography, psychology, political science and sociology.

- **Anthropology** is the scientific study of humans across cultures and through time.
- **Economics** is the study of how society chooses to use limited resources in attempting to satisfy unlimited wants.
- **Geography** examines through spatial analysis the world's social, political, cultural, economic and environmental processes, with a particular focus on space and place.
- **History** studies significant past events, explains their causes and effects, and their impact on the present.
- **Philosophy** involves the critical examination of our fundamental views concerning reality, knowledge and values.
- **Political Science** is concerned with the analysis of political and governmental institutions, public affairs and their interrelationships.
- **Psychology** seeks to discover the environmental and genetic factors that influence an individual's thoughts and behaviors.
- **Sociology** focuses on the study of society and its institutions, and social relationships among groups of humans.

The Modern Languages department provides the opportunity to study languages other than English. Professors as well as students use the target language as much as the level of the course permits. Language study is complemented by learning about the cultures in which the language is spoken. In addition, courses on literature and civilization are offered (see list of courses under the Literatures, Cultures and Civilizations section). Knowledge of other languages and cultures is increasingly important for economic and social reasons.

Placement in language courses varies according to the high school background of individual students.

Program Learning Outcomes:

1. Use critical thinking skills including analytic, research an interpretative abilities, and problem solving techniques.
2. Demonstrate effective communication.
3. Demonstrate awareness of diverse cultures.
4. Demonstrate understanding of human behavior, institutions and societies.

5. Demonstrate historical understanding of human behavior, institutions and societies.
6. Make and defend judgments about literature.

First Year	Credits
ENG 103-104 Freshman Composition and Literature I and II	6
Language Sequence	6
Mathematics Elective	3
Social Science Electives[1]	6
Science Elective (with Laboratory)	4
Humanities Elective	3
General Elective	3
Physical Education Elective	1
Total Credits:	32

Second Year	Credits
English Elective[2]	3
Social Science Electives[1]	6
Science Elective (without Laboratory)	3
Philosophy Elective	3
Fine Arts Elective	3
Global Awareness: Multicultural/International Perspective Elective[3]	3
General Electives[4]	7
Physical Education Elective	1
Health Elective	1
Total Credits:	30
Total Program Credits:	62

Notes:

1. Social Science electives must include 6 credits of History.
2. English electives are to be chosen from 200 level literature courses (ENG 203, 204, 209, 210, 213, 215, 217, 221, 222, 223, 224, 225, 226, 229, 230, 231, 233, 239, 241, 245, 250, and 282). 200 level selected topic literature courses may also apply with permission of the department.
3. See Global Awareness (GLAD) courses.
4. The exact number of general elective credits will vary according to course choices, requiring no more than 7, but enough to bring the Total Program Credits to 62.

Liberal Arts & Sciences: Mathematics and Science (A.A. or A.S.)

OFFICE: MAWHINNEY HALL, ROOM 210
PHONE: (315) 498-2328, EMAIL: OCCINFO@SUNYOCC.EDU

There are two degree programs under the Mathematics and Science curriculum, the A.A. and the A.S. Both are university parallel programs. Depending on the electives you select, you will be prepared to transfer to a senior college to pursue a career in biological science, physical science, biotechnology, mathematics, medicine, dentistry, pharmacy, forestry, computer science, psychology or other related disciplines.

The A.A. program is the traditional liberal arts basis for a four-year degree with a major in Mathematics or one of the Sciences (or even one of the more mathematically oriented social sciences). You will sample many areas of study while laying the mathematical and scientific foundation for the higher level courses you will take after transfer. You are strongly encouraged to have completed three or four years of high school mathematics and as much science as possible, including chemistry and physics if available. You may be accepted with less preparation, but extra time may be needed to complete all the requirements.

The A.S. program is highly concentrated in mathematics and science. Choose this program if your transfer plans require such a concentration. Several of the curricula at the SUNY College of Environmental Science and Forestry, for example, have such requirements.

It is recommended that students in the A.S. program be ready to start calculus (have four years of high school mathematics), and have a minimum of three years of science, including two of the following: biology, chemistry, or physics (all are recommended).

Specialization: Pre-Biotechnology

The first successful genetic-engineering experiments and the subsequent refinements in this technology have revolutionized biology and created new career opportunities in biotechnology. According to a recent report from the Center for Occupational Research, U.S. companies will require more than 1,000 new biotechnicians annually.

The pre-biotechnology specialization within the Mathematics and Science program is designed for you if your ultimate goal is a B.S. degree in the field of biotechnology. Onondaga Community College has articulation (transfer) agreements with the following senior colleges offering programs in biotechnology: Rochester Institute of Technology, The College at Brockport, and State University of New York College at Fredonia. Additional articulation agreements are developed each year.

These agreements allow you to take the first two years of a four-year degree at Onondaga, and then complete your studies for the B.S. degree at one of the participating senior colleges, usually in two additional years. If you plan to transfer as a junior, you should follow the Mathematics and Science A.S. program requirements in consultation with Onondaga's Pre-Biotechnology campus advisor, since the selection of required courses and electives will vary among the participating senior colleges.

As an applicant to Pre-Biotechnology, you must have four years of high school mathematics along with a minimum of three years of high school science, including two of biology, chemistry or physics (all are recommended).

Upon successful completion of the Pre-Biotechnology specialization, you will be prepared to transfer to the above named senior institutions, as well as to other schools offering comparable programs in biotechnology.

Specialization: Pre-Environmental Science and Forestry

If you ultimately desire a B.S. degree from the SUNY College of Environmental Science and Forestry (ESF), you are invited to study at Onondaga first by completing this specialization.

The requirements for transfer to ESF vary according to your eventual intended major. Your curriculum will similarly vary at Onondaga. You are urged to matriculate in either the Mathematics and Science program at Onondaga or the Architectural Technology program, the latter particularly if the ultimate goal is a bachelor of landscape architecture degree or a construction management degree.

Depending upon your intended major after transfer, the Onondaga Pre-ESF curricula will include varied courses in the liberal arts and sciences. All students in the program must take courses in biology, chemistry, physics, and mathematics. Other liberal arts and sciences requirements or electives for the transfer degree can include economics, social science, computer science, engineering graphics, political science, language, literature, or communications.

The College of Environmental Science and Forestry also offers a "one-plus-one" program leading to an A.A.S. degree in forest technology. Thirty credit hours of course work must be completed before transfer to the Ranger School at Wanakena. The required courses include biology, algebra, trigonometry, English and economics.

If you plan to transfer to ESF, you should follow the program requirements in consultation with our Pre-Environmental Science and Forestry campus advisors* for selection of electives which vary according to the curriculum at ESF. Full and complete guidelines of curriculum content are available in the Admissions office or from the Mathematics and Science and Architectural Technology advisors.

To apply to the Pre-ESF specialization, you are strongly encouraged to have three to four years of high school mathematics and as much science as possible, including chemistry and physics.

Upon successful completion of this course of study, you will be prepared to transfer to ESF to a variety of programs which include the biological sciences (botany and forest pathology, entomology, zoology, wildlife biology, silvics, pest management); chemistry (natural and synthetic polymers, biochemistry and natural products, environment); forest engineering; paper science and engineering; wood products engineering; forestry (resource management, forest resource science, management science, environmental education and communications, urban forestry, world forestry, applied resource management); and environmental studies. The program in landscape architecture leads to a B.L.A. degree (Bachelor of Landscape Architecture) after three years of study at ESF.

* Names and locations of the pre-ESF advisors may be obtained from the Mathematics/Science proctor.

Mathematics and Science Program A.A.

First Year	**Credits**
ENG 103-104 Freshman Composition and Literature I and II	6
History Electives	6
MAT 143 Pre-Calculus With Trigonometry[1]	4
MAT 161 Calculus I[1]	4
Sequential Laboratory Science[2]	8
Physical Education Activities	2
Health Elective	1
Total Credits:	31

Second Year	**Credits**
Language and/or Philosophy and/or English[3]	6
Social Sciences Electives	6
MAT 162 Calculus II or MAT 151 Statistics I	3-4
Mathematics/Science Electives[4]	6-8
General Electives[5]	8-11
Total Credits:	29-35
Total Program Credits:	60-66

Notes:

1. Students who complete MAT 143, Pre-Calculus With Trigonometry, may use these 4 credits in the general elective category. The mathematics requirement is fulfilled by completion of either MAT 161 and MAT 162, or MAT 151 and MAT 161.
2. The laboratory science sequence must be chosen from one of the disciplines listed below. Choose only one sequence from any particular discipline. The courses which constitute acceptable sequences within each discipline are indicated.
   - Biological Sciences: BIO 151-152.
   - Geological Sciences: GEO 151-152.
   - Physical Sciences: PHY 103-104, PHY 105-205, PHY 105-206 or PHY 205-206.
   - Chemistry: CHE 171-172, CHE 203-204, CHE 205-206.
3. Applicable English courses are ENG 121 and all ENG courses numbered 200 or above. Modern language can be used to fulfill this requirement. Modern language literature in translation or civilization courses are not applicable.
4. Mathematics/Science elective must be chosen from outside the discipline selected for the laboratory science sequence and must be selected from the following:

- MAT Courses numbered 151 or higher.
- BIO: Courses numbered 131 or higher
- CHE, 171, 172, 203, 205, 206
- GEO: 151, 152, 105, 105L, 106, 106L and courses numbered 200 or higher.
- PHY: 103, 104, 105 and courses numbered 200 or higher. (Degree credit cannot be awarded for both PHY 103 and PHY 105.)
- SCI: 100, 100L, 103, 103L

5. See your advisor for appropriate electives. Mathematics courses used as general electives must be chosen from MAT 112, 113, 121, 122 and any MAT course numbered 140 and higher.

Mathematics and Science Program A.S.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
Social Sciences or Humanities Elective	3
MAT 161 Calculus I[1]	4
First Sequential Laboratory Science I[2]	4
Physical Education Activity	1
Total Credits:	15

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
MAT 162 Calculus II	4
First Sequential Laboratory Science II	4
Second Sequential Laboratory Science I[2]	4
Health Elective	1
Total Credits:	16

Third Semester	Credits
Social Sciences or Humanities Electives	6
Mathematics/Science/Computer Elective[3]	4
Second Sequential Laboratory Science II	4
General Elective[4]	3
Total Credits:	17

Fourth Semester	Credits
Social Sciences or Humanities Elective	3
Mathematics/Science/Computer Electives[3]	8
General Elective[4]	3
Physical Education Activity	1
Total Credits:	15
Total Program Credits:	63

Notes:

1. Students who are required to complete MAT 143, Pre-Calculus With Trigonometry, may use these 4 credits in the general elective category.
2. Laboratory science sequences must be completed in two of the disciplines listed below. Choose only one sequence from any particular discipline.
   a) BIO 151-152
   b) CHE
   c) GEO 151-152
   d) PHY 103-104, PHY 105-205, PHY 105-206, PHY 205-206
3. Mathematics/Science/Computer elective must be selected from the following:
   a) MAT: Courses numbered 151 or higher
   b) BIO: Courses numbered 131 or higher
   c) CHE: 171, 172, 203, 205, 206
   d) GEO: 105, 105L, 106, 106L, 151, 152 and courses numbered 200 or higher
   e) PHY: 103, 104, 105 and courses numbered 200 or higher. (Degree credit cannot be awarded for both PHY 103 and PHY 105.)
   f) SCI: 100, 100L, 103, 103L
   g) CSC: 111, 112
4. See your advisor for appropriate electives. Mathematics courses used as general electives must be chosen from MAT 112, 113, 121, 122 and any MAT course numbered 140 and higher.

Mechanical Technology (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 143
PHONE: (315) 498-2442, EMAIL: OCCINFO@SUNYOCC.EDU

The Mechanical Technology program is a two-year Associate in Applied Science degree oriented to prepare students for employment in industry as engineering technicians.

Course work in the Mechanical Technology program includes: engineering documentation, manufacturing processes, machining and inspection techniques, material science, and computer-aided-design. Intrinsic to the educational development of the students, a mathematics sequence, physics, and relevant liberal arts courses are also included.

Program Learning Outcomes

1. Demonstrate understanding of the principles and theory of manufacturing processes.
2. Demonstrate knowledge of the basic operation of machine tools.
3. Apply knowledge of metrology in an industrial setting.
4. Create and interpret technical drawings and models utilizing current state of the art Computer Aided Design software.
5. Analyze, set up, and solve statics and strength of material problems.
6. Demonstrate knowledge of material science as utilized in an industrial setting.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
MET 151 Machine Tools	3
ENS/MET 150 Introduction to Engineering	3
MET 161 Engineering Drawing I	3
MAT 119 Mathematics for Technical Disciplines I	4
Total Credits:	16

Second Semester	Credits
ENG 104 Freshman Composition and Literature II	3
MET 152 Machine Tools	3
MAT 120 Mathematics for Technical Disciplines II	3
MET 171 Manufacturing Processes	3
SUNY Gen. Ed. Basic Communication COM Elective	3
Total Credits:	15

Third Semester	Credits
MET 251 Appl Strength/Materials	4
MET 252 Physical Metallurgy	3
MET 270 Solid Modeling	4
Liberal Arts Elective	3
Total Credits:	14

Fourth Semester	Credits
PHY 103 General Physics I	4
MET 153 Introduction to Modern Manufacturing	3
ELT 141 Circuits I	4
MET 275 Engineering Computations	3
Mechanical Elective[1]	3
Total Credits:	17
Total Program Credits:	62

Notes:

1. Any additional MET course with advisor approval.

Music (A.A.S.)

OFFICE: ACADEMIC II BUILDING, ROOM 202
PHONE: (315) 498-2256, EMAIL: MUSIC@SUNYOCC.EDU

The Onondaga Music degree program offers a two-year sequence designed to parallel the first two years of a typical four-year music degree program in music education, music business or music therapy. Completion of the two-year music curriculum will provide you with an A.A.S. degree, which includes a well-rounded liberal arts education. It also provides the options of transfer to a four-year degree program or direct entry into work as a private studio music teacher, professional musician, or any of a variety of positions in music merchandising.

Admission into the music major program requires adequate pre-college training and preparation, which is tested through audition prior to entry. If your audition suggests insufficient training in music theory, ear-training and/or your major instrument (or voice) and you nevertheless wish to enter the music degree program as a music major, a one-or two-semester sequence of proficiency courses is available. These courses generally cannot be applied to the degree requirements for the MUS.AAS degree; therefore, students in this situation may require an additional semester or two to complete the program. Those students whose audition results suggest a more serious level of under-preparation will be referred back to the Office of Recruitment and Admission for possible admission to an alternate academic program.

A curriculum specialization in Music Merchandising is available if your career plans include the fields of music and business. The format of this specialization would follow the same requirements as the MUS A.A.S. with the addition of courses in Economics (ECO 203), Business (two of BUS 105, 121 or 243) and Music as a Business (MUS 182).

Elective courses include Ethnic Music, Music Composition, MIDI, Music Business, improvisation, and applied music as well as performing ensembles.

The Music department has developed a basic electronic music laboratory located in the Music Resource Center. The use of the Electronic Music Lab is incorporated into a number of the Music department's course offerings. The lab features MIDI (Musical Instrument Digital Interface) equipped state-of-the-art pianos. In addition, a complete computer-controlled MIDI studio has been established featuring Kawai, Roland, and Yamaha synthesizers. This comprehensive digital synthesis studio is supported by an extensive library of the best music software programs.

The Music department presents many public concerts during each semester, including regular performances by student ensembles that are featured on the Arts Across Campus calendar as well as many featured artists from outside the campus. Such student ensembles normally include the Onondaga Singers, Concert Choir, Wind Ensemble, Brass Quintet, Flute Choir, Clarinet Choir, Saxophone Ensemble, Guitar Ensemble, Percussion Ensemble, String Ensemble, Latin Band, and Jazz Ensembles. Membership in Music department ensembles is decided by audition and is open to all Onondaga students.

A convocation for music students is scheduled every Friday during College Hour and features concerts by students, student ensembles, faculty members, and/or visiting musicians featured in Arts Across Campus.

Program Learning Outcomes:

1. Demonstrate proficiency on their instrument or voice in the areas of tone- production, technique and musicality.
2. Understand how to recognize, distinguish and interpret various musical styles and performance practices.
3. Analyze musical works and demonstrate an understanding of the compositional techniques endemic to the style of music studied.
4. Demonstrate keyboard and aural skills, including sight-singing and rhythmic reading.

Specialization: Music Merchandising

The Merchandising specialization will prepare you for music business careers including music publishing; the manufacture and sales of instruments; music reproduction, promotion or management; music retailing and wholesaling. This will also provide the option of transferring into a four-year music merchandising program. The course content in the specialization includes those music and liberal arts courses required for the degree, with the addition of MUS 182, Music as a Business, and selected business and economics courses. This specialization is open to music majors only. Specific requirement: audition.

Proficiency Courses for Non-Music Majors

Course	Credits
MUS 066 Beginning Music Reading I	0/1eq
MUS 067 Beginning Music Reading II	0/1eq
MUS 103 Music Appreciation I	3
MUS 104 Music Appreciation II	3
MUS 107-110 Applied Music (lessons)	2
MUS 113A Applied Piano Minor Class	1
MUS 160 Introduction to Music Theory I	3
MUS 161 Introduction to Music Theory II	3
MUS 166 Introduction to Ethnic Music	3
MUS 182 Music as a Business	3

The above courses do not fulfill non-elective music degree requirements for matriculated A.A.S. students. They are assigned through individual testing and advisement to fit the individual's needs in cases where the student has insufficient background or training to enter the degree program. They are often scheduled in conjunction with liberal arts/humanities courses and/or other music courses which may fulfill A.A.S. degree requirements. Placement is determined at the time of audition and testing.

Music A.A.S.

First Semester	Credits
MUS 101T Music Theory	3
MUS 101R Music Reading I	1
MUS 101K Keyboard Harmony	1
MUS 105 Survey of Western Music History I	3
MUS 111 Applied Music Instruction	2
MUS 113 Applied Piano Minor[1]	1
MUS 121 Applied Major Repertory	1
ENG 103 Freshman Composition and Literature I	3

Total Credits:	15

Second Semester	**Credits**
MUS 102T Music Theory	3
MUS 102R Music Reading II	1
MUS 102K Keyboard Harmony	1
MUS 106 Survey of Western Music History II	3
MUS 112 Applied Music Instruction	2
MUS 114 Applied Piano Minor[1]	1
MUS 122 Applied Major Repertory	1
ENG 104 Freshman Composition and Literature II	3
Social Science Elective[2]	3
Total Credits:	18

Third Semester	**Credits**
MUS 201T Music Theory	3
MUS 201R Music Reading III	1
MUS 201K Keyboard Harmony	1
MUS 211 Music Instruction	2
MUS 115 Applied Piano Minor[1]	1
MUS 221 Applied Major Repertory	1
Humanities Elective[3]	3
Mathematics/Science Elective	3
Total Credits:	15

Fourth Semester	**Credits**
MUS 202T Music Theory	3
MUS 202R Music Reading IV	1
MUS 202K Keyboard Harmony II	1
MUS 212 Music Instruction	2
MUS 116 Applied Piano Minor[1]	1
MUS 222 Applied Major Repertory	1
Liberal Arts Elective[4]	3
General Elective[5]	3
Total Credits:	15

Total Program Credits:	63

Notes:

1. Piano majors must take the MUS 185, MUS 186, MUS 187, MUS 188 sequence.
2. American History, World History, Psychology, or Sociology recommended for transfer.
3. MUS101D Diction for Singers partly fulfills Humanities requirement for voice majors only. Otherwise, Music courses do not fulfill Humanities requirements.
4. Music courses do not fulfill Liberal Arts requirements.
5. General elective must be approved by the student's advisor. Three (3) credits required from any college course. Please note the following exceptions: Only MUS-166, 182, 190, 203 and/or any music special topics may be applied as an elective.

Nuclear Technology (A.A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 143
PHONE: (315) 498-2451, EMAIL: OCCINFO@SUNYOCC.EDU

The Nuclear Technology A.A.S. degree program at Onondaga Community College prepares graduates for entry-level positions as technicians for the nuclear power industry. Based on the Uniform Curriculum Guide for Nuclear Power Plant Technicians, the program's classroom and laboratory coursework will emphasize the instrumentation and control systems applicable to the nuclear industry. Additional "hands-on" experiences may be gained through a summer internship at Constellation Energy Nuclear Group's power plants.

Admission Requirements

1. Placement in ENG 103 and RDG 153
2. Placement into MAT 119 or MAT 143 or higher
3. Satisfactory GPA in last educational experience required for consideration

Graduation Requirements: Successful completion of all ACAD-08-006 required courses (NET, ELT, PHY, and MAT) with a grade of C+ or higher.

Program Learning Outcomes

1. Demonstrate an understanding of nuclear systems and operations.

2. Demonstrate an understanding of radiological safety and radiation protection procedures.
3. Verbalize the applicable rules and regulations as they pertain to maintenance and control in the operations and quality assurance.
4. Accurately solve problems using foundation mathematics, physical sciences, and nuclear technology.
5. Interpret laboratory analyses that measure nuclear and radiation processes.
6. Implement operational procedures associated with start-up and shut-down activities.
7. Conduct, analyze, and interpret laboratory experiments.
8. Demonstrate effective oral and written communication skills.

First Semester	Credits
MAT 119 Mathematics for Technical Disciplines I	4
Lab Science Elective	4
NET 111 Mechanical Principles and Concepts	1
ELT 141 Circuits I	4
NET 101 Power Plant Fundamentals I for Nuclear Energy Technicians	3
Total Credits:	16

Second Semester	Credits
ENG 103 Freshman Composition and Literature I	3
MAT 120 Mathematics for Technical Disciplines II	3
NET 112 Chemistry for Nuclear Technicians	3
ELT 161 Electronic Circuits I	4
NET 102 Power Plant Fundamentals II for Nuclear Energy Technicians	4
Total Credits:	17

Third Semester	Credits
ENG 104 Freshman Composition and Literature II	3
ELT 215 Programmable Logic Controllers	4
ELT 258 Advanced Electronics	4
NET 201 Power Plant Fundamentals III for Nuclear Energy Technicians	4
Total Credits:	15

Fourth Semester	Credits
Social Science Elective	3
ELT 285 Power Systems I	4
NET 202 Power Plant Fundamentals IV for Nuclear Energy Technicians	4
NET 240 Process Control and Communications	4
Total Credits:	15
Total Program Credits:	63

Nursing (A.A.S.)

OFFICE: FERRANTE HALL, ROOM 104
PHONE: (315) 498-2360, EMAIL: OCCINFO@SUNYOCC.EDU

The Nursing department offers an associate in applied science degree and is accredited by the ACEN - Accreditation Commission for Education in Nursing. Upon graduation, you will be eligible to apply for the National Licensing Examination for Registered Professional Nursing (NCLEX). Graduates of the Onondaga Nursing program find employment in hospitals, nursing homes, home care agencies, and community and industrial clinics.

Accreditation Commission for Education in Nursing

Accrediting Commission
3343 Peachtree Road NE, Suite 850
Atlanta, GA 30326
Phone: (404) 975-5000
Fax: (404) 975-5020
http://www.acenursing.org

The program welcomes students of all ages with or without a health care background. Full-time or part-time study is available.

Admission Requirements

In addition to Onondaga Community College's general admission requirements, the cumulative average on your most recent high school or college transcript must be

2.6, 77, or C+ or higher. (N.B. Grades will not be rounded and better than a C is required.)

Before your application to the program can be considered, you must have the following prerequisites:

1. High school diploma or its equivalent.
2. Designated level on standardized nursing pre-admission test. No more than two attempts will be allowed.
3. Two mathematics requirements:
   a. Demonstrated eligibility for enrollment in MAT 114 at Onondaga within two years prior to matriculation in Nursing as determined by the Onondaga mathematics placement test or equivalent coursework

   AND

   b. After demonstration of eligibility to enroll in MAT 114, achievement of at least 80% in all sections of a Nursing Math Entrance Exam taken within two years prior to matriculation in Nursing. No more than four attempts will be allowed.
4. Completion of one year of high school biology, or BIO 121 (preferred), 151, 152 or equivalent, within 7 years prior to matriculation in Nursing. A hands-on laboratory is a required component of these courses.
5. Completion of one year of high school chemistry or CHE 151, general chemistry or equivalent within seven years prior to matriculation in Nursing. A laboratory is not required for these courses.
6. Placement into college-level English and reading.

NOTE: Prerequisite courses in biology and chemistry must be completed with a C+ (college), 77 (high school) or higher.

A competitive process is used for admission to Nursing with points assigned to specific criteria. Admission will be offered to qualified students in ranked order from highest to lowest, beginning at the review deadlines until all spaces are full.

Ranking points will be awarded for:

1. Most recent cumulative G.P.A.
2. Courses taken within the last three years of education that meet the grade requirement (science, mathematics, English).
3. Number of attempts on preadmission tests.
4. Previous certification as a health care provider (EMT, CNA, LPN, etc.) with documentation.
5. New review if student met prerequisites at previous admission cycle but the program was full.

Application deadlines for prerequisites complete with supporting documentation:

1. Summer/fall admission and readmission: March 1
2. Spring admission and readmission: November 1

Advanced Standing Options

Students seeking advanced standing must start the sequence of nursing courses with an advanced placement course which is offered once a year during the summer. Students are advised to check with the Financial Aid office to determine eligibility for financial aid.

LPN Advanced Standing

Licensed Practical Nurses may receive up to 10 hours of credit based on the equivalent education in their curriculum. Students should have an official copy of their LPN transcript sent to the College prior to acceptance into the program. At least three semesters of nursing courses will be required to complete the nursing component of the degree.

It is highly recommended that BIO 171 and 172 Anatomy and Physiology I and II, are completed prior to starting the Nursing Program.

Transfer Student Advanced Standing

A favorable letter of recommendation from the Chair of Nursing of a previous nursing program is required to be considered for admission into the program. Without a favorable letter from the previous nursing program, a transfer student will not be admitted.

Students transferring nursing courses from another RN nursing program should send their application and official transcripts to Admissions. The Nursing department will review nursing credits and determine equivalency of coursework for courses with a grade of B or better. Nursing courses over five years old will not be accepted.

It is highly recommended that BIO 171 and 172 Anatomy and Physiology I and II, are completed prior to starting the Nursing Program.

College-Level Science Courses

Required college-level science courses completed seven years or more before matriculation in the Nursing program, or with a grade less than C+, must be repeated.

Scholarships

See Scholarship section for sources.

The Program

The Nursing program consists of an arts and sciences component and a nursing component.

Graduates with an A.A.S. in Nursing will be able to utilize the nursing process to assist clients to maintain or restore an optimum level of independence in meeting fundamental needs or to achieve a peaceful death.

Arts and Sciences Component

The arts and sciences component includes 24 credits. (See program outline for list of arts and sciences courses required.)

Nursing Component

The nursing courses are organized around the concepts of nursing process and human need theory.

Students learn and practice through individualized instruction materials (readings, multimedia materials, taped lecture information, etc.). Small group lectures and discussions are held to clarify and reinforce the material. There are rarely any large, lecture-style classes.

Each nursing course has an expected level of achievement stated. The student must satisfactorily demonstrate the required level of performance for each course. This is called competency-based education. The minimum standard of achievement remains constant but the amount of time the student spends to achieve it will vary.

Students determine their own learning needs and goals, and evaluate their own progress. The amount of time students will spend completing the material in each course will depend on their ability, interests, and available study time. In order to promote student success in the program and on the licensing examination, a nationally normed standardized program of comprehensive assessment and review has been incorporated.

Clinical experience begins during the first semester that students are enrolled in nursing courses and continues until graduation. Students spend the first half semester of clinical in the Nursing department learning laboratory. During this time, students get to know each other and faculty, orient to the program and to the profession, and practice nursing skills to prepare for experience with clients in local hospitals. Among the agencies where students gain their clinical experience are Community General Hospital of Greater Syracuse, Crouse Hospital, University Hospital, VA Medical Center, and Syracuse Community Health Center.

Additional Costs

In addition to tuition, books, malpractice insurance[1] and other fees[2], nursing students are required to have the following:

- Annual physical examination[3]
- Current CPR certification[4]
- Laboratory equipment kit
- School uniform, lab coat, name pin, white uniform shoes
- Stethoscope
- Watch with number of seconds visible

Each semester, additional variable expenses include lunches and parking fees during clinical experiences.

Initial and follow-up care as a result of injury or exposure to illness in the clinical setting is at the student's expense. Neither the College nor clinical agencies assume any responsibility for health care costs. Students must be covered by an active health insurance policy.

A complete list of current expenses can be obtained from the Nursing department.

1. Malpractice insurance is a fee paid to the College to cover students while they function as Onondaga Community College Student Nurses. It is not personal indemnity coverage.
2. In order to cover the cost of the required Review and Assessment Program, all Nursing students will pay a one-time fee when registering for their first NUR course and another one-time fee in their last semester before graduation.
3. New York State law requires that students have a completed and current health form on file with the College prior to clinical experience.
4. CPR: For Professional Rescuer: a current certification valid up to two years from date of issue.

Time Commitment

The number of hours per week that a student could expect to spend in class, clinical, study, library, transportation and testing depends on the number of courses for which the student registers and the rate at which the student desires to progress in the Nursing program. It is expected that students will complete the program within two to three years of starting the first nursing course.

Part-time students registered for nursing courses need to plan on an average of twenty hours per week for these courses. Once you begin the nursing component, you will register for four credits of nursing clinical each semester. This equates in time to one (8-hour) day each week in a nursing care setting. Mastery and completion of a particular clinical course may take longer than one semester. In this case, an extended clinical course will give you the extra time needed. Students must also plan on preparatory time to review the chart and pertinent texts, and to prepare the nursing process record weekly. Complete details will be given at each clinical orientation.

Students should consider these time commitments in planning for transportation, child care, and employment. Because of the heavy time commitment in the program, it is strongly recommended that students do not attempt to work on a full-time basis. Class and clinical hours cannot be scheduled around a student's work hours.

Program Learning Outcomes

1. Graduates will demonstrate ability to use critical thinking to assess and analyze information resources for clinical decision making.
2. Graduates will demonstrate communication ability by effective, accurate and congruent transfer of information between individuals and groups.
3. Graduates will demonstrate use of technology by the ability to utilize tools (computers, computer programs, the internet, simulation manikins, and equipment) to advance knowledge and expertise.
4. Graduates will demonstrate diversity awareness by understanding the uniqueness of each individual despite differences in race, ethnicity, gender, sexual orientation, age, religious beliefs or disability.

Completion Requirements

Arts and Sciences	Credits
English[1]	6
Sociology	3
General or Introductory Psychology	3
Science[2]	12
Total Credits:	24

Nursing	Credits
Level 1 Theory (NUR 180-185)	6
Level 1 Clinical (NUR 191-192)	4
Level 2 Theory (NUR 220, 222-224, 243)	5
Level 2 Clinical (NUR 231-232)	4
Level 3 Theory (NUR 240, 245-248, 266-267)	7
Level 3 Clinical (NUR 255-258)[3]	4
Level 4 Theory (NUR 260-265)	6
Level 4 Clinical (NUR 271, 291, 295-298)[3]	6
Total Credits:	42
Total Program Credits:	66

Notes:

1. Developmental/Tutorial English courses, English as a Second Language, and English for Foreign students do not satisfy the English requirement.
2. Two (2) semesters of Human Anatomy and Physiology, and one (1) semester of Microbiology, with laboratories, are required. A biology class lacking a hands-on laboratory component may not be substituted.
3. Of the four specialty clinicals only two will be required at each level.

Academic Requirements

In addition to the requirements outlined in the Academic Rules, the following requirements apply to students matriculated in the Nursing program:

A. Matriculated Status

Because of the limited enrollment capacity of the Nursing program, a matriculated Nursing student in good academic standing who discontinues enrollment for reasons other than graduation for two or more consecutive terms (summer and winter sessions excluded) will be placed on inactive status. Readmission to the program is required and will be considered by the Nursing department.

B. Withdrawals

A student will not be permitted to withdraw from a Nursing theory course after a failing grade has been earned. A student who has demonstrated a failing grade in a NUR clinical course during clinical week #3 or after will not be allowed to withdraw from that clinical course.

C. Grading

1. Grading System

The quality point system used to determine academic standing for students in the Nursing program is as follows:

Exceeds Mastery..... EM = 4.0
Mastery + ... M+ = 3.5
Mastery.....M = 3.0
Mastery - ..... M- = 1.0
Non Mastery.....NM = 0.0

The grade of IP (In Progress) does not carry quality points.

2. Repeated Courses

A student is allowed to repeat a course with NUR prefix only once.

Students who fail to receive M or better for a repeated NUR course will lose matriculation in the program.

D. Academic Standing

1. Loss of Matriculation: A student in Nursing who receives two final grades of NM in clinical courses, including extended and elective clinical courses, will lose matriculation.

2. Reinstatement in Same Curriculum: Contact the Nursing department for specific guidelines.

E. Degree Requirements

Students matriculated in Nursing must achieve a minimal grade of M in all NUR courses and a minimum grade of C in all other required courses, except BIO 171, 172, and 205 for which a minimum of C+ is required.

Note: When a grade of C is required, a grade of C- is considered below minimum standards; when a grade of C+ is required, a grade of C is considered below minimum standards.

Graduation Requirements*

1. All requirements outlined for the A.A.S. degree in this catalog.

2. A grade of M (Mastery) or B or better in all required Nursing (NUR) courses.
3. A grade of C or better in all required Liberal Arts and Sciences courses except BIO courses.
4. A grade of C+ or better in BIO 171, 172, and 205.
5. Consistent demonstration of:
   a) entry-level clinical skills
   b) safe professional judgment
   c) academic and professional integrity

Note: When a grade of B or C is required, a grade of B- or C- , respectively, is considered below minimum standards; when a grade of C+ is required, a grade of C is considered below minimum standards.

*The ever-changing nature of nursing and/or refinements in instructional methods may necessitate changes in nursing curriculum requirements and policies. The faculty reserves the right to make such changes with adequate notice given to students active in the curriculum. In addition, the faculty reserves the right to review the current knowledge and skills of students who have taken a course with a NUR prefix five or more years before.

Suggested Semester Sequence

The following suggested plan for full-time students includes four regular semesters and two summer sessions. It is highly recommended that students take BIO-171 Anatomy and Physiology and a required 3 credit liberal arts course prior to taking their first nursing class.

Summer Session[1]	**Credits**
BIO 171 Anatomy and Physiology I	4
PSY 103 General Psychology	3
Total Credits:	7

First Semester	**Credits**
BIO 172 Anatomy and Physiology II	4
NUR 180 Nursing Process and Concepts I	1
NUR 181 Activity and Rest Needs I	1
NUR 182 Oxygenation Needs I	1
NUR 183 Safety and Security Needs I	1
NUR 184 Nutrition and Elimination Needs I	1
NUR 185 Psychosocial Needs: Therapeutic Communications	1
NUR 191 Introduction to Nursing Process	2
NUR 192 Introductory Nursing Process Clinical I	2
Total Credits:	14

Second Semester	**Credits**
ENG 103 Freshman Composition and Literature I	3
NUR 220 Nursing Process and Concepts II	1
NUR 222 Oxygenation Needs II	1
NUR 223 Safety and Security Needs II	1
NUR 224 Nutrition and Elimination Needs II	1
NUR 243 Safety and Security Needs III: Pharmacology	1
NUR 231 Nursing Process Clinical II	2
NUR 232 Nursing Process Clinical II	2
Total Credits:	12

Summer Session[1]	**Credits**
BIO 205 General Microbiology	4
SOC 103 Introductory Sociology	3
Total Credits:	7

Third Semester	**Credits**
NUR 240 Nursing Process and Concepts III	1
NUR 245 Psychiatric Client Needs I	1
NUR 246 Childbearing Family Needs I	1
NUR 247 Childrearing Family Needs I	1
NUR 248 Gerontological and Palliative Care	1
NUR 266 Childbearing Family Needs II	1
NUR 267 Childrearing Family Needs II	1
Any two of the following Specialty Care Clinicals:	

NUR 255, 256, 257, or 258	4
ENG 104 Freshman Composition and Literature II <OR> COM 210 Public Speaking	3
Total Credits:	14

Fourth Semester	**Credits**
NUR 260 Nursing Process and Concepts IV	1
NUR 261 Activity & Rest Needs II: Orthopedic Nursing	1
NUR 262 Oxygenation Needs III	1
NUR 263 Safety and Security Needs IV: Neuro Science Nursing	1
NUR 264 Nutrition and Elimination Needs III	1
NUR 265 Psychiatric Client Needs II	1
NUR 271 Advanced Nursing Process Clinical IV	2
NUR 291 Role Transition: Capstone Course	2
Any two of the following Distributive Care Clinicals: NUR 295, 296, 297, or 298	2
Total Credits:	12
Total Program Credits:	66

Notes:

1. Students may choose to carry more than 14 credit hours per semester and not attend summer session.

If Arts and Science course requirements are completed before beginning nursing courses, students may not be able to maintain full-time status with nursing courses only, due to the sequential nature of the nursing courses and the number of nursing credit hours required. Check with the Financial Aid office for requirements for financial aid awards.

Special Considerations

1. **Non-discriminatory**

Students accepted to the program will be expected to provide care in a variety of settings to individuals and families without regard to race, creed, color, national origin, gender, age or disability.

2. **Good Moral Character**

In order to be eligible to take RN boards (NCLEX exam), you must have the required educational background and be of good moral character. Persons charged with or convicted of a crime (felony or misdemeanor) in any state or country, or who have committed an act which raises a reasonable question as to the applicant's moral character (e.g., professional misconduct, unprofessional conduct, incompetence or negligence, or the termination of professional training, employment or privilege or voluntary/involuntary leaving to avoid termination by any hospital or licensed facility) shall be referred to the executive director of the Office of Professional Discipline or his/ her designee. This is a lengthy process and the applicant is responsible for his/her own legal fees. A person concerned with his/her eligibility is advised to initiate the process well before graduation.

(Source: Nursing Licensing Application Packet published by the New York State Education Department, Office of Professions)

3. **Essential Skills**

The following is a representative list of the essential skills, with or without accommodations, expected of students enrolled in the Nursing program:

a. **Communication**
   i. elicit health history/information from clients, computers, and health records including those written in cursive English,
   ii. give, receive, understand, and be understood regarding relevant verbal English and nonverbal feedback, and
   iii. record information accurately and efficiently.

b. **Observation and Sensory Skills**
   i. assess pertinent body systems including inspection of skin, respirations, temperature, color, odors, and motor function of the client,
   ii. auscultate (listen for cardiac, lung and abdominal sounds),
   iii. palpate (feel for pulses, lumps),
   iv. percuss (short quick blows by the fingers usually to the chest or abdomen in order to obtain a sound for the determination of density, size or position, and
   v. react/respond to signals, alarms, and other displays indicating immediate client need.

c. **Manual Dexterity and Motor Skills**
   i. position and transfer clients safely,
   ii. use appropriate hand washing techniques,
   iii. gown, glove and mask appropriately,
   iv. perform sterile techniques,
   v. perform nursing procedures such as bed bath, making an occupied and unoccupied bed, oral care, and urinary catheterization,
   vi. apply and/or utilize other client care equipment and devices such as stethoscopes, blood pressure cuffs, thermometers and monitors,
   vii. administer medications (IM, Sub Q, IV, suppositories, etc.), and
   viii. perform range of motion (passive) exercises for the client.

d. **Conceptual and Analytical Reasoning**
   i. demonstrate ability to calculate, measure and analyze,
   ii. exercise good judgment, and
   iii. utilize critical thinking in the process of delivering care and comfort to clients.

e. **Social Skills**
   i. perform effectively under stress,
   ii. display flexibility,
   iii. demonstrate compassion, and
   iv. develop effective relationships with clients, staff, peers, families and other health team members.

Photography (A.S.)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 252
PHONE: (315) 498-2401, EMAIL: OCCINFO@SUNYOCC.EDU

The Photography A.S. degree at Onondaga Community College offers a unique program that builds a strong technical foundation, encourages creative exploration and addresses photography's place in the evolution of visual communication. The program is designed to build skills from the basics of black and white photography through color photography and theory, digital imaging and studio lighting. Specialized areas include photojournalism, commercial photography and fine art applications. This program offers an excellent foundation for transfer to a four-year program or for embarking on a career in the multifaceted photography industry.

Classes are small and are taught in state-of-the-art facilities. Students have extensive interaction with faculty and access to Photography department resources. In addition to academic credentials, the Photography faculty has extensive and diverse experience as regularly exhibiting fine artists, photojournalists, and studio and commercial photographers.

Onondaga Community College's Photography program offers exceptional facilities for film-based black and white and color photography, studio lighting and the latest digital technology for
capture, creation, editing and printing.

Program Learning Outcomes

1. Demonstrate the ability to develop conceptual thoughts into original visual communication.
2. Demonstrate an appropriate level of technical competence in the production of his/her work.
3. Demonstrate a competence in the craftsmanship, execution and presentation of his/her artwork.
4. Employ the use of written and spoken vocabulary to communicate the contents of their own and others visual compositions and processes.
5. Show a preliminary working knowledge of the history of art and its social relevance.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
ART 103 Design I	3
ART 105 or 106 History of Art I or II	3
ART 142 Introduction to Computer Graphics	3
PHO 100 Basic Photography	3
Physical Education Activity	1
Total Credits:	16

Second Semester	
ENG 104 Freshman Composition and Literature II	3
PHO 150 Black and White Photography II	3
PHO 160 Color Photography I	3
ART 101 Drawing I	3
PHO 290 History of Photography	3
Physical Education Activity	1
Total Credits:	16

Third Semester	Credits
PHO 170 Studio Lighting and Techniques I	3
Mathematics/Science Elective[1]	3-4
Social Science Elective	3
General Elective (Western Civilization suggested)	3
ART 152 Color and Concept Development	3
Health Elective	1
Total Credits:	16-17

Fourth Semester	
PHO 260 Color Photography II	3
PHO 270 Studio Lighting and Techniques II	
<OR>	
PHO 271 Alternative Photographic Process	
<OR>	
PHO 272 Documentary Photography	3
Mathematics/Science Elective	3-4
Social Science Elective	3
General Elective	3
Total Credits:	15-16
Total Program Credits:	63-65

Notes:
1. Non-credit courses may have to be taken prior to placement in credit courses.

Physical Education and Exercise Science Studies (A.S.)

OFFICE: ALLYN HALL, ROOM 202
PHONE: (315) 498-2282, EMAIL: KLEINA@SUNYOCC.EDU

The Associate in Science (A.S.) degree in Physical Education and Exercise Science Studies is suitable for students whose goals include teaching, coaching, sports management, and/or careers in the broad fitness and wellness fields.

This program prepares students for transfer into a bachelor's degree program in physical education, exercise science, sports management, or other fitness/health-related curricula.

The curriculum emphasizes professionalism, wellness lifestyle, health awareness and leadership by providing background knowledge and skills that form the foundation of the fields. Required courses include health, human anatomy and physiology, exercise science, psychology, and specific liberal arts courses.

Graduates are prepared to:

- Explore the variety of fields relating to physical education and exercise studies
- Write and develop lesson plans
- Develop and demonstrate leadership skills
- Conduct fitness assessments
- Prescribe appropriate exercise programs
- Demonstrate a basic knowledge of sport history, rules and strategies
- Provide instruction of athletic skills

Program Learning Outcomes

1. Demonstrate competency in skills and knowledge within the physical education core courses.
2. Articulate career choices in the fields of physical education, exercise science, and related disciplines.
3. Communicate introductory professional knowledge of the basic concepts and trends as well as current issues within the physical education field.
4. Conduct basic fitness and wellness assessments for diverse populations.

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
PED 101 Introduction to Physical Education, Sport, and Kinesiology	3
PEH 100 Lifetime Physical Wellness	1
PSY 103 General Psychology	3
General Elective	3
History (Western Civilization) Elective[1]	3
Total Credits:	16

Second Semester	Credits
BIO 171 Anatomy and Physiology I	4
COM 210 Public Speaking	3
ENG 104 Freshman Composition and Literature II	3
HEA 207 Personal Health	3
PEH 163 Basic Weight Training for Life	1
History (American) Elective[2]	3
Total Credits:	17

Third Semester	Credits
BIO 172 Anatomy and Physiology II	4
REC 102 Activity Planning I	3
PSL 210 Team Sports: Teaching and Officiating	2
Humanities Elective[3]	3
Mathematics Elective[4]	3
Total Credits:	15

Fourth Semester	Credits
PED 201Fundamentals of Exercise Science	3
HFA 203 Responding to Emergencies	2
HFA 204 Cardiopulmonary Resuscitation	1
Arts Elective[3]	3
Foreign Language Elective[3]	3
Other World Civilizations Elective[3]	3
Total Credits:	15
Total Program Credits:	63

Notes:

1. Acceptable courses: HIS 103 or 104.
2. Acceptable courses: HIS 105, 106, or 107.
3. Consult the SUNY General Education list of courses for course selection in these categories.
4. Any MAT class at the level of 112 or above is acceptable.

Physical Therapist Assistant (A.A.S.)

OFFICE: FERRANTE HALL, ROOM 267
PHONE: (315) 498-2458, EMAIL: OCCINFO@SUNYOCC.EDU

This program is a two-year (four consecutive semesters, followed by one summer) program leading to an Associate of Applied Science degree. It is approved by the New York State Education Department, and is fully accredited by the Commission on Accreditation in Physical Therapy Education. The program begins in the fall semester only.

Your Physical Therapist Assistant A.A.S. degree will prepare you for employment as a competent entry-level physical therapist assistant. This program provides the education you need to become a skilled technical worker, prepared specifically to perform physical therapy interventions and related duties as assigned by a registered physical therapist. As a PTA, you will work under the supervision of a physical therapist utilizing prescribed activities to help patients recover physical function and strength lost through disease, injury or other causes, and to relieve pain and promote healing. Your patient may be a small child born with physical disabilities or an athlete with a shoulder injury, an older person with limited function because of arthritis or a teenager immobilized by an accident.

As a PTA, you might help a patient learn to use crutches or an artificial leg; to maneuver a wheelchair or use adaptive equipment in a home; or to adjust socially and emotionally to a new disability. You may also assist in patient treatment by using physical agents such as heat, electricity and water, as well as providing exercise and massage.

Upon completion of all course requirements, the graduate will be eligible to take the national exam to be able to practice in most states, including New York. The program is specifically designed to prepare qualified PTA's. It is not designed as a preparatory program for a physical therapy degree. Most states (including New York) require state certification to practice as a Physical Therapist Assistant.

Good Moral Character: An individual's eligibility for certification may be affected by an existing criminal record. It is the individual responsibility of the student to confirm their eligibility for certification.

In New York State, contact:
Office of the State Board for Physical Therapy
89 Washington Avenue
Albany, New York 12234-1000
(518) 474-3817, ext. 180
Fax: (518) 474-6735
Email: ptbd@mail.nysed.gov

In an effort to meet the future needs of the health care community, it is the mission of the Physical Therapist Assistant Program to educate, train and cultivate Physical Therapist Assistants who have entry-level competencies as defined by the State of New York and according to guidelines of the American Physical Therapy Association. It is our purpose to provide the highest quality academic education in the classroom, lab and variety of clinical experiences to enable graduates to meet the psychological, social and physical needs of patients, and develop skills in problem-solving, diversity and lifelong learning.

Admission Requirements

The following are requirements that must be met before application to the PTA Program can be considered:

1. High School Diploma or its equivalent;
2. Completion of two years of high school or college mathematics including one year of algebra or MAT 087 (non-credit) at Onondaga;

3. Completion of two years high school or college science including one year of biology; physics and chemistry are recommended. The completion of one year of high school biology, or BIO 121, 151, 152 or equivalent, must be within 7 years prior to application in the PTA program. A hands-on laboratory is a required component of these courses;
4. A grade of 77 or C+ or higher in required courses used to meet the prerequisites;
5. A cumulative average of 2.6 (from most recent college experience), or 77% or C+ (from most recent high school experience);
6. Before registering for PTA courses, the student must have completed Onondaga placement tests and demonstrated competency, placing into MAT 114 and the ENG 103 and RDG 153 levels.
7. All students participating in clinical or laboratory courses must be able to perform all of the "Essential Skills" as outlined in this catalog.
8. Students will be required to earn CPR certification for the healthcare professional from the American Heart Association before/during the first semester of the program.

Note: You should possess good communication skills, and be in excellent health.

A competitive process is used for admission to the PTA program, with points assigned to specific criteria. Admission will be offered to qualified students in ranked order from highest to lowest, beginning at the review deadlines until all spaces are full. Curriculum changes must be initiated by the student at Student Central.

Ranking points will be awarded for:

1. Most recent cumulative G.P.A.;
2. Courses taken within the last three years of education that meet the grade requirement (science, mathematics, English), especially for good grades in Anatomy and Physiology I & II;
3. Previous certification in the health care field (EMT, CAN, LPN, ATC, massage therapy, etc.) with documentation;
4. New review if student met prerequisites at previous admission cycle but the program was full (student must have reapplied to the program for each new admission cycle); Application deadlines for prerequisites complete with supporting documentation are due by March 1st.

All applicants are dependent on maintenance of required GPA between the time of admission into the program and the start of the program in the fall.

The Program

The PTA program consists of 20 credits of general education courses and 42 credits of PTA courses which include class, lab and clinical experiences.

You are required to earn CPR certification (for the professional rescuer) on an independent basis prior to/during the first semester of matriculation. The New York State regulations require you to have an annual health assessment and to have a health form on file at the College and clinical site prior to beginning any clinical experience. Additional immunizations, such as an annual flu shot, may be required for clinical experiences.

Scheduled clinical assignments cannot accommodate work schedules for those students wishing to hold part-time jobs. PTA courses must be taken in sequence as presented in the curriculum. They are held during weekdays only. Due to the intensity of the program, students are strongly encouraged not to work more than 20 hours per week. For students with child care responsibilities, back-up child care is strongly encouraged, as strict attendance policies affect grades.

Additional Costs

In addition to the regular college expenses of tuition, student activity fees and textbook fees for non-PTA courses, PTA students are financially responsible for the following:

1. Physical exams and required immunizations;
2. Malpractice insurance: approx. $8 per semester (Malpractice insurance is a fee paid to the College to cover students in their functions as Onondaga student PTAs.)
3. Personal health insurance: varies (neither the College nor your assigned clinical facility assumes any responsibility for student health care costs);
4. Textbooks for core PTA courses: approx. $900
5. Uniform and name pin for clinicals: approx. $50
6. Transportation to/from and parking for clinical assignments
7. Room and board for full-time clinicals (where applicable)
8. Watch with second hand.
9. Goniometer: approx. $15
10. Student membership to APTA: $85/year

(Fees subject to change)

Essential Skills

A candidate for a physical therapist assistant associate in applied science degree must have the abilities and skills necessary to complete the educational requirements as defined by the American Physical Therapy Association and the state regulatory agencies. The following is a representative list of the essential skills, with or without appropriate accommodation, expected of students enrolled in the PTA program.

1. Communication Skills

a. effectively communicate the patient's progress and mental/physical status to the PT

b. effectively communicate directions to patients

c. record accurate, legible progress notes in chart

d. elicit accurate and pertinent health history/information from the client and chart

e. accurately and efficiently follow directions

f. give, receive, understand and be understood when engaged in relevant written and verbal English and nonverbal feedback

2. Conceptual and Analytical Reasoning

a. apply didactic knowledge effectively in the lab and clinical settings

b. demonstrate the ability to analyze distinct situations and utilize critical thinking in the process of delivering safe and appropriate care to clients

c. exercise good judgment in problem solving

3. Social Skills

a. perform effectively under stress

b. display flexibility

c. demonstrate compassion

d. develop positive and effective relationships with clients, staff, peers and families

e. willingly accept constructive criticism and modify behavior appropriately

f. provide care in a variety of settings to individuals and families without regard to race, creed, color, national origin, gender, age or disability

4. Physical Strength

a. physically lift an adult in a pivot transfer

b. demonstrate a two-man lift with an adult

c. carry out emergency procedures such as patient evacuation and CPR

d. stand and walk for extended periods of time, and be able to work a 40 hour week

5. Bilateral Dexterity

a. carry out stretching exercises, range of motion and exercise programs such as PNF techniques

b. adjust crutches/canes and walkers

c. carry out manual massage and bandaging techniques

d. set up exercise machines such as traction, Cybex, mechanical lifts, electrical modalities

6. Unilateral Dexterity

a. adjust and fine tune controls on electrical and heat modalities

b. demonstrate fine motor skills such as activities of daily living and exercise to patients

7. Balance

a. maintain balance during guarding of unstable patients on flat surfaces, inclines or stairs

b. maintain balance during lifting, transferring and guarding of unstable patients

8. Observational and Sensory Skills

a. assess pertinent body systems including inspection of skin, color, odor; take accurate vital signs (respiration, blood pressure, temperature, pulse and oximetry); and assess motor function of the client

b. detect and interpret calibrations on modalities, sphygmomanometers, computers, and measurement instruments (goniometers, dynamometers)

c. interpret and respond appropriately to equipment used to monitor patients

d. judge distance, surface and depth changes for ambulating patients on all surfaces

e. recognize patient call systems, including timers and emergency signals

f. touch and be touched by other students, therapists and patients (e.g. palpation, massage)

Completion Requirements

The following must be met to nominate for graduation:

1. All requirements written in this College catalog for an A.A.S. degree.
2. All required PTA, BIO 171, and BIO 172 courses completed with a grade of C or higher (CR for clinical courses)
   a. A student will be allowed to repeat PTA, BIO 171, and BIO 172 courses only once. Students who fail to receive at least a C after two attempts in any one of these courses will lose matriculation in the PTA Program.
   b. BIO 171 and BIO 172 must have been completed within seven years of matriculation into the program.
3. Successful completion of clinical assignments demonstrating to the faculty safe, proficient entry level skills, professional judgment and integrity.

Program Learning Outcomes

1. Students will demonstrate cognitive (knowledge/problem-solving) behaviors appropriate to function as an entry-level PTA.
2. Students will demonstrate adequate psychomotor skills required to function as an entry-level PTA.
3. Students will demonstrate appropriate affective (response, value, organization) behaviors required to function as an entry-level PTA.

First Semester	Credits
BIO 171 Anatomy and Physiology I	4
PTA 107 Physics for the Physical Therapist Assistant	2
PTA 101 Introduction to Rehabilitation	3
PTA 102 Physical Therapy Procedures I	2
PTA 102L Physical Therapy Procedures I Lab	2
PTA 103 Clinical Training I	1
Total Credits:	14

Second Semester	Credits
BIO 172 Anatomy and Physiology II	4
PTA 104 Physical Therapy Procedures II	2
PTA 104L Physical Therapy Procedures II Lab	3
PTA 105 Functional Anatomy I	3
PTA 105L Functional Anatomy I Lab	0
PTA 106 Clinical Training II	2
Total Credits:	14

Third Semester	Credits
ENG 103 Freshman Composition and Literature I	3
PSY 103 General Psychology	3
PTA 201 Physical Therapy Procedures III	4
PTA 201L Physical Therapy Procedures III Lab	0
PTA 207 Functional Anatomy II	3
PTA 207L Functional Anatomy II Lab	0
Total Credits:	13

Fourth Semester	Credits
ENG 104 Freshman Composition and Literature II	3
PSY 218 Psychology of Disabilities	3
PTA 203 Physical Therapy Procedures IV	3
PTA 204 Seminar	3
PTA 208 Seminar II: Strategies for Success	2
Total Credits:	14

Summer Session	Credits
PTA 205 Advanced Clinical Training I[1]	4
PTA 206 Advanced Clinical Training II	4
Total Program Credits:	63

Notes:

1. PTA 205 can also be taken during the winter intersession of the second year, if all non-PTA core courses have been completed at this date.

Professional Cooking (Certificate)

OFFICE: GORDON STUDENT CENTER, ROOM 107A
PHONE: (315) 498-2231, EMAIL: OCCINFO@SUNYOCC.EDU

The Professional Cooking certificate is a one-year program for individuals seeking to acquire marketable skills for entry-level positions as:

- assistant chefs
- commercial cooks
- various positions in commercial kitchens

Certificate requirements include 11 credit hours of hands-on culinary arts laboratories, 12 credits of business-related courses and 400 hours of acceptable work experience within the hospitality industry. This work experience must be earned while matriculated in the Professional Cooking program.

Additional expenses will be incurred for an approved uniform and shoes, and an optional trip to the International Hotel/Motel and Restaurant trade show in New York City.

Many of the Hospitality faculty are members of the American Culinary Federation (ACF) and involve students in numerous ACF activities. Our student's classroom education Is further enhanced by off campus field trips to local beef and produce farms as well as tours of area restaurants, hotels and other Hospitality Industry operations.

If you are interested in more information about Hospitality Management or any business program and would like to speak to someone, stop by the Hospitality Management office located in the Gordon Student Center, Room 107A, (315) 498-2232, or the Business Administration office located in the Whitney Applied Technology Center, Room 324, (315) 498-2435.

More interesting information about the Hospitality Industry and the Walt Disney World College Program can be found at the following sites:

www.acfchefs.org

www.disneycollegeprogram.com

Graduation requirement:

All students in the Professional Cooking program must have a minimum G.P.A. of 2.0 in discipline courses in order to graduate.

Program Learning Outcomes

1. Demonstrate the ability to accurately produce a food production plan, prepare food items, garnish and display items, garnish and display items for small and large volume food production.
2. Demonstrate the knowledge of food and beverage products, including product identification and specifications.
3. Develop a menu and select/design the appropriate equipment and facility layout to produce that menu.
4. Demonstrate advanced level culinary skill by reciting the terminology and techniques and be able to produce 3 different types of end products (examples, brioche braid, chocolate decor, decorated cake, restaurant quality plated meal, plated torte or pastry).

First Semester	Credits
ENG 103 Freshman Composition and Literature I	3
FSA 100 Food Service Sanitation	2
NTR 102 Basic Nutrition	3
FSA 103 Basic Food Preparation	4
BUS 102 Mathematics of Business and Finance	3
Total Credits:	15

Second Semester	Credits
FSA 104 Restaurant Operations	
<OR>	
FSA 210 Catering and Advanced Culinary Arts	4
FSA 204 Purchasing, Storage and Handling	3
FSA 207 Meal Planning and Equipment Selection	3
BUS 138 Supervision and Management	3
Advance Skills Culinary Arts Elective[1]	3
Total Credits:	16
Total Program Credits:	31

Notes:

1. Choose any of the following courses for a total of 3 credits FSA 112, 114, 116, 217, 218, 219.

Surgical Technology (Certificate)

OFFICE: FERRANTE HALL, ROOM 267
PHONE: (315) 498-2458, EMAIL: OCCINFO@SUNYOCC.EDU

Surgical technologists are highly trained individuals qualified by didactic and clinical training to provide services in the operating room. They function in association with nurses and surgeons to help provide high-quality care of the surgical patient.

Onondaga's Surgical Technology program was designed to fill the personnel needs of area hospitals, outpatient surgery centers, and surgeon's offices for surgical technologists. The demand locally and nationally for trained surgical technologists is constant. Even if you have no previous experience in the health field, you can be prepared for employment after eleven months of study (see special admission requirements). If you are a homemaker, recent high school graduate, or displaced worker, or if you desire a career change, this program may be of interest to you.

The Surgical Technology program includes clinical experiences that begin during the first semester and continue until completion of the program. You will gain your clinical experiences in the hospital and outpatient surgery centers in Syracuse and its surrounding areas.

Costs:

In addition to the regular college expenses of tuition, student activity fees, and books, Surgical Technology students are financially responsible for the following:

1. Physical exam and required immunizations
2. Malpractice insurance - $8 per semester
3. Personal health insurance – varies (neither the College nor your assigned clinical agency assumes any responsibility for student health care costs)
4. Transportation and parking to/from clinical assignments – ranges from $0 - $14 per day

5. Name tag and shoes used specifically for clinical assignments - approx. $60

Admission Requirements

Before an application to the program can be considered, the student must have the following requirements:

1. An overall cumulative average of 2.6, 77, or C+ or higher from the student's most recent high school or college experience;
2. A high school diploma or equivalent;
3. Successful completion of one year of high school mathematics (Math A or Algebra is recommended) or equivalent.
4. Successful completion of one year of high school chemistry, or CHE 151 (preferred with no lab required) at Onondaga or General Chemistry equivalent within seven years prior to matriculation in Surgical Technology.
5. Successful Completion of one year of high school biology, or BIO 151 or BIO 152 or BIO 121 (preferred) at Onondaga within seven years prior to matriculation in Surgical Technology.
6. A grade of 77 or C+ or better in high school or college courses used to meet prerequisites.
7. Successful completion of placement tests demonstrating placement into MAT 114, this must be done at Onondaga within two years prior to matriculation into the Surgical Technology curriculum as determined by Onondaga mathematics placement test or equivalent coursework. Must also place Into ENG 103 level and RDG 153 level.
8. All students participating in clinical or laboratory courses must be able to perform all of the "Essential Skills" as outlined in this catalog.

A competitive process is used for admission to the Surgical Technology Certificate program, with points assigned to specific criteria. Admission will be offered to qualified students in ranked order from highest to lowest, beginning at the review deadlines until all spaces are full. Curriculum changes must be initiated by the student at Student Central.

Ranking points will be awarded for:

1. Most recent cumulative G.P.A.;
2. Courses taken within the last three years of education that meet the grade requirement (science, mathematics, English), especially for good grades in Anatomy and Physiology I & II;
3. Previous certification in the health care field (EMT, CAN, LPN, ATC, massage therapy, etc.) with documentation;
4. New review if student met prerequisites at previous admission cycle but the program was full (student must have reapplied to the program for each new admission cycle);

Application deadlines for prerequisites complete with supporting documentation for fall admission:

a. March 1st; first review;

b. May 1st; second review;*

*These reviews will only be used if there were insufficient applicants at the time of the first review. All applicants are dependent on maintenance of required GPA between the time of admission into the program and the start of the program in the fall.

Essential Skills

A candidate for a certificate in surgical technology must have the abilities and skills necessary to complete the educational requirements as defined by the national accrediting body for national certification. The following is a representative list of the essential skills, with or without accommodation, expected of students enrolled in the surgical technology program.

1. **Communication Skills:**
   a. Effectively communicate with surgeons and co-workers regarding requirements and supplies for surgical procedures while all are wearing masks
   b. Effectively communicate directions to peers
   c. Give, receive, understand and be understood regarding relevant verbal English and nonverbal feedback.
   d. Accurately and efficiently follow directions
   e. Provide effective, coherent, legibly written communication
2. **Conceptual and Analytical Reasoning:**
   a. Apply didactic knowledge effectively in the clinical setting
   b. Demonstrate ability to analyze distinct situations and utilize critical thinking in the process of delivering safe and appropriate care to clients
   c. Exercise good judgment in problem solving
3. **Social Skills:**
   a. Perform effectively under stress
   b. Display flexibility
   c. Demonstrate compassion
   d. Develop positive and effective relationships with physicians, staff, and peers
4. **Manual Dexterity and Motor Skills:**
   a. Demonstrate ability to perform surgical scrub using standard equipment
   b. Gown, glove, and mask appropriately

c. Perform surgical procedures employing sterile technique

d. Identify and pass instruments, supplies, and suture/needle combinations in rooms dimly lit or very bright

e. Attach and manipulate power equipment and endoscopic cameras

5. **Physical Strength**

a. Assist with transferring anesthetized patients

b. Lift, move, and carry instrument trays weighing up to 17 - 21 pounds

c. Stand, sometimes with little movement, for four - five hours

6. **Observation and Sensory Skills**

a. React/respond to signals, alarms, and other displays indicating immediate patient need

b. Judge obstacles encountered during movement around sterile area, i.e. cords on floor, low ceiling lights.

c. Immediately identify and respond to breaks in aseptic technique by anyone in the sterile area

Completion Requirements

1. All requirements listed here for a certificate in Surgical Technology.
2. All required SGT courses, and BIO 111, BIO 171 and BIO 172 completed with a grade of C or higher, with the exception of SGT 103L, SGT 105, and SGT 115, which require a B.

a. SGT courses may be repeated only once if failing grades are earned

b. Only two registrations allowed for completion of BIO 171 or BIO 172

c. BIO 171 and 172 and 205 (if being used as substitution for BIO 111) must have been completed within seven years of admission into the program

3. Successful completion of clinical assignments; demonstration of safe, proficient entry-level skills; professional judgment and integrity.
4. Completion of the National Surgical Technologist (CST) examination prior to exiting the program.

Program Learning Outcomes

1. The student will demonstrate cognitive (knowledge/critical thinking) behaviors appropriate to function as an entry-level surgical technologist.
2. The student will demonstrate adequate psychomotor skills required to function as an entry-level surgical technologist.
3. The student will demonstrate appropriate affective behaviors required to function as an entry-level surgical technologist.

First Semester	Credits
BIO 171 Anatomy and Physiology I	4
BIO 111 Microbiology for Surgical Technology	1
ENG 103 Freshman Composition and Literature I	3
SGT 101 Introduction to Surgical Technology	3
SGT 102 Surgical Pharmacology	1
SGT 103 Principles of Surgical Technology	3
SGT 103L Principals of Surgical Technology Lab	2
Total Credits:	17

Second Semester	Credits
BIO 172 Anatomy and Physiology II	4
SGT 111 Surgical Procedures	5
SGT 105 Clinical Practice I	5
Total Credits:	14

Summer Session	Credits
SGT 115 Clinical Practice II	6
Total Program Credits:	37

Web Technology (Certificate)

OFFICE: WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 230
PHONE: (315) 498-2427, EMAIL: OCCINFO@SUNYOCC.EDU

The growth of the Internet and Web-based technology offers many career opportunities. This certificate is intended for students with previous college and/or work experience wanting to retrain in a credit-course environment. The courses will prepare the students to create and maintain Web pages, and manage Web servers. Electives offer the opportunity to enhance skills in the areas of marketing, communication, graphic design, Web programming, server management and others. Courses may be offered in an accelerated or distance-learning mode when demand is sufficient.

Program Learning Outcomes

1. Demonstrate an understanding of the components of a computer information networked system, including application and system software, communication protocols, and networking hardware and software.
2. Create, install and update sophisticated websites.
3. Install and manage server software and other server side tools.
4. Demonstrate critical thinking in the understanding, evaluation and application of technology solutions to a variety of real life situations.
5. Articulate ethical and professional standards as they apply to the use of the computer systems and computer based data.

First Semester	**Credits**
English Elective[1]	3
CIS 130 Foundations of the Internet	3
CSC 110 Program Design and Development	
<OR>	
CSC 162 Visual Basic I Programming	4
Curriculum Elective[2]	3-4
Total Credits:	13-14

Second Semester	**Credits**
CIS 230 Website Design and Development	4
CIS 231 Advanced Web Servers	4
Curriculum Elective[2]	3-4
Curriculum Elective[2]	3-4
Total Credits:	14-16
Total Program Credits:	27-30

Notes:

1. Students may choose from one of the following: ENG 121, ENG 227, or ENG 259. Please note that students with no previous college experience will be required to complete ENG 103 and ENG 104. ENG 099 (a non-credit course) may also be required.

2. Courses which are applicable are ART 142, ART 224, ART 244, BUS 121, CIS 106, CIS 125, CIS 151, CIS 170 CIS 271, CIS 286 and CSC 250.

Minors

A minor is defined as

12 or more hours of elective course work in a specialized field.

It is not a major for which, in itself,

a degree can be earned.

Students may matriculate in one of several degree programs of study and may "minor" in one (or more)

of the following.

In This Section

Minors are available to all matriculated students, regardless of major course of study. If you have an interest in one of the specialized areas noted, consult your advisor on how to set up your class schedule to complete the required course work. Minors in any of these areas are not open to students who are majoring in that same area; these are designed to allow you to study another area of interest. (Course-work can be utilized for both program requirements and minor requirements.)

MINOR: African American Studies

This minor is intended for students who want to gain a fuller understanding of African American life, culture and history. It is also intended for those students who plan to develop their interest in African American life, culture and history beyond Onondaga. This minor consists of 12 credit hours chosen from the following six courses:

ENG 225 African American Literature I
ENG 226 Literature of the Black American II
SOC 211 Race and Ethnicity
HIS 223 African American History Through the Civil War Era
HIS 224 African American History 1890 to the Present
HIS 226 History of the Civil Rights Movement

MINOR: Alcohol and Substance Abuse

These electives are designed to provide an understanding of the bio-psychosocial factors relevant for providing counseling to alcohol and substance abuse clients. Theories regarding etiology and the treatment and relapse process, and development of skills needed to provide individual and group counseling for addicted populations are included in the courses in this minor. This minor is not open to HUM majors.

Group I (Required Courses – 6 credit hours)

HUM 150 Human Services Theory, Skills, and Resources
ASA 159 Chemical Dependencies

Group II (Electives – 6 credit hours)

ASA 226 Group Skills for Alcohol and Substance Abuse Counseling
ASA 227 Overview of Addiction Services
ASA 229 Addictions and Family Systems Treatment Programs
ASA 268 Clinical Skills for Alcohol & Substance Abuse Counselors

MINOR: Cinema

If you have a serious interest in motion pictures, and if you are considering a film-related career (cinematography, film critic, film teacher), then you should consider the Cinema minor. The primary requirement is the completion of 12 credit hours of film-related courses. This minor may be part of your studies in several Onondaga curricula including Humanities and Electronic Media Communications.

Cinema courses are found in a variety of disciplines. They may be listed as English courses, social science/history courses or given a cinema designation. Since all curricula which allow a Cinema minor require English and social science courses, these credits may fulfill both requirements. All Cinema students are required to take at least one CIN course, in addition to whatever English and history cinema-related courses are completed. CIN courses deal with specific topics (animated films, comedy films, etc.), whereas the English and history courses are primarily of a broader nature.

All of the courses—whether they are officially listed as English, history, or cinema—deal with the history and appreciation of film, and are designed to give you a historical perspective on motion pictures while also stimulating an aesthetic appreciation of film and an ability to view film critically and analytically. Filmmaking is NOT taught in any of these courses; if you are interested in learning the basics of production, you are advised to enroll in the Electronic Media Communications program and take cinema courses as well. This will give you a more suitable background in both production and appreciation. On the other hand, if your primary interest is in the artistic aspects of film as it relates to society and the arts, you are advised to enter the Humanities program and take an assortment of cinema courses.

MINOR: Communication

If you want to enhance your success academically, personally and professionally, communication skills are essential. This minor in Communication, which nicely complements any major course of study at Onondaga, can supply you with those oral presentation and interpersonal skills that serve as a springboard to effective personal and professional interactions.

Skill areas of public speaking, listening, conflict resolution, managing interpersonal relationships and research are emphasized in the 6-credit core courses. Enhanced understanding of small group dynamics, the effective use of reasoning or debate, understanding public relations, effective use of the voice, and gender interactions are covered in the electives.

Education, sales, communication training, management, public relations, human resources, entertainment, speechwriting and politics are just some of the avenues students with the Communication minor can explore through either a career or transfer track.

Suggested Course Sequence

Group I Required Core - 6 credit hours

COM 210 Public Speaking
COM 220 Interpersonal Communication

Group II Electives - 6 credit hours from:

COM 111 Social and Professional Etiquette
COM 113 Communication and Health
COM 202 Rhetorical Criticism
COM 204 Advocacy and Opposition
COM 206 Voice and Articulation
COM 225 Teamwork and Small Group Communication
COM 240 Persuasion in Everyday Life
COM 245 Communication @ Work
COM 272 Communication and Conflict Management
COM 282 Intercultural Communication
COM 284 Communication and Gender
COM 290 Communication Seminar
BUS 212 Business Correspondence
BUS 293 CO: Disney Co-Operative Internship
(Only 3 of the 9 credits may apply toward this minor)

MINOR: Computer Science

The Computer Science minor, like the Computer Science degree, emphasizes computer function and the use of the computer in solving mathematical and scientific problems. If your goal is to develop skills to supplement your primary academic interest, this minor will meet your expectations. You may transfer to some four-year computer science programs with the Computer Science minor -- consult with a College transfer advisor. To be accepted into the Computer Science minor, you should have at least three years of high school mathematics. Please note that pre-calculus with trigonometry (MAT 143) is necessary for the required computer science courses, and for all CSC courses numbered 211 and higher.

Suggested Course Sequence	Credits
First Semester	
MAT 143 Pre-Calculus With Trigonometry*	4
Second Semester	
CSC 111 Fundamentals of Computing I	4
Third Semester	
CSC 112 Fundamentals of Computing II	4
Fourth Semester	
One 3- or 4-credit-hour elective in Computer Science to be selected from: CSC 162, CSC 211 (recommended), or any CSC course numbered 261 or higher.	3-4

* Students proficient in MAT 143 may have MAT 143 waived, and may take each CSC course one semester earlier than noted.

MINOR: Delinquency Studies

The Delinquency Studies minor is designed for students who want to focus on the complicated role of criminal justice as applicable to juvenile crime, victimology, and delinquency. The courses will enhance students' knowledge of programs and policies related to delinquency within the juvenile justice system. Students will also explore theoretical explanations and the etiologies of delinquency, juvenile crime, and victimology.

CRJ 203 Juvenile Delinquency
CRJ 206 Juvenile Justice System
CRJ 207 Sexual Violence and the Criminal Justice System
CRJ 252* Internship
*Another relevant course may be substituted after consultation with academic advisor and permission of department.

MINOR: Ethnic Diversity Studies

The Ethnic Diversity Studies minor is interdisciplinary in scope and content and seeks to enhance students' understanding of the culture, life, historical struggles, and contributions of racial/ethnic groups in the United States. Students who opt for the minor will complete 12 credit hours of course work with courses selected from four major groups as follows:

GROUP I - Select one - 3-credit course

SOC 211 Race and Ethnicity
ENG 250 Voices of Diversity

GROUP II - Select one - 3-credit course on African Americans

HIS 223 African American History Through the Civil War Era
HIS 224 African American History 1890 to the Present
HIS 226 History of Civil Rights Movement
ENG 225 African American Literature I
ENG 226 Literature of the Black American II

GROUP III - Select one - 3-credit course on Native Americans

HIS 207 History of the North American Indian
HIS 208 History of the Iroquois
POS 215 The Politics of Native American - U.S. Relations

GROUP IV - Select one - 3-credit course

ANT 151 Introduction to Physical Anthropology
ENG 239 American Folklore
CRJ 108 Police Community Relations
LCC 245 Latin American Civilization in English

MINOR: Honors

If you are a highly motivated student with an excellent academic record who likes to be challenged, and if you are interested in transferring to a highly competitive institution, the Honors minor may be for you.

The Honors minor provides students in all curricula the opportunity to blend honors coursework with individual degree requirements. It requires a minimum

of 13 credits of honors work, with no grade below a B in those courses, and an overall GPA of 3.5. The 13 credits are not in addition to your degree requirements, but are honors courses and contract options associated with required or elective courses. Upon completion of the 13 credits, an Honors minor will be designated on your transcript.

You may participate in Honors even if you do not plan to complete the minor. You may take honors courses or arrange honors contracts to obtain an Honors designation on your transcript for individual courses.

There are two ways you can enter the Honors minor: as an entering freshman you must have a 90 average, as determined by your high school transcript; a minimum combined SAT score of 1100 or equivalent ACT score of 23; and two letters of recommendation, ideally from teachers familiar with your academic abilities. Alternatively, you may apply as a transfer student or current Onondaga student on the basis of at least 15 college credits, with a GPA of 3.5 and no grades below B, plus two letters of recommendation. If your most recent college experience includes at least 15 credits at Onondaga within the past two years, you may request that only your Onondaga Community College record be taken into account.

Except for LIB-100, there are no restrictions on sequence, but you are advised to distribute your 13 Honors credits throughout your semesters at Onondaga.

A. LIB 100 (1 credit) Students will be advised to take this course as early as possible. If a student has already taken LIB 100 prior to admission to the Honors minor, the instructor of LIB 100 will either:

   1. waive the requirement, or
   2. set up a substitute research activity to be conducted in cooperation with the instructor of another course.

B. At least 3 of the Honors credits must be in an Honors course, an Honors section or an Honors Special Topics course.

C. The remaining 9 Honors credits may be selected from any suitable combination of Honors enrichment contracts, Honors sections, and Honors courses.

Honors courses are notated in the Schedule of Classes.

If you want to participate in the Honors minor, take individual Honors courses or arrange enrichment contracts, you need to apply and be accepted into Honors. To apply: contact the Honors Office, Ferrante Hall, Room 262, (315) 498-2490. Application and recommendation forms may be downloaded from the College website at sunyocc.edu; on the home page select academics, then select Honors Program.

MINOR: Human Services

The Human Services minor offers you an introduction to the helping and teaching professions. It will provide you with interpersonal and professional interviewing and counseling skills to assist you in your professional work and interpersonal relationships.

The twelve-credit minor is open to all matriculated students. The courses may be used as general electives by students in Humanities and in other curriculum areas. By working with your advisor and with Human Services faculty, you may design this minor to meet your specific interests and needs.

MINOR: Information Technology

The study of information is an interdisciplinary venture. This minor is designed for students who do not wish to become computer scientists, but realize their chosen field requires the regular use of information processing and basic computing skills and is thus intended for any student who wishes to enhance their technical computer skills, as well as their ability to critique and evaluate information. A core of technical computer courses is complimented by a set of electives that draw from the strengths of other disciplines in the area of critical thinking, digital information and emerging technologies.

The minor is ideal for any student who wishes to utilize technology and information in their given profession or further studies.

Courses	Credits
CIS Core*	3
CIS Core*	3
Elective**	3
Elective**	3

*The following are acceptable sequences:

CIS 100/CIS 120, CIS 106/ CIS 120

**Choose from: EMC 101, SOC 183, ENG/COM 227. Other courses could be included with approval of the Computer Studies department.

MINOR: International/Global Studies

The International/Global Studies minor prepares you to live and work in an increasingly dynamic and diverse global community in the 21st Century. The minor will enable you to deepen your cross-cultural perspectives, and will provide you with relevant tools you will need to analyze global/international issues. You will earn transferable credits to help you pursue your interests in international studies in a four-year institution and beyond. Upon graduation, a minor or a degree in International/Global Studies will increase your chances of finding employment with international organizations in the U.S. and abroad. In other words, the possibilities are endless. So, go ahead and combine this value-added experience to your academic major at Onondaga.

Requirements:

Complete 12-15 credit hours of coursework in one of the two options as outlined below. These courses are not offered every semester, so please plan carefully after consulting with an academic advisor as well as the Social Science and Modern Language departments, respectively.

Option 1: International Studies (12-15 credits)
2 Required Courses (6 credits) from list below
GEG 101: Introduction to Geography
HIS 213: End of Empire: British Imperialism Since 1900

POS 201: Comparative Politics

2 Elective Courses (6 credits)
See Global Awareness (GLAD) courses list. Courses must be selected from the "International" designation.

1 Foreign Language Proficiency Requirements
A language course is required for the International option beyond the language requirements for the A.A. in Liberal Arts & Sciences: Humanities & Social Sciences.

Option 2: Global Studies (12 credits)
2 Required Courses (6 credits) from list below
ANT 152: Introduction to Cultural Anthropology
HIS 102: World History II
SOC 214/POS 214: Contemporary Global Issues
2 Elective Courses (6 credits)
See Global Awareness (GLAD) courses list. Courses must be selected from the "Global" designation.

MINOR: Internet and Web Design*

No matter what curriculum you may choose for your Onondaga degree, the Internet and Web Design minor will provide you with the skills necessary to learn how to find information on the Internet, and how to design, implement and maintain hypertext and multimedia on a World Wide Web server. Not available to CIS majors.

Courses:

CIS 100 Information and Computer Literacy	3
CIS 130 Foundations of the Internet	3
CIS 230 Website Design and Development	3
Elective: Choose from CIS 120, ENG/COM 121, or MUS 190. Others with CIS advisor approval.	3

*NOTE: Students interested in this minor may also be interested in the WEB TECHNOLOGY CERTIFICATE Program.

MINOR: Journalism

The Journalism minor is designed for students interested in exploring the field of journalism and related careers in the media. The courses in the minor are cross-listed as both Communication and English courses as they have a strong emphasis on writing. Courses with either prefix will qualify for completion of the minor, although students intending to transfer to a four-year journalism program should take the course as a Communication course, with the COM prefix. This may make transferring into a four-year communication or journalism program easier.

Students enrolled in the Communication or the Humanities and Social Sciences A.A. programs may qualify for the associate of arts degree with the Journalism minor by completing a minimum of 12 credit hours in journalism courses as part of the regular sequence. Students enrolled in a curriculum other than Communication or Humanities may also meet the requirements of the Journalism minor while meeting the requirements of their own curriculum.

All students enrolled in the minor are required to take ENG/COM 121 (News Literacy, 3 credits) and ENG/COM 122 (Introduction to Journalism, 3 credits). The additional six credits may be selected from among the following three-credit courses:

ENG/COM 157 Electronic Media Writing

ENG/COM 227 Writing for Emerging Technologies

ENG/COM 251 News Writing

ENG/COM 252 Feature Writing and Literary Journalism
In addition, journalism students are strongly encouraged to become involved with the student-run news organization, The Overview. Students can earn academic credit and get hands-on experience both reporting and editing by attending staff meetings and enrolling in the associated courses:

ENG/COM 123 Student Media Reporting (1 credit)

ENG/COM 253 Student Media Editing (2 credits)

MINOR: Mathematics

The minor in Mathematics is intended for those students whose interest in higher-level mathematics exceeds the requirements of their program. It is open to all non-MTS, non-ENS students. Students who wish to pursue this minor will take a minimum of 12 credits of Mathematics courses numbered above MAT 143. Some possible course combinations include, but are not limited to:

The mini-major:	MAT 161, 162, 263
The intro sampler:	MAT 151, 161, 241, 251
The stat-calc combo:	MAT 151, 152, 161, 162
The discrete sampler:	MAT 151, 152, 241, 251

MINOR: Music

The Music minor is designed for non-music majors who want to continue their study in music in a more formal and cohesive manner on a college level. Its aims and goals are designed to increase the students' individual skills levels and to broaden their knowledge and experience. Auditions are required for all

applied music courses.

Music Theory -
6 credits, choose 2 courses from MUS 160, 161, 101T, 102T

Music History -
3 credits, choose 1 course from MUS 103, 104, 105, 106

Applied Music -
4 credits, choose 2 courses by Music department advisement from MUS 107 - 110 sequence or MUS 111 sequence

Performing Ensembles
1 credit, 2 courses by Music department advisement from the Performing Organizations sequence (MUS 151, 152, 251, 252)

MINOR: Native American Studies

The minor in Native American Studies enables the College to better serve its Native American students as well as the surrounding Native American community, and also to enlighten the whole student body as to the antiquity, diversity and richness of Native American cultures in the Americas.

The Native American Studies minor is interdisciplinary in nature, with courses and faculty coming from several departments, thereby providing a rich and diverse program for students and faculty. All the courses deal with the Native American experience, and are taught with a sensitivity to Native American perspective.

To qualify for the minor in Native American Studies, you must declare the minor, and complete a minimum of twelve hours in Native American Studies as part of your regular Humanities sequence. The twelve hours must be chosen from the menu below:

Group I: (Required Core Course)
HIS 207 History of the North American Indian

Group II : (Elective Courses)
HIS 208 History of the Iroquois
HIS 221 Mayas and Aztecs: An Introduction to the History of Ancient Mesoamerica
HIS 240 The Plains Indians
HIS 292 Collision of Cultures: America and Europe
POS 215 The Politics of Native American - U.S. Relations

Note: This menu of courses will be expanded over time. The Native American Studies Committee will review and recommend any future course additions to the minor.

MINOR: Women's Studies

The Women's Studies minor is designed to meet the needs of students interested in analyzing the influences of gender on human experience including politics, medicine, psychology, history and social institutions. Students are able to devise an individualized program with core courses that focus on an examination of women's voices from historical and literary narratives.

Women's Studies courses are open to all students in the college, regardless of their curriculum. Many of these courses, drawn from a variety of departments, may be used to fulfill Liberal Arts requirements in all curricula. An important component of each course is the serious contemplation of issues affecting women. Such issues include the intellectual, creative, social and political experiences of women; the nature, historical development and consequences of sexism in American culture; the evolution of gender role expectations; and definitions of women's "nature" in the social sciences and literature.

Students enroll in Humanities and Social Sciences may qualify for the associate of arts degree with a Women's Studies minor by completing a minimum of 12 credit hours in Women's Studies as part of the regular Humanities sequence. Students enrolled in a curriculum other than Humanities may also meet the requirements of the Women's Studies minor while meeting the requirements of their own curriculum.

Courses applicable to the Women's Studies Minor

Required Core Course	Credits
WMS 101: Introduction to Women's Studies	3
Students must choose three courses from the list below	9
ANT 201: Anthropology of Marriage and the Family	
COM 284: Communication and Gender	
CRJ 107: Women and Crime	
ENG 230: Women's Literature	
HIS 209: History of American Women	
HIS 210: History of Women and Medicine in America	
HIS 214: The Global History of Sexuality	
HIS 219: History of European Women Since 1500	
HUM 265: Aging and the Family	
HUM 267: Families in Crisis: Human Services Intervention	
POS 230: Women and Politics	

PSY 212: Psychology of Women	
SOC 203: Sociology of Gender Roles	

NOTE: Students who do not complete 12 credit hours from the above groups may elect a maximum of 3 credit hours from a variety of additional courses upon consultation with the Women's Studies coordinator at (315)498-2673.

Students are encouraged to enroll in LIB 100, The Art of Inquiry.

MINOR: World Languages

The Minor in World Languages is intended for those students whose interest in the study of languages and cultures taught at OCC other than their native language exceeds the requirements of their program. It is open to all students.

Students who wish to pursue this minor must complete the following requirements:

I. Required language proficiency (min. 6 credits taken at OCC).

Students must be able to demonstrate a minimum proficiency in two languages other than the student's native one (only languages taught at OCC apply*) as follows:

- Intermediate II (202) level in one World language
- Elementary II (102) level in an additional World language

*Languages taught at OCC are: American Sign Language, Chinese, English as a Second Language, French, German, Italian and Spanish.

II. Required courses other than language:
Any LCC (Literatures, Cultures and Civilizations) course - 3 credits

III. Electives** - Choose one additional (3 credit) course from the following list:

Any additional LCC (Literatures, Cultures and Civilizations) course.
COM 282 - Intercultural Communication
EDU 230 - Human Services with Diverse Populations
GEG 101 - Introduction to Geography
GEG 203 - Economic Geography
HIS 101 - World History I
HIS 102 - World History II
POS 201 - Comparative Politics

** Other courses need the approval of the Modern Languages Department.

Academic Rules

Effective: Fall 2015

In order to maintain and nurture the scholastic standards of Onondaga Community College, the following academic rules have a two-fold purpose. The first is to stimulate the pursuit of academic excellence, and the second is to establish minimum criteria for academic standing.

Note: Individual academic programs may have additional rules. Please refer to the catalog or website for further details.

I. Matriculation

A. Matriculated Status: A matriculated student is one who has been accepted by the Admissions office and is enrolled in a credit degree or credit certificate program. A nonmatriculated student is enrolled in College classes but has not been admitted formally to a credit degree/certificate program, or has been dismissed because of unsatisfactory academic performance. A matriculated student in good academic standing who discontinues enrollment for two or more consecutive semesters retains his/her matriculated status (summer and winter sessions excluded). However, such students should contact the Counseling Center before re-enrolling in classes. A student matriculated in a program with limited enrollment capacity, such as health-related programs (i.e., Nursing, Physical Therapist Assistant, and Surgical Technology) will be placed on inactive status in the program if enrollment is discontinued for reasons other than graduation. Students may retain matriculated status in non-health related programs. Readmission to programs with limited enrollment capacity is required and will be considered by the applicable academic department. Matriculated students who have discontinued enrollment for a period of six years or longer will be placed in non-matriculated status. Such students must contact Student Central to seek readmission to the College.

B. Academic Program Change: A matriculated student may request an academic program change through Student Central. The request is processed only after it has been reviewed and approved.

Matriculated students requesting a second change of program (into a 3rd program at Onondaga Community College), are required to meet with a Counselor in the Counseling department or their Academic Advisor in their current department of study to assess education and career goals in relation to the requested academic program change.

Forgiveness: Students who change their academic program may apply for one time grade forgiveness. This forgiveness, if approved, applies to the program GPA only (GPA2), not to the cumulative GPA.

A student may submit a petition for grade forgiveness for prior courses with grades of D and F that are not applicable to the new program. For example, if a student was in MUS and changes to NUR, all MUS courses with grades of D or F will be forgiven. Extra liberal arts electives that could potentially be applied to the new program will remain in the program GPA (GPA2) and cannot be forgiven.

If approved, forgiven courses with grades of D and F will be made non-applicable to the program GPA (GPA2). The grades will be indicated with an asterisk (i.e. *D). Courses will remain on the transcript to reflect an accurate academic history, but the grades will not be calculated into the program GPA (GPA2), and credit will no longer count towards graduation requirements.

A student may submit a petition for grade forgiveness after successful completion of his or her first semester with 12 or more credits in the new academic program and a semester GPA of 2.0 or higher. Petition forms are available by request at the Registrar's office. Students must submit the petition along with a letter explaining the circumstances that warrant grade forgiveness. Petitions are at the discretion of the Registrar and the Scholastic Standards committee.

Greater consideration will be given to candidates demonstrating a significant disparity between prior and current academic performance. Students will be granted only one grade forgiveness petition during their academic career at Onondaga Community College and must petition no later than four weeks into the semester following their second semester in the new academic program.

Should a student receive approval to change back to a program in which the student had been matriculated, all courses applicable to that program must be applied (including those that may have been forgiven as a result of the original program change) and recomputed in the program GPA.

II. Course Load

A. Enrollment Status: A full-time student is one who is enrolled for 12 or more credit hours/equivalent credit hours during the fall/spring semester. A part-time student is enrolled in fewer than 12 credit hours/equivalent credit hours during the fall/spring semester.

B. Maximum Credit Load: A student may register for a maximum of 19 credit hours during the fall/spring semester. A Summer Session student may register for a maximum of 8 credit hours during a 5-week session or 11 credit hours during a 10-week session. Summer registration in both day and evening sessions will not include more than 9 credit hours concurrently.

For course sessions other than those above, the maximum number of credits for which a student may register is equal to the number of weeks in the session.

Exceptions: Registering for more than the maximum credit load is allowed only under special circumstances. Advisor approval is required after certification of student grade point average and credit hours by the Registrar's office. Permission will not be granted to any student with a cumulative program index less than 3.0 or a student who has earned fewer than 12 credit hours.

III. Registration

A. Registration: Registration occurs prior to the start of the semester.

B. Add/Section Changes: Courses may be added or sections of the same course may be changed through the first seven calendar days of the semester.* Students adding a course after classes begin are responsible for all missed work but may not be penalized for absences which occur before they are registered for the course.

C. Audit: Audit status may be declared at the time of registration. Audit students must meet all course prerequisites and co-requisites, if applicable, or receive permission of instructor. Auditing a course means that the student enrolls and attends the class, but does not receive a grade or earn credit. Students who choose to audit will not be allowed to take the final exam. Mid-term and other coursework evaluation will be at the discretion of the instructor. The "AU" designation will be awarded in the case of satisfactory attendance, as determined by the instructor. A change from audit to credit status may not be made. Students may audit a course only one time.

D. Withdrawals: Students who wish to withdraw from a course must officially do so through the registration system. Students must drop courses prior to the start of the semester to receive a full refund. The last day to drop and remove a class from the official transcript is the end of the third week of the semester. After the third week of the semester, drops are considered withdrawals and are recorded with a grade of "W" on the transcript. The last day to withdraw from a course is three weeks prior to the last day of classes.*Students are responsible for dropping or withdrawing from courses. Petitions to waive this academic rule are only considered when extenuating circumstances have made it impossible for the student to be able to withdraw by the deadline. Extenuating circumstances must be documented and provided with the petition.

E. Change to Audit Status: Students may elect to declare audit status instead of withdrawing. To declare audit status, the student must obtain the instructor's written approval. The final day to declare audit status is five weeks prior to the last day of classes. Once approved for change to audit status, the requirements of paragraph III.C above apply.

IV. Academic Integrity

Current and prospective students at Onondaga Community College are expected to adhere to the values of intellectual and academic honesty and integrity. Violations of academic honesty will not be tolerated. Policies and penalties for violations of academic honesty are established by each academic department.

A. Definition*: Academic dishonesty describes a wide range of behaviors; the following is offered as a working definition. Academic dishonesty includes but is not limited to:

1. Cheating: Intentionally using unauthorized materials, information, or study aids in any work submitted (e.g. using crib notes, copying another's work during tests, or collaborating with others on out-of-class assignments without permission).
2. Fabrication: Intentionally falsifying or misrepresenting information derived from another source in an assignment (e.g., making up sources for the bibliography of a paper or faking the results of a laboratory assignment).
3. Plagiarism: Deliberately adopting or reproducing ideas, words, or statements of another person as one's own without acknowledgement (e.g., paraphrasing or summarizing a source without acknowledgement, turning in a paper written by another person, buying a paper from a commercial source, failing to properly attribute quotations within a paper, or submitting the same paper for credit in more than one course without the instructor's permission [self-plagiarism]).
4. Facilitating Academic Dishonesty: Intentionally helping another engage in academic dishonesty.
5. Misrepresentation: Providing false information to an instructor concerning an academic exercise (e.g., giving a false excuse for missing a test or deadline or falsely claiming to have submitted a paper).
6. Failure to Contribute: Taking credit for participation in a collaborative project while failing to do one's fair share.
7. Sabotage: Preventing others from completing their work (e.g., disturbing someone's lab experiment or removing materials from a reserved reading file so that others may not use them).

B. Examples of Activities Associated with Academic Dishonesty

1. Copying from another's exam, test, or quiz.
2. Giving or receiving answers during an exam, test, or quiz.
3. Using written or electronic aids during an exam, test, or quiz when prohibited.
4. Reviewing current or previous copies of an instructor's exam, test, or quiz.
5. Discussing the nature and/or content of an exam, test, or quiz with students who have not yet taken it.
6. Giving exam, test, or quiz questions to students in another class.
7. Copying materials without citing the original source.
8. Purchasing term papers, projects, etc. and turning them in as original work.
9. Writing papers for another student or hiring a ghostwriter.
10. Submitting the same term paper, project, etc. to another class without permission.

11. Padding entries on a bibliography.
12. Feigning illness to avoid an exam, test, quiz, etc.
13. Turning in a lab report without doing the experiment.
14. Collaborating on any course work unless instructions permit.
15. Submitting work for someone else, or another's work as your own.
16. Engaging in bribery, blackmail, threats or harassment.
17. Altering or forging an official academic document.

Instructors may provide additional examples of activities more specific to their course and/or discipline.

**Adapted from: Bleeker, Karen C. To Be Honest: Championing Academic Integrity in Community Colleges. Washington, D.C.: American Association of Community Colleges, 2008. Used with the author's permission.*

C. Procedure: When a faculty member wishes to impose a penalty for academic dishonesty, the faculty member initiates action by notifying the student(s), in writing, of the charges against them, the nature of the evidence supporting the charge, and of the penalties which apply. This notification should take place within one week of when the infraction is discovered. The faculty member must retain written documentation to substantiate the charges.

The student(s) may then, within one week, submit to the faculty member a written statement in their defense.

If the faculty member finds the student statement satisfactory, the charge is dropped and the matter is resolved.

If the student(s) offers no defense, or if the faculty member finds the student's statement unsatisfactory, the faculty member imposes the penalty. A written report is then (no later than four weeks after discovery of the cheating/plagiarism) sent to:

1. The student(s)
2. The Department Chairperson
3. The Chief Academic Officer or designee
4. The Registrar, if the penalty to be imposed is a failing grade for the course. In this case, the student will not be permitted to withdraw from the course in which the penalty is imposed.

If the chief academic officer or designee finds the academic dishonesty to be a part of a pattern of repeated offenses or complicity on a larger scale, they may initiate further action.

D. Appeals: If, within two weeks of being notified of the imposed penalty, the student(s) disputes the facts constituting the evidence of the infraction, an appeal may be filed. The appeal is filed with the Chairperson of the department offering the course in which the dishonesty is alleged. (If the Chairperson is also the faculty member making the charge of academic dishonesty, another faculty member shall be assigned the duties of coordinating this appeal process.) The Chairperson will appoint an ad hoc Appeal Board, consisting of three faculty members.The Appeal Board will schedule a hearing at which both the student(s) and the faculty member will be present. Both the student(s) and the faculty member may be assisted by an advocate of their choice, and may call additional witnesses. The Appeal Board will review the facts of the case and hear testimony from both parties and any additional witnesses. Following the hearing, the Appeal Board will deliberate in private and render a decision to either uphold or reject the appeal. The Appeal Board will complete its investigation promptly and communicate its decision, in writing, to the faculty member and the same persons listed in the above section within three days after the hearing. This appeal process is confidential, and is to be completed no later than the end of the semester following the semester in which the alleged cheating/plagiarism took place.

If either the student or the faculty member disputes the decision of the Appeal Board and has new evidence bearing on the case, they may submit an additional appeal to the Chief Academic Officer no later than one year after the alleged infraction took place. The decision of the Chief Academic Officer shall be considered final and binding on all parties.

Passed by the faculty in November 2009.

V. Grading

A. Grading Policy: At the beginning of a course, the instructor informs the students of the criteria to be used in determining the final grade. Numerical or letter grades may be used during a course, but the final grade must be submitted in letter form. The instructor determines the appropriate final grade. A student whose achievement through mid-semester is C- or below may be given formal warning at the discretion of the instructor.

B. Grading System: A quality-point system will be used to determine academic standing:

A = 4.0
A- = 3.7
B+ = 3.3
B = 3.0
B- = 2.7
C+ = 2.3

C = 2.0
C- = 1.7
D+ = 1.3
D = 1.0
D- = 0.7
F = 0.0

For Nursing courses only:

Exceeds Mastery	EM = 4.0
Mastery +	M+ = 3.5
Mastery	M = 3.0
Mastery -	M- = 1.0
Non Mastery	NM = 0.0

Non-Credit Equivalent courses will be graded as follows (except Mathematics courses):

S = Satisfactory
U = Unsatisfactory

Mathematics Courses: All grades SA-SB indicate 80% or higher competency.

PTA Clinical Courses are taken Pass/Fail only, with grades of CR or NC assigned. Passed courses with a grade of CR are not calculated in the GPA. Failed courses with a grade of F are computed in both the semester and cumulative GPA.

The grades of SA, SA-, SB+, SB, S, U, CR, AU, W, UF, I, and IP (In Progress) do not carry quality points.

C. Grade Point Average (GPA): The GPA is calculated by dividing the sum of the earned quality points by the sum of the attempted credit hours, except as modified elsewhere. Transfer credit is not computed in the index.

D. Repeated Courses: All grades and credits are recorded on the student's transcript. If a course is repeated, only the last grade is computed in the GPA and used for graduation requirements. If the last grade is a W or UF, it will not replace a previous quality point grade. Only courses repeated at Onondaga Community College will affect a student's index.

The following conditions apply to the NUR, RPD, SGT, and PTA programs:

1. A student is allowed to repeat a course with a program prefix only once.
2. Students who fail to receive a C or M for a repeated course lose matriculation status in that program
3. PTA students may repeat BIO 171 and BIO 172 only once.
4. RET students may repeat any required CHE or BIO course only once.

E. Incompletes: In consultation with the student, the instructor may assign a grade of Incomplete (I). An Incomplete is assigned only when a student has not completed a major assignment or examination. The instructor notifies the Registrar's office that the grade of Incomplete is to be assigned. The reason for the Incomplete and the plan for its removal will be specified. A student may not remove an Incomplete through unofficial participation in the major portion of any subsequent offering of the same course. Participation in the same course with another instructor is not valid for removal of an incomplete. Course requirements must be completed before the end of the next regular semester (fall or spring) or the I becomes an F. An instructor may extend this deadline for one additional regular semester through written notification to the Registrar's office.

F. Class Standing: A class standing grade may be requested by a student in the event of serious illness or other extenuating circumstance which prevents completion of the course. The class standing grade can be awarded only after the instructor certifies completion of 75% of the required course content, and upon approval of the Department Chairperson. No class standing grade may be higher than a C, with a lower grade being recorded if the student has not earned a C. The student's permanent record will indicate that the grade represents class standing.

G. Grade Changes: After a grade is recorded by the Registrar's office, a faculty member may request that the grade be changed. This request must be submitted to the Registrar's office on an official Grade Change Form during the following semester. Grade changes for reasons other than computational or clerical error are subject to the approval of the Scholastic Standards Committee.

H. Grades for Non-Attendance

1. For students that never attend through the first three weeks of classes*, faculty are required to award the grade of "Never Attended" (NA) and check the never attended flag by census date (see academic calendar for specific deadlines).
2. For students that attend during the first three weeks*, but subsequently cease** attending, faculty are required, per federal regulations, to award the "Unearned F" grade (UF) and must specify the student's last date of "attendance". Since Onondaga Community College does not require instructors to report attendance, federal guidelines permit institutions to use the last date the student participated in an academically related activity to serve as this date.
3. Faculty must submit UF grades within one week after the determination is made that a student has ceased** attending. The last date to assign the grade of "UF" is three weeks prior* last day of classes.

Notes:
The "UF" grade will carry no quality points and will not be computed into the student's grade-point-average, nor will the credit counts toward overall load (i.e. full-time).

A grade of UF may affect a student's current or future financial aid and/or veteran's eligibility. Students should consult the Financial Aid and/or Veteran's Affairs Offices to learn both short and long term consequences.

Non-attendance does not relieve students of their financial responsibility for tuition and fees.

*Deadlines for courses other than 15 weeks in length are adjusted proportionally.

** Student has not attended for a period of two consecutive weeks

VI. Grade Disputes

Members of the faculty will respect the right of any student to dispute a final grade. The student shall initiate a grade dispute procedure with the instructor no later than March 1st for fall grades and October 1st for spring and summer grades. In the absence of the instructor, the student may contact the instructor's Department Chairperson. If the instructor is not available, the Department Chair will utilize the grades and records left on file by the instructor.

The following procedure is established to resolve grade disputes. While Stages 2 and 3 of this procedure are available to students in all such cases, it is assumed that most, if not all, grade disputes will be resolved at Stage 1. The original grade will not be adjusted downward at any stage of these proceedings.

A. Stage 1 – Instructor/Student Conference

1. A student disputing a final grade shall request a conference with his/her instructor and shall bring to that conference all exams, papers, assignments and other material pertinent to that discussion.
2. The instructor shall be prepared at this conference to explain the way in which the final grade was determined, and such explanation shall include, though not necessarily be limited to, the following:
    a. The instructor's grading policy as it was previously presented to the class under the provisions of the Academic Rules, Sec. V. A.;
    b. Records that support the determination of the student's final grade within the context of the instructor's policy to the extent that they do not violate the privacy of other students in the class.
3. In the event that no resolution can be reached at this conference, the instructor shall refer the student to the Department Chairperson who shall inform the student of the rules governing Stage 2 and Stage 3 of this procedure. If the Chairperson is also the student's instructor, that Chairperson shall refer the student to the Chief Academic Administrator who will appoint another department member to administer the completion of Stage 2 in the capacity of the Chairperson.

B. Stage 2 – Ad Hoc Faculty Committee

1. The student shall prepare a written statement of what is being challenged and why. This statement is to contain evidence supporting the student's challenge other than simple dissatisfaction with a low grade. This statement shall be submitted to the instructor's Department Chairperson no later than March 15th for fall grades and October 15th for spring and summer grades. The Chairperson may accept a statement submitted after that time if in his/her opinion there were extenuating circumstances.
2. The Chairperson will appoint an ad hoc committee to review the student's challenge and the instructor's response. In order to accommodate varying departmental circumstances, the exact membership of this committee may vary from department to department, but in all cases the following criteria shall apply:
    a. Three faculty members will serve on this committee, and one of them will be chosen chairperson by the committee. The ad hoc committee will be composed of members of the department unless the department is too small for this to be possible. In the case of small departments, non-department members will be asked to serve on this committee. The choice of non-department members will be made on the basis of their closeness to the discipline involved in the dispute. If that is not possible, faculty members who will be impartial third parties to the dispute will be selected to serve on the ad hoc committee.
    b. Both the student and instructor involved in the dispute should be present at the Stage 2 hearing. Both parties should present written statements to the committee chairperson at least one week prior to the scheduled hearing for review by the ad hoc committee, student and instructor.
    c. The student and/or instructor may each choose one member of the campus community to be an advocate to assist in the presentation of his/her case. An advocate is not a member of the committee.
    d. A committee member is appointed by the chair of the committee to record minutes of the proceedings.
3. While it is understood that the burden of proof rests with the student, the instructor shall make available to the committee those materials used in explaining the grade assignment to the student at Stage 1 (V. A.).
4. The ad hoc committee may either reject the student's appeal or recommend that the instructor change the grade. In either case, a written report containing the recommendation shall be given to the student, the instructor, and the Department Chairperson. If a grade change is recommended and the instructor declines, such refusal shall be explained in a written statement that must be given to the student, the ad hoc

committee and the Department Chairperson.

C. Stage 3 – Final Appeal

An appeal of the Stage 2 decision is considered only if the student or instructor presents new information. The information must be presented to the Chief Academic Administrator who determines if a Stage 3 hearing is warranted. If a new hearing is warranted, the dispute proceeds to Stage 3 of this procedure. All documents used in Stage 2 are forwarded to the Chief Academic Administrator, who schedules a hearing with the student, instructor and advocates, if any. After hearing this case, the Chief Academic Administrator informs the student, instructor and the committee of his/her decision in writing, and notifies the Registrar's office if a grade change is to be made. The decision of the Chief Academic Administrator is final.

VII. Attendance

A. Experience demonstrates that regular attendance enhances academic success. Students are expected to attend each meeting of their registered courses, whether taught online or in the traditional classroom setting. Participation in classroom activities such as lectures, films, guest speakers, class discussions, labs, group activities, and online work contributes to student success in college level coursework. Attendance in an online course requires student to demonstrate an active and continued presence in the course through participation in assigned activities such as discussion posts, submissions, written assignments and tests.

B. It is the student's responsibility to inform the instructor of an anticipated absence ahead of time. Students are responsible for completing any missed work, as allowed by the instructor's syllabus and/or course outline.

C. Earned grades must be based on demonstration of student learning outcomes and/or participation, not solely on attendance.

VIII. Academic Standing

The Registrar's office reviews a student's academic record when a student is matriculated into a degree program and has attempted 12 credit hours. The review includes all coursework, including non-credit equivalent courses.

A. Good Academic Standing: A matriculated student is in good academic standing when he/she meets the minimum satisfactory cumulative index described below.

B. Academic Probation: A student whose cumulative index is unsatisfactory at the time of review will be placed on academic probation.

Non-credit equivalent grades are calculated as follows:

Credits attempted (including equivalent credit)	Minimum Cumulative Index
0 - 17	1.5
18 -30	1.7
30 - 40	1.8
42 +	2.0

Grade	Equivalent/Non-credit Points*
S, SA, SA-, SB+, SB	2.0
U	0

*These points are used for academic standing purposes only. They are NOT calculated in the official college cumulative GPA or program GPA (GPA2) and are not reflected on the transcript.

NOTE: Students must have a program GPA (GPA2) of 2.0 or higher to earn a degree from Onondaga Community College.

A student on academic probation will be limited to 12-13 credits in order to support academic success. In addition, a student on academic probation may be required to meet with an academic advisor/counselor to develop an academic success plan.

C. Extended Probation: A student on Academic Probation who subsequently attains a semester index of at least 2.0, but who still has an unsatisfactory cumulative index, will be granted extended probation. A student on Extended Probation who continues to attain at least a 2.0 semester index, but still has an unsatisfactory cumulative index, will remain on Extended Probation.

D. Academic Dismissal: A student on academic probation who subsequently fails to achieve the required minimum cumulative index (see chart in VII.B) and does not meet the terms of extended probation will be subject to academic dismissal at the next review. A student who is academically dismissed must remain out of the college for at least one semester (summer does not apply) and will then be allowed to apply for reinstatement.

A student who is reinstated on probation after dismissal must achieve at least a 2.0 semester GPA in each subsequent semester in order to remain on probation until a cumulative index of 2.0 is achieved. A student who is dismissed a second time must remain out of the college for one academic year. Reinstatement will follow the guidelines stipulated below.

E. Reinstatement: The Academic Standing for all reinstated students is Academic Probation. All re-admitted/reinstated students will be subject to

catalog and program requirements in effect in the semester of the readmission or reinstatement.

NOTE: Reinstatement to matriculated status does not automatically reinstate eligibility for Financial Aid. Students must also meet any academic standing or academic progress requirements articulated by individual financial aid programs. Any questions regarding these policies should be directed to the Financial Aid office.

F. Academic Achievement: Students who are matriculated in a credit degree/certificate program and complete twelve or more credit hours in a semester may, according to their grade point average (GPA), be recognized for academic achievement as follows:

Provost's List	3.40 – 3.69
President's List	3.70 – 4.0

Part-time students will be eligible for Provost's List and President's List based on their cumulative GPA after completing a minimum of 15 credit hours, subsequently after completing 30 credit hours, and again after completing 45 credit hours.

IX. Degree/Certificate Requirements

A. Degree Requirements: A candidate must fulfill the following requirements, except where exemptions or waivers are approved and recorded:

1. A student must be matriculated in a degree/certificate program and meet all program and credit hour requirements.
2. Onondaga will automatically confer a degree or certificate upon the student's completion of all program requirements. However, students who wish to participate in the college's commencement ceremony must submit an Application for Graduation form three weeks prior to the start of the student's semester of intended graduation and no later than the end of the third week of the semester of intended graduation.
3. The student must achieve at least a 2.0 program GPA (GPA2).
4. All grades of Incomplete ("I") must be resolved before the degree/certificate is conferred.
5. All financial obligations to the College and other College requirements must be met.
6. At least twenty-four (24) of the academic credits for the degree/certificate must be completed at Onondaga Community College subject to specific program restrictions (Certificate programs will be calculated proportionally).
7. No more than 12 independent study credits may be taken at Onondaga Community College.

B. Graduation: Degree/Certificate candidates are recommended for graduation by the Curriculum Proctor, the Scholastic Standards Committee, the Faculty, and the Board of Trustees. Applicants for graduation who fail to meet requirements are notified by the Registrar's office.

C. Cum Laude, Magna Cum Laude, and Summa Cum Laude will be recognized at the commencement ceremony based on the cumulative GPA recorded for the semester prior to commencement. Cum Laude, Magna Cum Laude, and Summa Cum Laude will be designated on the diploma based on the student's final cumulative program GPA (GPA2).

Cum Laude 3.4 – 3.59

Magna Cum Laude 3.6 – 3.79

Summa Cum Laude 3.8 – 4.0

D. Multiple Degrees/Certificates: A student may earn more than one degree at Onondaga Community College, subject to the following restrictions: A minimum of 20 of the academic credits for any associates degree and ten academic credits for any certificate must be credits which have not been applied to any previously or concurrently awarded degree. A student may not earn more than one degree from any single Academic Program grouping.

X. Waivers and Substitutions

A. Transfer Credits: Course work which has been satisfactorily completed with a grade of "C" or better at any accredited college or university will be considered for credit. Transfer credit from institutions on a "quarter plan" or "trimester" system will be adjusted accordingly.

The application of transfer credits to a program is subject to department guidelines. After a student has been admitted, and submitted an official transcript or transcripts, a review of credits will be completed. Students will be notified in writing of the applicable credits to an Onondaga degree or certificate. Credit for correspondence courses, credit by evaluation/examination, credit for in-service coursework, and credit for experiential learning may be granted. A veteran or soldier on active duty who submits an AARTS, SMART, CCAF or Coast Guard Institute transcript or DD214, indicating at least six months of active duty, will be awarded transfer credit towards any applicable credit, including physical education, for the program in which the student is enrolled.

B. Course Substitutions/Waivers: A program requirement may be waived or a course substitution may be made pending the approval of the Department Chairperson(s) involved, the Curriculum Proctor, the academic advisor and the Scholastic Standards Committee. The total credit hours required for the program must still be met, unless approved otherwise.

C. PEH Waivers: A waiver from physical education requirements may be granted to a student who meets one of the following criteria:

1. 30 years of age or older at the time of first matriculation into the College;
2. A physician's statement, which precludes the student's participation in PEH, has been submitted. The Registrar's office records the medical waiver on the student's permanent record.

D. Proficiency Examinations: All students may take a health proficiency examination. Students who receive a grade of 75% or higher are not

required to pass a health course. Credit is not awarded for successful completion of the health proficiency examination.

XI. Changes to the Academic Record

In unusual or extenuating circumstances, the Scholastic Standards committee will consider exceptions to these rules.

A student who requests changes to the permanent academic record must present evidence of extenuating circumstances supporting the change.

Multiple Degrees

Restrictions on Multiple Degrees

A student many not earn more than one degree from any single program grouping.

Alcohol & Substance Abuse
(ASA) Alcohol & Substance Abuse Counseling A.A.S.

American Sign Language
(ASL) American Sign Language A.S.

Apprentice Training – Building Trades
(ABT) Building Trades A.A.S.

Apprentice Training – Electrical
(ASE) Electrical A.A.S.

Apprentice Training – Machine Trades
(AMT) Machine Trades A.A.S

Architecture
(ARH) Architectural Technology A.A.S.

Art/Advertising *
(ART) Graphic Arts & Advertising Technology A.A.S.
(ART) Art A.A.S.

Automotive Technology
(AUT) Automotive Technology A.A.S.
(ATC) Automotive Technology – Ford Asset A.A.S.*

Business
(BUA) Accounting A.A.S.
(BUB) Banking A.A.S.*
(BUS.AAS) Business Technology A.A.S.
(BUC) Business Administration A.A.S.*
(BUS.AS) Business Administration A.S.
(OTD) Office Technology: Administrative Assistant A.A.S.*
(SEC) Secretarial Science (Industrial, Legal, Medical) A.A.S.*
(INS) Insurance A.A.S.*
Business: Telecommunications Management A.S.*

Computer Engineering Technology
(CMT) Computer Engineering Technology A.A.S.*

Computer Forensics
(CFS) Computer Forensics A.S.

Computer Information Systems
(CIS) Computer Information Systems A.A.S.
(CSC) Computer Science A.S.
(BUD) Data Processing A.A.S.*

Criminal Justice
(CRJ) Criminal Justice A.S.

(CRJ) Criminal Justice A.A.S.*

Dental Hygiene
(DEH) Dental Hygiene A.A.S*

Electrical Engineering Technology

(ELT) Electrical Engineering Technology A.A.S.

Electronic Media Communications

(EMC) Electronic Media Communications
(RTV) Radio and Television A.A.S.*

Emergency Management

(EMG) Emergency Management A.A.S
(HSD) Homeland Security & Disaster Preparedness A.A.S. *

Environmental Technology

(ENV) Environmental Technology
(ETB) Environmental Technology: Biology*
(ETE) Environmental Technology: Emissions Management & Testing A.A.S.*
(ETC) Environmental Technology: Chemistry A.A.S.*
(ETG) Environmental Technology: Geoscience A.A.S.*

Fire Protection Technology

(FPD) Fire Protection Technology A.A.S.

Food Service/Hotel Technology

(FSA) Food Service Administration – Restaurant Management A.A.S.*
(HTL) Hotel Technology A.A.S.*
(HOS) Hospitality Management A.A.S

Health Information Technology

(HIT) Health Information Technology / Medical Records A.A.S.
(MRT) Medical Records Technology A.A.S.*

Human Services

(HUM) Human Services A.S.
(HUM) Human Services A.A.S.*

Insurance

(INS) Insurance A.A.S.*

Interior Design

(IND) Interior Design Technology A.A.S.*
(IND) Interior Design A.A.S.

Labor Studies

(LBR) Labor Studies A.S.*

Liberal Arts

(EDA) Adolescence Education A.A.
(EDC) Childhood Education A.A.
(GEN) General Studies A.A.
(HMT) Humanities A.A.
(MTS) Mathematics and Science A.A. or A.S.

Mechanical Technology

(MET) Mechanical Technology A.A.S.
(INT) Industrial Technology A.A.S.*
(QCT) Quality Control Technology A.A.S*

Medical Technology

(MED) Medical Laboratory Technology A.A.S*

Music

(MUS) Music A.A.S.

Nuclear Technology

(NET) Nuclear Technology A.A.S.

Nursing

(NUR) Nursing A.A.S.

Office Technology

(OTD) Office Technology: Administrative Assistant A.A.S.*
(SEC) Secretarial Science (Industrial, Legal, Medical) A.A.S.*

Photography

(PHO) Photography A.A.S.

Physical Education & Exercise Science

(EXR) Physical Education & Exercise Science Studies A.S.

Physical Therapist Assistant
(PTA) Physical Therapist Assistant A.A.S.

Professional Communication
(PCM) Professional Communication A.A.S.

Recreation Leadership
(REC) Recreation Leadership A.S.*
(REC) Recreation Leadership A.A.S.*

Respiratory Care
(RPD) Respiratory Care A.A.S.

Sciences
(CHE) Chemical Technology A.A.S.*
(CSC) Computer Science A.S.
(ENS) Engineering Science A.S.
(MTS) Mathematics and Science A.A. or A.S.

Theatre
(THR) Performing Arts – Drama A.A.S.*

Telecommunications Technology
(TTA) Telecommunications Technology A.A.S.*
(TTN) Telecommunications Technology - Verizon A.A.S.*

* Program inactive / no longer available

Please Note: The completion of a certificate and a degree is not subject to category requirements. Any certificate may be completed with any degree.

COURSE DESCRIPTIONS

Anthropology

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM M380, (315) 498-230

ANT 151 Introduction to Physical Anthropology (3) This course is a general introduction to the field of physical anthropology, with an emphasis on the causes and evolution of human biological similarities and differences. The course introduces the main perspectives and methods of physical anthropology, paleoanthropology, and primatology in order to help students trace and explain human evolution from the first primates and hominids to the development of bipedalism and the emergence of anatomically modern humans (Homo sapiens).

ANT 152 Introduction to Cultural Anthropology (3) This course provides students with an introduction to the cultural and social systems that humans have devised over time and space, using a comparative anthropological perspective. The course will also focus on using the methods, theories, and concepts of cultural anthropology to understand and explain the cultural diversity seen around the world.

ANT 154 World Archaeology (3) This introductory course discusses the basic philosophy and methods of archaeology, and provides an introductory survey of archaeological excavations and discoveries in the Near East, Africa, Asia, Europe, and the Americas, with an emphasis on understanding how societies changed and developed during the unwritten periods of human history. Beginning with the evolution of the first human ancestors nearly seven million years ago, topics will include the evolution of the earliest human societies, the development of lifeways based on domesticated plants and animals, and the emergence of complex societies. Along the way, students will also have a chance to use archaeological methods to make sense of material remains in their own society.

ANT 155 Language and Culture (3) This is an introductory course in anthropological linguistics and charts how human languages are formed, evolve, and disappear. The main topics will include the nature of human language as distinct from other communication systems; how we organize sound to make a language, i.e. how we identify sound patterns (phonology), create words (morphology), group words into sentences (syntax), and attribute meaning to these sounds (semantics and semiotics); the relationships between language, culture, and human thought; changes in language use in different socio-cultural contexts; and the historical development of languages and writing systems.

ANT 175 Peoples and Cultures of the World (3) This course provides students with a comparative survey of the indigenous peoples and cultures of the modern world, from the late 1800s to the present. Course readings will focus on the ethnographic study of peoples from all major culture areas of the world outside of Europe: Africa, the Middle East, South Asia, Southeast Asia, East Asia, the Pacific Islands and Australia, North America, and South America. Through this class, students will gain a general understanding of world cultures and the utility of ethnography as a means for exploring specific cultures and ethnology as a basis for cross-cultural comparison and comprehension.

ANT 201 Anthropology of Marriage and the Family (3) This course examines marriage, kinship, and family systems in various cultures from around the world using a comparative anthropological approach. Students will gain an understanding of the cultural logics underlying diverse marriage customs, descent patterns, notions of relatedness, and forms of family life found in different parts of the world and within present-day American society.

ANT 202 Cult Archaeology (3) Why does archaeology inspire endless theories about ancient aliens, lost civilizations, apocalyptic predictions, and mysterious technologies? This course seeks to answer this question and introduce students to the realities of archaeology by exploring the weird world of "cult archaeology," also known as pseudoarchaeology. We will investigate the origins of so-called alternative archaeological theories; look at the types of "evidence" used to create them; and examine the reasons and rationales that lead people to invent, disseminate, and believe them. From the lost city of Atlantis and ancient alien astronauts to Bigfoot and pre-Columbian voyagers to the Americas, we will explore the many different forms of pseudoarchaeology and their impact on modern societies.

ANT 203 Magic, Witchcraft and Religion (3) This course examines the nature and evolution of religious beliefs and practices across cultures. Many different cosmologies, mythologies, rituals, and magical systems of thought - such as animism, totemism, witchcraft, sorcery, and shamanism - will be explored from an anthropological perspective. Emphasis will be placed on the religions of indigenous societies and their unique cultural contexts. Students will also consider the role that religion plays in promoting cultural stability and in expressing patterns of cultural change due to colonialism and globalization.

Architectural Technology

FOR MORE INFORMATION, CONTACT THE ARCHITECTURE + INTERIOR DESIGN DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W352, (315) 498-2687

ARH 101 Exploring Sustainability, Design, and The Built Environment (3) This course is an exploration of global built environments, with a focus on explaining significant design styles, movements, and trends within the context of the arts, politics, technology, business, the sciences, the social sciences, and an emphasis on sustainability. Using an interdisciplinary approach, the course discusses the recent history of design in the built environment - what has impacted it and why. It is part of the three-course foundation for all Architecture and Interior Design students and is also a Liberal Arts elective. Prerequisite: ARH/IND major or placement in ENG 103.

ARH 110 Foundation Studio 1 (4) This foundation studio will be used to explore design principles. Freehand, manual drafting and digital techniques will be introduced that help the student appreciate forms, texture and composition. Instruction will be given in pencil techniques, perspective principles, and the use of digital tools. This course will develop the required graphic skills to prepare architecture and interior design students for the next three semesters of course work. This class meets 6 hours per week. Co-requisites:ARH/IND 101 and 170.

ARH 111 Design Studio 2 (4) This is the first of three design studio courses. Students begin to explore elements of design and their relationships in three dimensions. Design concepts and processes are discussed in detail. Architectural and interior design concepts of space, organizations, circulation, scale, structure, volume, massing, fenestration and materials are analyzed and discussed. This class meets 6 hours per week. Prerequisites: ARH/IND 101, 110, and 170; co-requisites: ARH/IND 120 and 140.

ARH 120 Drafting Studio 1: Wood Frame (3) This course will develop basic architectural drafting skills (digital and manual). The

student will demonstrate an understanding of these skills through the development of a set of architectural drawings for a wood frame house or similar structure. This class meets 4 hours per week. Prerequisite: ARH/IND 101, 110, and 170; co-requisite: ARH/IND 140 or Permission of Department.

ARH 121 Drafting Studio 2: Masonry (3) Students apply and improve drafting skills by developing architectural working drawings for a small commercial building. Drawing documents include symbol conventions, plans, sections, elevations and details with the emphasis on masonry bearing wall construction. Prerequisite: ARH/IND 120; co-requisite: ARH 141 or Permission of Instructor.

ARH 140 Wood Frame Construction (3) This is a lecture course covering the materials and methods of contemporary residential construction, including sustainability and the latest building science. The characteristics, properties, performance and application of materials and systems used in wood frame construction will be discussed.

ARH 141 Commercial Construction (3) This course covers the materials and methods of contemporary commercial construction. This course focuses on site-work, foundations, concrete framing systems, masonry wall systems made of concrete, clay, and stone, steel framing systems, moisture and thermal protection, glass and windows, cladding and curtain walls, doors and hardware. Prerequisite: ARH/IND 140.

ARH 144 Introduction to Sustainable Construction (3) This course is an introduction to the theory and principles of innovative sustainable construction with a focus on residential construction. The course takes an integrated design and ecological systems approach to high performance green building. Students learn how to reduce the ecological impact of the built environment using cutting-edge best practices. Topics include climate change, green building principles, performance standards and measurements, and rating systems including LEED(R) for Homes. Cost, life cycle assessment, energy efficiency, renewable energy and solar elements, and valuing "natural capital" will be discussed. Prerequisite: ARH 140 or demonstration of a fundamental knowledge of residential construction or Permission of Department.

ARH 170 Technology: Design and Production (3) This course will develop the technology skills required for architecture and interior design students. The students will learn how to create, modify, communicate, collaborate, transmit and present solutions to problems using specific software applications including AutoCAD, SketchUp, ANGEL CMS, and PowerPoint. Co-requisites: ARH/IND 101 and 110.

ARH 215 Design Studio 3 (4) This is the third design studio for Architectural design. Students are expected to apply knowledge of design concepts and design process to "real-life" design problems. Programming, aesthetics of interior spaces, context, fenestration, materials, furniture, structure, and design development will be explored. Experimentation with space, form, light, and proportion will be stressed. Significant trends in interior and architectural design, as practiced by recent leading interior designers and architects, will be discussed. This class meets 6 hours per week. Prerequisite: ARH/IND 111 or Permission of Instructor; co-requisite: ARH/IND 256 or Permission of Instructor.

ARH 216 Design Studio 4 (4) This is the fourth design studio for Architectural design. This studio is a continuation of ARH 215 and will require in-depth analysis of design problems and higher expectations for design presentations. Students are expected to apply knowledge of design concepts and design process to "real-life" design problems. This class meets 6 hours per week. Prerequisites: ARH 215 and 256, or Permission of Instructor.

ARH 222 Drafting Studio 3: Steel Frame (4) A concentrated continuation of ARH 121 with emphasis on the production of working drawings for steel and concrete frame multistory structures. Prerequisite: ARH 121.

ARH 230 History of Architecture and Interiors 1 (3) This is a survey course that traces developments in design, construction, materials and interiors from Prehistory to the dawn of the Renaissance. The comparative method is used to study the impact of economic, religious, political, sociological and technological develpments on resultant building types, architectural forms, interior designs, furnishings and decorative arts.

ARH 231 History of Architecture and Interiors 2 (3) This is a survey course that traces developments in design, construction, materials and interiors from the dawn of the Renaissance to the present day. The comparative method is used to study the impact of economic, religious, political, sociological and technological develpments on resultant building types, architectural forms, interior designs, furnishings and decorative arts.

ARH 241 Mechanical and Electrical Systems: An Introduction (3) Introductory survey of mechanical and electrical systems for buildings. Topics will include heating, ventilating, air conditioning (HVAC), plumbing, fire protection, electrical power, and lighting systems for residential and commercial buildings. Auxiliary electrical systems such as security, public address, fire detection and alarm systems will be briefly discussed. Coordination of these systems with existing architectural plans will be emphasized. Instruction will involve case studies of pre-designed buildings. The primary method of learning and evaluation will be through student prepared drawings. Prerequisite: ARH 121.

ARH 244 Residential Energy Performance (3) This course is a fundamental study of energy efficiency and building science with an emphasis on residential energy performance and analysis. Topics include basic energy principles; building thermal boundary; and the control of air, heat, and moisture. The interaction of building components with environmental factors is essential to the discussion. Efficiency strategies for lighting, appliances, heating, cooling, and water heating will be introduced. Strategies for dealing with home health, air quality, and combustion safety problems will be discussed. Fundamentals of building inspection and diagnosis will be covered, including the use of the blower-door, duct-blaster, manometer, infrared camera, smoke generator and other testing equipment. Students must be available for two four-hour field experiences, times and days to be determined. Prerequisite: ARH/IND 140 or equivalent wood frame construction experience as determined by the Architecture department.

ARH 245 Solar Design in the Built Environment (3) This course introduces the design and application of solar energy in building design and construction. The primary focus is on passive solar energy, daylighting and shading strategies. Discussion topics include the historical development of solar energy in buildings, designing with nature, energy conservation, heat theory and thermal comfort, solar processes, passive and active solar energy systems, thermal mass and storage, solariums, natural ventilation strategies and earth-sheltered buildings. Prerequisite: ARH/IND 140; co-requisites: ARH 141.

ARH 250 Principles of Structures (3) Structure as it affects design. A study of the loading of structures and the resistance to those loads as they apply to wood frame and steel frame structures.

ARH 256 Graphic Communications (3) This is an advanced course in perspective rendering. Students are expected to apply perspective drawing skills acquired in ARH 150 to generate color renderings of building interiors and exteriors. Students taking Architectural Design Studio II are encouraged to take this course concurrently and to use their design solutions as a base for required rendering projects in ARH 256. Prerequisite: ARH 110 or Permission of Department.

ARH 261 Professional Practice (3) A detailed survey of important aspects of professional practice with emphasis on the architect's role in society, ethics, licensing, legal instruments, specifications, and contract administration. Prerequisite: ARH or IND major and sophomore standing, or Permission of Department.

ARH 262 Building Codes (3) A detailed analysis of the New York State Building Code.

ARH 263 Green Building Rating Systems (3) This course acquaints the student with rating systems that seek to define and measure sustainable, high-performing "green" buildings. Focus is on the U.S. Green Building Council's LEED(R) Green Building Rating System portfolio of rating products and the major LEED(R) credit categories including sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, regional priorities, and innovative design. Course content includes an introduction to sustainability; core concepts; the integrated design approach; the LEED(R) certification process; and credit intents, requirements, and strategies. Other significant rating systems will be discussed and comparisons made with the LEED(R) system. Aspiring candidates for the GBCI LEED(R) Green Associate examination will find the course useful. Prerequisite: ARH/IND 140 or Permission of Department.

ARH 266 Independent Project (1)

ARH 270 Digital Portfolio for Architecture and Interior Design (1) A hands-on course to create a digital portfolio. Students will utilize digital cameras, scanners, image editing software, and CD recording software and hardware to produce a PowerPoint presentation on an autorun CD. Basic computer literacy is required. Prerequisite: ARH or IND major with 30 completed credits, or Permission of Instructor.

ARH 272 Architectural CAD II (3) An intermediate level course in Architectural CAD (Computer Aided Drafting) utilizing 2-1/2 and 3-D software (AutoCAD). Topics include intermediate drawing, editing, and system commands with direct hands on experience, file management and multi-pen plotting. Professional details and drawings will provide the basis for graphic problems and solutions. Prerequisites: ARH 170 and ARH 120 (grades of B or better or Permission of Department).

ARH 291 Internship in Architecture (1) This course is designed for students in their second year of architectural coursework, giving them an opportunity to obtain real-world experience in the design and construction industry. Internships and co-op job opportunities are available throughout the community; however, there is no guarantee of internship placement. The ultimate responsibility for obtaining a placement rests with the student. Assistance is provided by department faculty and Onondaga's internship office. Internships may be paid or unpaid. A learning contract containing specific educational objectives that relate to both the work experience and academic studies is developed between the student and a faculty internship coordinator. Course requirements include a minimum of 60 hours of work, maintenance of a work journal, and a final paper. Open to ARH majors only. Prerequisites: Approval of department, minimum G.P.A. of 2.5, and sophomore standing.

Art

FOR MORE INFORMATION, CONTACT THE ART DEPARTMENT IN FERRANTE HALL, ROOM F162, (315) 498-2401.

ART 101 Drawing I (3) Drawing is a basic thinking and visualization tool to any art discipline. This foundation course goes to the core of drawing as making sensitive, well-understood and named marks. Its purpose is to lead the student into understanding the intuitive, the visual and the spoken vocabulary of drawing. Students will realize perceptual values as they relate to conceptual values. The content of the course will be developed through various in-class exercises, projects, and extensive homework assignments. Prerequisite: ART or PHO major, or Permission of Instructor.

ART 102 Drawing II (3) This course refines the basic skills learned in ART 101, Drawing I. Emphasis is placed upon technical proficiency and in-depth exploration of the basic elements of drawing and design. Subject matter will be expanded to include the nude model. Prerequisite: C or better in ART 101.

ART 103 Design I (3) A survey and application of the basic principles of 2-dimensional design and composition and an introduction to the design process and its use in visual problem solving. Students will also receive training in the use of drafting tools, measuring systems and methods of producing finished work. Prerequisite: ART or PHO major or Permission of Instructor.

ART 104 Design II (3) A continuation and advanced application of the basic 2-dimensional design concepts and processes begun in ART 103. An introduction to basic 3-dimensional concepts. The course includes a cursory examination of career paths in the field of design and important historical design movements. Prerequisite: C or better in ART 103.

ART 105 History of Art I (3) A survey of painting, sculpture, and architecture from prehistoric times through the early Renaissance, with a consideration of major societal issues and ideas which may have influenced the development of forms and techniques in the visual arts. Prerequisite: placement into ENG 103.

ART 106 History of Art II (3) A continuation of ART 105, from the high Renaissance to the present. Prerequisite: ENG 099 or successful completion of the English Competency Examination.

ART 109 Principles of Drawing (3) Introductory course for non-art majors. An exploratory course that analyzes the components of drawing (line, shape, form, value, transition, texture, tension, balance, composition, etc.) Subject matter varies and may include still-life, landscape, architectural and figurative elements.

ART 111 Life Drawing Studio (3) Life Drawing is an intensive study of basic drawing skills, in keeping with portfolio development for high school students and others interested in advanced studies in the visual arts. The human figure is employed as subject, in the creation of expressive content. Summer sessions only.

ART 112 The Practice of Visual Aesthetics (3) This is an introductory course for non-art majors exploring the common themes encountered in the visual arts. Students will explore content in the arts through analysis of a wide range of masterworks and apply these studies in creating original artwork. Class time will include lecture, demonstrations, and exploring new mediums for expression.

ART 114 History of Visual Culture (3) This one-semester course provides the understanding necessary for viewing art in an historical and aesthetic context. It is designed for non-majors. Students will also engage in exercises to develop writing and communications skills. A select set of artworks will establish the evolution and cross-cultural synthesis that is the basis of the history of art.

ART 123 Digital Design for the Non-Designer (3) This course offers an introduction to the fundamental design concepts and software techniques used by graphic designers to produce printed communications. Students will achieve a proficiency in the software used for computer aided graphic design as well as in the process of organizing 2-dimensional space. This course may be used as an elective course for non-art majors only. No MAC experience necessary.

ART 142 Introduction to Computer Graphics (3) An introduction to graphic design in a digital environment. This course examines industry standard software applications for page layout, illustration, and photo manipulation. Requirement for Graphic Design majors. Prerequisite: ART or PHO major or Permission of Instructor.

ART 152 Color and Concept Development (3) This course is an introduction to the visual thought processes used in the development of creative concepts and ideas, as well as an introduction to color theory and the emotional and spatial behavior of color. Focus is on the conceptual, verbal and technical skills needed to effectively communicate visual ideas. Prerequisite: ART or PHO major or Permission of Instructor.

ART 201 Advanced Drawing and Painting I (3) Advanced studio experience in drawing and the use of a variety of media. Emphasis is on improving technical skills, compositional sophistication and experimentation with new or multimedia techniques. Individual creativity is encouraged through exploration of a variety of subject possibilities. Prerequisite: ART 102 or Permission of Instructor.

ART 202 Advanced Drawing and Painting II (3) Advanced studio experience in drawing and the use of a variety of media. A continuation of Art 201, with a greater emphasis on self-directed individual creative development. The students will be assigned a term project or series of related works to be produced in consultation with the instructor. Further in-depth exploration and refinement of drawing technique and compositional ability will be stressed. Students will participate in group critiques with other students and guest faculty. Prerequisite: ART 201.

ART 203 Typography and Layout (3) Basic principles of typographic design and typesetting will be studied along with letterforms, their development and present trends. How to select fonts and create a hierarchy of projects will demonstrate how visual layout and typographic composition can be used to communicate ideas. Requirement for Graphic Design majors. Prerequisites: ART 142 and ART major, or Permission of Instructor.

ART 204 Intermediate Computer Graphics (3) An intermediate-level course for students to develop the skills needed to create and manipulate images. The creative process and industry standard software functions are used to develop and edit images to communicate ideas graphically. Requirement for Graphic Design majors. Prerequisite: ART 142.

ART 205 Figure Drawing I (3) An exploratory drawing course concerned with the human form including the nude model. Emphasis will include the techniques of drawing, use of mediums, and the awareness of anatomical correctness. Skeletal and muscular construction will also be introduced. Prerequisite: ART 101 and 102 or Permission of Instructor.

ART 206 Figure Drawing II (3) Continuation of Figure Drawing I, with further emphasis on anatomical studies. In addition, the syllabus will stress figure work in the area of design (figures in environments, in landscapes, and as part of graphic composition); and in anatomy, a more in-depth concern with spatial movements, volume, and structures. Prerequisite: ART 205.

ART 211 Introduction to Ceramic Sculpture (3) An introduction to 3-dimensional space, form, scale, surface and image as they relate to the specialty of ceramic sculpture. Related clay forming and firing techniques will be covered as well as historical and contemporary trends. Prerequisite: ART 219 or Permission of Instructor.

ART 212 Ceramics Sculpture II (3) An advanced ceramic sculpture course, drawing on the skills, techniques and understandings explored in ART 211. ART 212 will provide the student with the opportunity to produce a body of complex, related ceramic work. Prerequisite: ART 211 or Permission of Instructor.

ART 213 Painting I (3) A studio course concerned with the study of acrylic and/or oil painting medium and its applications to the various techniques of traditional and non-traditional painting. All techniques discussed and demonstrated will be applied to concentrated studio projects. Prerequisite: ART 101 and 102 or Permission of Instructor.

ART 214 Painting II (3) Advanced course work in painting with concentrated studio projects and problems involving lighting, spatial and environmental concepts. Students should develop technical understanding of the various components of painting, space, volume, and value, as well as various painting media such as oil, acrylic, watercolor, gauche, encaustic, and graphic design media. Prerequisite: ART 213 or Permission of Instructor.

ART 218 Art in Animation (3) This course is an introduction to the history of animation and will give students hands-on studio experience making a short animated presentation. Students will learn the artistic skills required for computer animation techniques using current animation software. Prerequisite: ART 142 or Permission of Instructor.

ART 219 Ceramics I (3) An introduction to handbuilding techniques; the exploration of clay as an expressive material through various forming and decorating methods.

ART 220 Ceramics II (3) A continuing exploration of handbuilding and decorating techniques, as well as an introduction to throwing on the potter's wheel. Prerequisite: ART 219 or Permission of Instructor.

ART 221 Modern Art and Its Backgrounds (3) A semester-long survey of the forms and techniques of late nineteenth and early twentieth century visual arts, with an examination of their relationships to one another, to past art, and to some of the major issues and ideas of their times.

ART 224 Design for Multimedia (3) This course focuses on the aesthetic and organizational skills required for designing interactive multimedia products. The course content includes the integration of the various elements of text, artwork, photographs, sound, and motion. Topics of discussion will include user interface design, interactivity, information mapping and intuitive navigation design. Prerequisite: ART 142 or Permission of Instructor.

ART 225 Watercolor (3) A studio course exploring traditional and non-traditional use of watercolor. Subject matter may include still-life, landscape, the nude figure. Prerequisite: ART majors or Permission of Instructor.

ART 226 Ceramic Processes I (3) An in-depth ceramics course with emphasis on exploring a variety of production techniques. Pottery processes covered include wheel throwing, slab and coil building, mold design, glaze and clay chemistry, primitive firing and reduction firing. Prerequisite: ART major or Permission of Instructor.

ART 227 Ceramic Processes II (3) Studio sequel to ART 226. Emphasis will shift to the production of a portfolio of related art work making use of previously acquired skills. Prerequisite: ART 226 or Permission of Instructor.

ART 240 Advanced Graphic Design (3) Practical and theoretical design concepts and their application to advanced communications problems and multi-piece campaigns will be studied. Projects will emphasize concept development and portfolio preparation. Required for Graphic Design majors. Prerequisite: ART-142 or POI; ART 203 and 204 recommended.

ART 244 Visual Design for the Web (3) Visual design for the web examines the unique opportunities and capabilities of digital electronic art. Emphasis will be placed on the organization and the communication of visual information needed for Web site design. Students will learn how to create and maximize visual assets for Web design. Prerequisite: ART 142 or Permission of Instructor.

ART 253 Italian Renaissance Art (3) This course will examine the painting, sculpture, and architecture produced in Italy from the early Renaissance to Mannerism. Students will focus on master works while paying particular attention to the cultural, political, and societal issues which may have affected the development of artistic forms and techniques of the period. Prerequisite: placement in ENG 103.

ART 291 Art: Cooperative Education (1) Designed to provide work experience directly related to the student's area of study in art. Internships and co-op job opportunities are available throughout the community. Assistance is provided by department faculty, however, the ultimate responsilbity for obtaining a placement rests with the student. A learning contract containing specific education objectives that relate to both the work experience and the field of study is developed between the student and a faculty co-op coordinator.

Alcohol and Substance Abuse Counseling

FOR MORE INFORMATION CONTACT THE HUMAN SERVICES AND TEACHER EDUCATION DEPARTMENT IN MAWHINNEY HALL ROOM M280, (315) 498-2341.

ASA 159 Chemical Dependencies (3) This course provides a study of the epidemiological, etiological (genetic factors, nature of addiction) effects of alcohol, tobacco and other drug use and abuse, including: pharmacological, physiological and psychological dimensions of chemical dependency. Emphasis will be placed on the bio-psycho-social model of addiction as it is utilized in chemical dependency intervention, counseling and treatment. An overview of the history of chemical use and abuse will be presented. Basic concepts of toxicology testing and screening will be reviewed.

ASA 226 Group Skills for Alcohol and Substance Abuse Counseling (3) The emphasis of this course is on group facilitator preparation and training. It presents a variety of theoretical approaches to group techniques applicable to individuals with substance use disorders as well as those experiencing adult child syndrome. The knowledge base will include stages of group development with special emphasis on the skills required of a group facilitator for each developmental stage. Students will practice group techniques and skills through experiential exercises including client screening, interventions, and group techniques designed for or modified for specific populations. Discussions will include managing group processes such as norm development, dealing with reluctance and resistance, support groups and the use of addiction medications. Pre-requisite: HUM 150 and ASA 159, or Permission of Instructor.

ASA 227 Overview of Addiction Services (3) This course includes an overview of chemical dependency services including: prevention, intervention, treatment and recovery. The history and theories related to addiction will be discussed. Specific therapy models and approaches including faith based treatment approaches, medication assisted treatment, and non-traditional treatment methods will be presented. Prerequisite: HUM 150 and ASA 159, or Permission of Instructor.

ASA 229 Addictions and Family Systems Treatment Programs (3) This course is designed to provide an in-depth analysis of substance abuse disorders on the family system. The unit of study is the family. Topics include: family system theories, models of family assessment, the intervention process, co-dependency treatment, and family dynamics (i.e. family roles, rules). The influence of a counselor's personal and professional development (i.e. growing up in a family system effected by a substance use disorder) on the counselor's professional conduct will be emphasized. Relapse prevention topics are explored, especially how it impacts the family unit. Pre-requisite: HUM 150 and ASA 159, or Permission of Instructor.

ASA 268 Clinical Skills for Alcohol & Substance Abuse Counselors (3) This course provides instruction and practice in diagnostic criteria, assessment, evaluation, and treatment planning. Various assessment instruments and diagnostic tools for alcoholism and substance abuse treatment will be reviewed with an emphasis on Office of Alcohol and Substance Abuse Services (OASAS) approved screening and assessment instruments. Knowledge regarding the cooperative process of treatment planning, components of a treatment plan, documentation, essential elements of client records and new technologies for producing client records will be covered. Prerequisite: HUM 150 and ASA 159, or Permission of Instructor.

ASA 269 Individual Counseling Skills for Chemical Dependency Counselors (3) This course is designed to provide entry level chemical dependency counselors the basic concepts of substance abuse and addictions counseling, including: terms, models, and ethical issues; substance classifications, effects and associated dangers; assessment, diagnosis, and treatment planning; theoretical approaches, including: motivational interviewing; cognitive behavioral therapy; relapse prevention; and family systems theory. Counseling individuals about the use of addiction medications and vocational related issues will also be explored. Prerequisites: HUM 150 and ASA 159, or Permission of the Instructor.

ASA 270 Counselor Spirituality and Wellness (3) This course is about the use of spirituality in the field of Human Services, particularly as it relates to wellness. It will introduce students to the difference between spirituality and religion; spiritual assessment spiritual genogram; death and dying; spirituality and human services work. The importance of counselor wellness, including: compassion fatigue, burnout, recognition of symptoms, prevention and recover strategies, role of clinical supervision, and counselor impairment. The history, philosophy, principles and practices of mutual aid groups will also be discussed. Prerequisite: HUM 150 and ASA 159, or Permission of the Instructor.

ASA 271 Cultural Competence and Special Populations (3) This course is designed to provide students with information regarding special populations with the goal of increasing their ability to understand, communicate, and effectively interact with people across diverse cultures. The course will examine needs and issues related to Alcohol, Tobacco, and Other Drugs (ATOD) prevention and treatment. Special population is defined, but not limited to: race; minority/protected status; ethnicity; gender; age; religion; sexual orientation, co-occurring disorders; veterans; domestic violence; disabilities; etc. Students will develop skills necessary to effectively counsel individuals in the populations discussed in this course. Prerequisites: HUM 150 and ASA 159, or Permission of the Instructor.

American Sign Language

FOR MORE INFORMATION, CONTACT THE MODERN LANGUAGES DEPARTMENT IN MAWHINNEY HALL, ROOM M308, (315) 498-2305

ASL 100 Beginning American Sign Language I and II (6) This course includes basic linguistic features, cultural protocols, and core vocabulary to enable students to communicate in basic American Sign Language (ASL) conversations within an authentic cultural context. It includes ASL grammar for asking and answering questions; exchanging personal information; talking about family, friends, and surroundings; discussing hobbies, interests, and health; describing people; making requests; giving directions; and attributing qualities to others. This learner-centered course is designed for students with little or no previous knowledge of ASL. Upon successful completion of ASL 100, students may enroll in ASL 200. Students may not receive credit for both this course and ASL 101 and 102.

ASL 101 American Sign Language I (3) This learner-centered course is designed for students with little or no previous knowledge of American Sign Language. Students acquire basic grammatical and lexical skills that will enable them to communicate in routine social or professional situations within an authentic cultural context. Upon successful completion of ASL 101, students may enroll in ASL 102. This course also fulfills the Global Awareness requirement at Onondaga.

ASL 102 American Sign Language II (3) This course is a sequel to American Sign Language I. It builds upon the basic grammatical, linguistic, communicative and cultural concepts learned in ASL 101. Upon successful completion of ASL 102, students may enroll in ASL 201. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: ASL 101, or two to three years of high school ASL, or Permission of Instructor.

ASL 200 Intermediate American Sign Language I and II (6) This course, the second in a series of four American Sign Language (ASL) courses, draws upon previously acquired knowledge, while introducing students to more complex grammatical and lexical structures to further develop communicative proficiency and cultural knowledge. This course focuses on the ASL features of time, classifiers, space, non-manual markers, and fingerspelling (including numbers and loan signs). In addition, specialized vocabulary, ASL semantics, syntax, and features of ASL discourse will be introduced. Upon successful completion (C+ or better) of ASL 200, students may enroll in ASL 203. Students may not receive credit for both this course and ASL 201 and 202. Prerequisites: ASL 100 (or equivalent) or Permission of Instructor.

ASL 201 American Sign Language III (3) This dynamic course draws upon previously acquired knowledge, while introducing students to more complex grammatical and lexical structures to further develop communicative proficiency and cultural knowledge. This course is conducted mostly in American Sign Language. Upon successful completion of ASL 201, students may enroll in ASL 202. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: ASL 102, or three-four years of high school ASL, or Permission of Instructor.

ASL 202 American Sign Language IV (3) This course is a sequel to American Sign Language III. It expands upon complex grammatical and lexical structures. It is conducted entirely in American Sign Language and provides a solid foundation for advanced study. Upon completion of ASL 202, students may enroll in any intermediate-high level course. Students who successfully complete the 202 level have fulfilled their language requirement for the A.A. in Humanities and Teacher Prep programs. The three additional credits may be taken either as a language course or as a general elective. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: ASL 201, or five years of high school ASL, or Permission of Instructor.

ASL 203 Advanced American Sign Language I (3) This intermediate-high level course is a sequel to American Sign Language IV (ASL 202). It expands upon complex grammatical and lexical structures for improved communication. This course gives emphasis to semantics and focuses on various structures of ASL discourse. Students will continue to learn and use vocabulary, fingerspelling, numbers, and grammatical features of ASL. It is conducted entirely in ASL and provides a solid foundation for advanced study. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: ASL 202 or Permission of Instructor.

ASL 204 Advanced American Sign Language II (3) This course is a sequel to American Sign Language V (ASL 203). It incorporates intermediate-high American Sign Language (ASL), vocabulary, grammatical features, and sophisticated discourse features as they relate to narratives of ASL. It expands upon complex grammatical and lexical structures learned in previous courses. This course gives emphasis to semantics and English idioms for expressing concepts in ASL. Information based on cultural issues in the Deaf community will continue to be examined. This course is conducted entirely in ASL and provides a solid foundation for advanced study. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: ASL 203 or Permission of Instructor.

ASL 206 Processing Skills Development (3) This course is an introduction to the mental processing skills (pre-interpreting skills) of consecutive and simultaneous interpretation. It includes an overview of the theoretical models of interpretation, provides skill development activities for isolated interpreting sub-tasks and practice activities for the integration of these tasks in translation and consecutive interpreting activities. Course content includes interpreting theory, message analysis, and text analysis. The subskills addressed in this course include visualization, listening comprehension, shadowing, paraphrasing, dual task training, and structuring. Prerequisite: ASL 203 or Permission of Instructor.

ASL 210 Introduction to the Field of Interpreting (3) This course introduces students to the profession of signed language interpreting. It covers the history of interpreting as a field of professional practice, introduces students to the Code of Professional Conduct and terminology related to the field. Theoretical models of interpreting, employment options in regard to various settings, function of assessing as part of the interpreting process, impact of legislation on the field, and occupational stress are explored. Additional topics include the phenomena of cross-cultural dynamics, oppression of minority groups and the role of an interpreter as a practice professional. Prerequisite: ASL 200, or 202 or POI.

ASL 211 Fingerspelling and Numbers Skill Development (3) This course is designed to develop intermediate receptive and expressive fingerspelling and number skills. This course provides an avenue to improved fingerspelled word and number recognition by providing theoretical information; practice in specific skills that underlie the fingerspelled whole word and phrase recognition process; identification of fingerspelled words and numbers in context; management strategies to request repetition of fingerspelled words and numbers; and production of short narratives that include fingerspelling, lexicalized fingerspelling, and numbers. Expressive skills focus on the development of speed, clarity, and fluency. Prerequisite: ASL 202 or Permission of Instructor.

ASL 212 Deafhood: Moving Beyond Deaf Culture (3) At the intermediate-high level, this course provides students with a new,

deeper perspective on Deaf people who use American Sign Language (ASL) and their culture. Deafhood is a recent term coined by Paddy Ladd to encompass the "brotherhood" that is evident in many Deaf cultures around the world, including American Deaf culture. The course is based on a cultural model as an alternative to the pathological model, and analyzes the history of the Deaf community in historical terms of colonialism and anthropological terms of language, culture, education, arts, social rules, and values. Class is conducted entirely in American Sign Language. Prerequisite: ASL 202 or equivalent, or Permission of Instructor.

ASL 215 American Sign Language Literature and Film (3) Students will explore selected works of American Sign Language literature and film, and analyze and critique them in terms of the historical, social, cultural, and artistic journey of the American Deaf community and the individuals within the community. Various ASL literature genres will be studied, including but not limited to poems, jokes, and stories. Students will apply knowledge of ASL, storytelling techniques, and literary techniques to decode works of ASL literature and film. Additionally, students will create poems and stories in ASL using appropriate techniques and language skills. Prerequisite: ASL 202 or Permission of Instructor.

ASL 247 Linguistics of American Sign Language (3) This course is an introduction to the basic grammatical and linguistic structures of American Sign Language. Students will examine the basic linguistic features of ASL phonology, morphology, syntax, semantics and the use of language. Language variation, discourse, bilingualism and language contact will also be included. Prerequisite: ASL 202 or equivalent, or Permission of Instructor.

Automotive Technology

FOR MORE INFORMATION, CONTACT THE AUTOMOTIVE TECHNOLOGY DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W176, (315) 498-7200

ATC 103 Automotive Fundamentals (4) Provides a foundation for students entering the automotive service field. It prepares the student with shop and tool safety, basic automotive maintenance procedures and pre-delivery inspection procedures. The internal combustion engine and related components are introduced in this course. Three class hours, and three-hour lab. Prerequisite: MAT 114 or Permission of Instructor.

ATC 115 Automotive Electrical Systems (4) An introductory course applied to the automobile. DC and AC circuits including series, parallel and series parallel are investigated. Concepts of magnetism and inductance are studied and applied to starting and charging systems. Laboratory emphasis is on basis electronic test equipment for diagnosing basic vehicle accessories and systems. Three class hours and a three-hour lab. Prerequisite: MAT 114 or Permission of Instructor.

ATC 116 Automotive Electronics (4) An introductory course in semiconductor devices, circuits, digital concepts and microprocessors applicable to the modern automotive system. Laboratory emphasis is on test instrumentation and the application of troubleshooting techniques. Three class hours and a three-hour lab. Prerequisite: ATC 115 or Permission of Instructor.

ATC 131 Engine Concepts (3) A detailed study of the internal combustion engine. Topics include design criteria, theoretical combustion concepts, energy transfer, cylinder head design, intake and exhaust systems and efficiency principles. Service operations and measurement techniques are investigated in laboratory exercises. Two class hours and a three-hour lab.

ATC 142 Fuel and Ignition Controls (4) Extensively explores fuel delivery and emissions control. The emphasis is on microprocessor control applications applied to fuel management ignition and related emissions devices. Principles of feedback control signals are investigated in laboratory exercises. Three class hours and a three-hour lab. Prerequisite: ATC 116 or Permission of Instructor.

ATC 190 CO:Cooperative Education I (3) This course is designed to provide work experience directly related to the student's field of study. A learning contract, containing specific educational objectives as they relate to the specific work experience and the student's field of study, is developed between the student, department coordinator,and the employer. There is a 120-hour minimum of work in the student's co-op experience. The student is required to keep a daily journal which provides relevant feedback to the department coordinator thereby ensuring a consistent monitoring of tasks performed during the work session. Prerequisites: ATC 103 and 115.

ATC 207 Chassis Fundamentals (5) This course examines the design, construction and operation of basic vehicular suspension systems, braking systems, alignment geometry, wheel and tire fundamentals and steering systems. The emphasis is on service and diagnostic procedures are discussed in detail. Laboratory exercises consist of wheel balancing and alignment, proper brake system service practices, suspension component diagnosis and replacement, anti-lock troubleshooting techniques and related chassis services. Rotor and drum machining techniques are explored in detail. Four class hours and a three-hour lab.

ATC 222 Drivelines and Geartrains (5) A thorough examination of manual and automatic transmissions/transaxles. Clutch operations, drivelines and differentials are addressed. Detailed power flow analysis for manual and automatic geartrains is provided in lecture with practical applications derived from laboratory exercises. Vehicle manufacturer service and maintenance procedures are investigated in lab activities. Four class hours and a three-hour lab. Prerequisite: ATC 243 or Permission of Instructor.

ATC 223 Hybrid, Electric and Alternative Fuel Vehicles (4) The course is designed to introduce the student into the theory and systems applications of modern hybrid, electric and alternative fuel vehicles, hydrogen and natural gas. All vehicle systems will be covered: HEV Technology, Hybrid Engines and Transmissions, Electric Machines, Power Inverter Systems, DC-DC Converter Systems, Hybrid Braking and Steering Systems, Battery Pack Technology. Emphasis in laboratory is placed on vehicle systems and safety. Three class hours and a three hour lab. Prerequisite: ATC-115, ATC-131, MAT-119 or POI. Co-requisite: ATC-116, ATC-222 or POI.

ATC 243 Advanced Engine Performance (4) Modern engine control systems are discussed. Ignition systems and related diagnostics with an emphasis on computer-controlled fuel management are examined. Laboratory topics include gas analyzers, oscilloscopes and scanning devices (DRBs). Three class hours and a three-hour lab. Prerequisite: ATC 142 or Permission of Instructor.

ATC 271 Climate Control Systems (3) Fundamentals of refrigeration and heating are analytically discussed. Concepts of modern electronic air temperature control systems are developed in the lecture. Laboratory activities focus upon service and diagnostic methods. Proper evacuation and recharging techniques applicable to current EPA standards are developed. Two class hours and a three-hour lab. Prerequisite: ATC 116 or Permission of Instructor.

ATC 290 CO:Cooperative Education II (3) This course is designed to provide work experience directly related to the student's field of study.

A learning contract, containing specific educational objectives, is developed between the student, the chairperson of Automotive Technology and the employer. There is a 120-hour minimum employment requirement in the student's cooperative experience along with a course component. Tasks include advanced automotive service activies involving electronic diagnostics and engine repair. The student is required to keep a daily journal of activities performed and periodic evaluations will be conducted by department faculty. Students will have assistance in the co-op placement, however, the ultimate responsibility for obtaining placement rests with the student. The Automotive chairperson must grant prior approval for the cooperative experience, which must be directly related to the student's curriculum. The work experience cannot be used to satisfy the requirement of another course. No experiential credit based upon past work experience will be awarded for this course. A letter grade will be assigned.

Biology

FOR MORE INFORMATION, CONTACT THE BIOLOGY DEPARTMENT IN FERRANTE HALL, ROOM F252, (315) 498-2411.

BIO 105 Exploring Biology (3) This one-semester course introduces biological concepts essential for an understanding of current issues such as the Human Genome Project, DNA Fingerprinting, the cloning of organisms, and AIDS. It is intended for students in non-science and non-health-profession majors; does not fulfill the science requirement for Math/Science or Computer Science students. Three class hours. Not open to students with credit in BIO 121 or any Biology course numbered 141 or higher. No prerequisite. Optional 1-credit laboratory available (BIO 105L); must be taken concurrently with BIO 105.

BIO 105L Exploring Biology Lab (1) Optional laboratory for BIO 105. Involves off-campus field trips plus weekly on-campus lab activities. May ONLY be taken concurrently with BIO 105 or Permission of Instructor. Co-requisite: BIO 105. No prerequisite.

BIO 106 Human Biology (4) This one-semester course provides basic knowledge of the major organ systems of human beings. Emphasis is on how the body functions normally. It is intended for non-science majors and is inappropriate for students preparing for Nursing, Respiratory Care, Surgical Technology and Physical Therapy Assistant degrees. Does not fulfill the science requirement for Math/Science and Computer Science students. Three class hours, two laboratory hours. Not open to students with credit in BIO 152 or BIO 171.

BIO 110 Introduction to Microbes (3) An introduction to the nature of microorganisms, with an emphasis on topics of everyday significance. The roles of microbes in the environment, in food production and spoilage, and in health and disease will be explored, along with the basic biology of microbes. This general education science elective is intended for non-science, non-health professions students. Does not fulfill the science elective requirement for students in the Math/Science programs. Not recommended for students planning to take BIO 205. Three class hours; no laboratory. No prerequisite.

BIO 111 Microbiology for Surgical Technology (1) This course provides an introduction to Microbiology, emphasizing aspects related to safe practice in the surgical field. The infectious process, infection control, and the role of the immune system in health and disease will be covered, in addition to the structure and properties of bacteria, fungi, viruses, and other microbes. Open only to students in the SGT program. No prerequisite; co-requisites: SGT 101, 102, 103.

BIO 112 Introduction to Biology - Geology (4) This is an introductory course in geology and biology for students with only a high school background in these two areas, and who are not intending to pursue a science curriculum. This course is designed for education majors with an emphasis in elementary education. Topics to be covered include: the scientific method, basic chemistry of geology and biology, the rock cycle and basic elements of rock types, biochemical cycles, hydrologic cycle, aspects of evolution, aspects of historical geology, and a survey of basic aspects of life. Prerequisite: SCI 111. Course is restricted to Liberal Arts and Science AA: Childhood Education and Adolescent Education majors. BIO 112 is cross-listed with SCI 112.

BIO 121 Introduction to Biology (4) This introductory one-semester biology course introduces some core concepts of biology. Topics include the molecular and cellular basis of life, energy flow in biological systems, gene expression and regulation, DNA technology, inheritance, and reproduction. This course is for students who need additional preparation before attempting BIO 151 (General Biology) or BIO 171 (Anatomy and Physiology I). This general education science elective is intended for non-science majors and those pursuing careers in nursing, respiratory care, or surgical technology, or as physical therapist assistants. Does not fulfill the science elective but can fulfill a general education requirement for students in the Math/Science program who intend to pursue 4-year degrees. Three class hours and two laboratory hours per week.

BIO 131 General Ecology (3) A study of the principles of energy and material flow through ecosystems; includes the introduction of population dynamics and community organization. This class is available for MTS science elective credit and is also recommended for students in non-science majors seeking general education science elective credit. Three class hours. No prerequisite. Optional one-credit laboratory available (BIO 131L).

BIO 131L General Ecology Lab (1) A field and laboratory approach to ecological principles including energy and chemical flow through terrestrial and aquatic systems. Optional lab to be taken by current or former BIO 131 students. A Saturday field trip may be required, with an option for an equivalent Friday trip. No prerequisite.

BIO 147 Environmental Health (3) This course reveals how the sustained vitality of the planet is essential for maintaining the health of the societies and economies of the Earth. Major topics showing the mutual dependence of these realms of human existence (i.e., ecology, culture, and economics) are discussed. These topics include population forces, habitat alteration, pollution of air/soil and living species, water use and abuse, agricultural methods, and fuel (both fossil and renewable). Practical and attainable solutions to our current problems in these areas are emphasized. Solutions range from the personal through community, national, and global levels. No prerequisite. Suggested preparation: BIO 121 or 131 or 151 or 152. No laboratory. Can be used as a non-lab science elective for all students.

BIO 151 General Biology I (4) This course explores the molecular and cellular basis of life. Topics covered include the biochemical make-up of cells, membrane transport, cellular respiration, photosynthesis, protein synthesis, cellular division, inheritance, and evolution. Plant structure and reproduction are also introduced. This course is intended for Math/Science majors, and is the prerequisite for BIO 152. Three class hours and two laboratory hours (hands-on, in presence of a mentoring instructor) per week. Successful completion of both high school biology and chemistry is strongly recommended. Prerequisite: ENG, RDG, and MAT placement must be at the college level.

BIO 152 General Biology II (4) This course focuses on animals and

systems biology, including a survey of animal types and of the organismal biology of animals. Organisms' methods of response and adaptation to the environment and to each other are also emphasized. Laboratory includes hands-on dissection of preserved animal specimens in a classroom setting, under the supervision of a mentoring instructor. Three class hours and 2 laboratory hours per week. BIO 152 assumes a basic knowledge of chemistry, cell structure and function, and the concepts explaining the genetic unity and evolutionary diversity of species. Prerequisite: BIO 151 or Permission of Instructor. The combination of BIO 121 and BIO 152 does NOT count as a sequence for the Math/Science degree.

BIO 161 Applied Environmental Biotechnology (4) This course will present the fundamentals of general, cellular, and molecular biology, and then build upon these foundations in the context of applied chemistry, microbiology, and microbial ecology. This four-credit course has been developed to provide students with an understanding of the structural and metabolic characteristics of eukaryotic and prokaryotic cells, in order to then develop comprehensive descriptions of important cellular-, enzymatic-, and/or microbial-based environmental and industrial processes. Specifically, the course will highlight applied biotechnological topics including applied microbiology, biochemistry, enzymology, microbial nutrient-cycling, composting, wastewater treatment, industrial fermentations, and biodegradation of chemical contaminants. Three class hours and three laboratory hours per week. Prerequisite: CHE 171 (formerly CHE 103).

BIO 171 Anatomy and Physiology I (4) First part of a two-semester study of the structure and function of the human body. Topics include homeostasis, basic chemistry, cell structure and function, tissues, and the following body systems: integumentary, skeletal, muscular, respiratory, and urinary. The cat is the primary dissection specimen in the laboratory. This course is for students preparing for Nursing, Respiratory Care, Surgical Technology, Physical Therapy Assistant, and other health-related professions. This course is inappropriate for students preparing for medicine or dentistry. It does not fulfill the lab science sequence requirement for most Math/Science students, but does fulfill the science elective requirement for Math/Science students. Three lecture hours, two laboratory hours. Students are expected to have mastered high school-level biology, chemistry, and algebra, or the college equivalents.

BIO 172 Anatomy and Physiology II (4) Second part of a two-semester study of the structure and function of the human body. The following body systems are covered: cardiovascular, nervous, endocrine, lymphatic, digestive, and reproductive. The cat is the primary dissection specimen in the laboratory. This course is for students preparing for Nursing, Respiratory Care, Surgical Technology, Physical Therapy Assistant, and other health-related professions. This course is inappropriate for students preparing for medicine or dentistry. It does not fulfill the lab science sequence requirement for most Math/Science students, but does fulfill the science elective requirement for Math/Science students. Three lecture hours, two laboratory hours. Prerequisite: BIO 171.

BIO 181 Principles of Biological Research (2) This interdisciplinary course introduces basic skills important for success in a scientific research environment. Topics will include the following: the nature of scientific inquiry; an introduction to principles of statistics, data management, analysis and graphing using Excel; finding, accessing, reading, and presenting scientific research articles; and the ethics of scientific research. Students will also review the following: chemical concentrations and dilutions, pipetting and micropipetting, calculation of moles and molarity, construction of a standard curve, and spectrophotometry. This course is intended for Math/Science students preparing to conduct an extensive research project or internship in a biological discipline. Students will use Excel, PowerPoint, and a web browser in this course; familiarity with these tools and/or prior completion of CIS 100 is recommended. Prior completion of CHE-171 and/or BIO-151 is recommended, but not required. Prerequisite: Permission of Department.

BIO 205 General Microbiology (4) An introduction to the biology of microorganisms, with an emphasis on clinical relevance. Topics include the structure and function of microbes, including their metabolism and genetics. Infectious diseases and the interactions between microbes and their hosts are also considered. Laboratory exercises emphasize the isolation, identification, and control of microorganisms. Primarily intended for students entering health professions. Not recommended for students with credit in BIO-110 or BIO-150. Prerequisite: BIO-151, BIO-171, or Permission of Instructor. Prior completion of either BIO-152 or BIO-172 is recommended but not required.

BIO 220 Biology of AIDS (3) Starting where introductory biology classes leave off, this course explores AIDS and the pathology of HIV, including the structure and origin of the virus, mechanisms of viral replication, routes of transmission, and consequences of infection. Methods of prevention and treatment also will be discussed, including the biomedical challenges to effective treatment. A review of current testing methods and the prevalence of the disease in various populations will also be discussed, along with the role of the immune system in disease control and progression. This class is appropriate for all students, including non-science majors, science majors, and students entering the health professions. Three hours of lecture; no laboratory. Prerequisite: BIO 105 or BIO 121 or BIO 151 or BIO 171.

BIO 221 Pathology (3) This course covers the nature, causes, and development of disease conditions, as well as the structural and functional changes that result from the disease process. The principal diagnostic tests and treatments used in the detection and control of diseases will also be considered. Open only to students in the Health Information Technology program. Prerequisites: BIO 171 and BIO 172 (Anatomy and Physiology I and II).

BIO 253 Genetics (4) This course covers the biological basis for patterns of inheritance, including the structure, function, and regulation of DNA, genes, and chromosomes. The biochemical nature of mutations will be discussed, along with the potential consequences, both harmful and beneficial. Methods of molecular genetic analysis also will be introduced. This class is intended for Math-Science majors, especially students interested in Biology, Pre-Med, Pre-Vet, Pre-Physician Assistant, or Pre-Dent. Three lecture hours and two laboratory hours per week. Prerequisite: BIO 151 and BIO 152 (or equivalents) or Permission of Instructor.

Business

FOR MORE INFORMATION, CONTACT THE BUSINESS ADMINISTRATION DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W324, (315) 498-2435.

BUS 101 Introduction to Business (3) This is an introductory course designed to give the student an overview of the impact of business on society. The course is intended to aid the student in obtaining a clear understanding of the way in which contemporary business functions through the interrelationships of marketing, management, and finance. It is not open to students with previous credit in BUS 121 and/or BUS 230.

BUS 102 Mathematics of Business and Finance (3) A study of

mathematical concepts and processes as applied to business and finance. Students will develop skills required to perform with accuracy and facility mathematical operations integral to the interpretation and solution of business problems. Arithmetic operations, signed numbers, linear equations, percentage and statistical procedures are applied to such topics as accounting, retailing, risk management, banking, and finance. This course is a core course for the Business Technology A.A.S. degree and may be used to fulfill a business or general elective requirement. Prerequisite: MAT 087 or equivalent or Permission of Instructor.

BUS 105 Financial Accounting (3) An introduction to accounting as a means of recording business activities. This course includes a study of the classification and recording of original business transactions, the preparation and evaluation of financial statements, and the application of Generally Accepted Accounting Principles. The course will incorporate appropriate computer technology in the instruction process. Prerequisite: MAT 087 or Permission of Instructor.

BUS 105R Financial Accounting Applications (1EQ) This course is designed to give additional instruction and application to the topics covered in Financial Accounting (BUS 105). The course includes the study of the preparation of journal entries, financial statements, merchandising activities, cash, accounts receivable, plant assets and payroll. Co-requisite: BUS 105.

BUS 106 Managerial Accounting (3) An introduction to the fundamentals of managerial accounting emphasizing the collection, management and use of accounting information in the decision making process within an organization. Topics include a comparison of the different types of organizations and the impact on their financial statements, long-term debt and equity transactions reporting and analysis of cash flows, procedures necessary to determine product costs, break-even analysis, profit planning, and cost analysis. The course will incorporate appropriate computer technology in the instruction process. Prerequisite: BUS 105.

BUS 106R Managerial Accounting Applications (1EQ) This course is designed to give additional instruction and application of topics covered in Managerial Accounting (BUS 106). The course includes a study of partnerships, corporations, bonds, long-term investments, statement of cash flows, job order and process costing, break-even and standard cost variances. Prerequisite: BUS 105; co-requisite: BUS 106.

BUS 117 Integrated Financial Systems I (4) Computers are one of the most important tools to the accountant and users of accounting information. This course will provide extensive hands-on exposure to general ledger software. Skills acquired will include the ability to create and maintain general ledger master files, process transactions, and prepare financial statements and informational reports. Prerequisite: BUS-105. Fall semesters only.

BUS 121 Marketing (3) An introductory course in marketing intended to make the student aware of the development and efficient distribution of goods and services for a targeted consumer segment. The course studies both consumer and industrial markets, using as the basis for study the product, the distribution, the pricing and promotional techniques.

BUS 124 Principles of Retailing (3) The principles of retailing involve all the activities necessary for the sale of goods and services to the ultimate consumer for personal, family or household use. This course examines the different types of retail institutions and dwells on store location, merchandise planning and control, pricing and promotion.

BUS 138 Supervision and Management (3) This is a practical course in the principles and techniques of management applied by first line supervisory and training personnel. Special emphasis is placed on plant operations, organizing, training, developing supervisors, evaluating performance, motivation, and supervisory leadership responsibilities.

BUS 178 Disney Corporate Communication (3) The Disney Corporate Communication Course describes how companies communicate with key audiences, both internal and external to the corporation. Course introduces students to the communication function and how companies reach a variety of publics to include customers, investors, employees, media, government and communities in relation to the corporation. The purpose of this course is to engage students in the purpose and significance of communication within an organization at many levels. Students will learn both the why, how and application of communication techniques as organizations interface with customers, employees, and the public. As a result, students should have greater understanding of and appreciation for the corporate communication process. Co-requisite: BUS 293

BUS 201 Intermediate Accounting I (4) Intensive consideration is given to accounting theory and practice as it pertains to principle statement items. The course deals primarily with investments, receivables, inventories, fixed assets, and other material suitable to a second-year course in accounting. Prerequisite: BUS 106. Fall semesters only.

BUS 202 Intermediate Accounting II (4) Intensive consideration is given to accounting theory and practice as it pertains to current and long-term liabilities, long-term investments in stocks, stockholders' equity transactions, accounting for leases, Statement of Cash Flows, preparing statements from incomplete records and the analytical process as well as other selected topics. Prerequisite: BUS 201. Spring semesters only.

BUS 203 Electronic Spreadsheets for Business I (3) The course will include an introduction to the creation and modification of spreadsheets and charts. These skills will then be expanded and applied to business situations. Topics will include, but not be limited to, the creation of spreadsheets, formatting, printing, layout options, charting, creating simple and more complex formulas, using built-in formulas and other features as appropriate. Prerequisite: BUS-105 or POI.

BUS 204 Electronic Spreadsheets for Business II (3) This course builds on the skills learned in Electronic Spreadsheets for Business I. Students will create, edit, and manage worksheets and workbooks to analyze and communicate data relevant to a variety of business applications. Topics include a variety of advanced functions, formulas, and analysis tools. Prerequisite: BUS-203.

BUS 205 Income Tax Accounting I (3) A course in individual and business taxes under the federal income tax system. The course includes instruction and practice in the fields of individual returns, includable and tax-exempt income, partnership and other information returns, other business property and depreciation deduction, deductible losses, capital gains and losses, involuntary conversions, installment sales, etc. There will be considerable practice in return preparation in all these areas, as well as instruction in same. Prerequisite: BUS 106. This course is offered once per academic year.

BUS 207 Cost Accounting (3) Basic principles of cost accounting are developed and applied to industrial situations. Topics include budgetary planning and control; income measurement and inventory valuation; accounting for costs of material, labor, and overhead; job-order, process, and standard costs systems. Prerequisite: BUS 106. This course is offered once per academic year.

BUS 210 Disney Advanced Studies in Hospitality Management (3) The Disney Advanced Studies in Hospitality Management Course is an advanced-level course that covers complex issues facing Hospitality leaders today. This course will prepare students to become entry-level managers in the Hospitality industry by exposing them to contemporary operational issues and situations, equipping them with various problem solving methods and teaching them to develop and implement strategic solutions. Topics covered include guest service, leadership, strategic planning, trends and technology, communication, marketing, human resource management, and crisis management. Class content is delivered through lectures, group discussion, learning activities, and case studies. Co-requisite: BUS 293 Disney Co-Op Internship.

BUS 212 Business Correspondence (3) Business communications and report writing. Theory is put into practice in the writing of representative types of business letters and reports. Methods of all types of business communications are studied, including oral presentation. Prerequisite: ENG 103 or Permission of Instructor.

BUS 218 Disney Corporate Analysis (3) This course provides an organizational exploration of the Walt Disney Company and covers a variety of topics, including its corporate history, structure, governance, performance, and culture. In addition, students will learn more about the company's concepts about innovation and technology, globalization, history and heritage, corporate social responsibility, and diversity and inclusion. Class content is delivered through lectures, group discussions, learning activities, and situational studies. Prerequisites: full- or part-time status and minimum 2.0 G.P.A.; co-requisite: BUS 293.

BUS 219 Statistics I (3) Topics covering the descriptive and inferential aspects of statistics will include: frequency distribution, graphs, measures of central tendency and dispersion, probability, probability distributions, binomial and normal distributions, introduction to sampling theory, estimation theory, and hypothesis testing (mean, variance, proportions, etc.) Computer software will be used. A specific calculator will be required for this course. Credit will not be given for both MAT 151 and BUS 219 nor for MAT 118 if taken after BUS 219. Prerequisite: MAT 116 or MAT 143 or Permission of Instructor.

BUS 220 Statistics II (3) A continuation of Statistics I to include the topics: two-sample analysis, linear and multiple regression, correlation, analysis of variance, non-parametric statistics, and Chi-square goodness of fit. Time series analysis and/or statistical process control as time permits. Computer software and graphing calculator applications will be an integral component of this course. A graphing calculator with specific statistical capabilities will be required. Credit will not be given for both MAT 152 and BUS 220. Prerequisite: MAT 151 or BUS 219 or equivalent.

BUS 230 Principles of Management (3) This course is a study of the management process with a survey of managerial and organizational theories. Specific topics will include planning, organizing, supervision, control, labor relations, and decision-making.

BUS 231 Human Resource Management (3) This course is a study in the major areas of Human Resource Management. It includes recruitment, selection, job analysis, training, job evaluation, wage and salary administration, labor relations, and the administrative functions and responsibilities of a human resource manager.

BUS 233 Small Business Management (3) This course is the study of principles of management related to the establishment and operation of a small business enterprise. Topics will include small business start-up (economic and legal aspects), organization and financing concerns, location and facilities layout, employee relations, merchandising, and control techniques.

BUS 240 Disney Creativity and Innovation (3) The Disney Creativity and Innovation course combines theory and experiential assignments to introduce students to the main concepts of creativity and innovation. It will explore their crucial importance to individuals, organizations, and the entrepreneurial process. Students will learn various tools to promote creativity within themselves and others, processes to increase innovation, how to contribute to a creative team, how to manage creativity, and how to establish a culture of creativity within an organization. As a result, students should have greater understanding of and appreciation for the creative/innovative processes and be better able to harness and direct those forces for themselves and others. This course prepares students to contribute in a unique and productive way to today's entrepreneurial and organizational demands. Co-requisite: BUS 293.

BUS 243 Business Law I (3) The fundamentals of legal liability, of the growth of our legal institutions, and court systems. The principles of the law of contracts, negotiable instruments, and sales.

BUS 244 Business Law II (3) A study of the fundamental legal principles relating to agency relationships, sustainable business forms and practices, and other business forms to include partnerships, limited liability companies, and corporations.

BUS 247 Disney Human Resources (3) The Disney Human Resource Management Course explores the human resource management function in a corporate setting and focuses on the development of knowledge and skills that all managers and leaders need. This course will focus on such subjects as the selection process, employment law, labor relations, compensation, performance development, corporate training and maintaining effective environments. The classes are designed to familiarize participants with current human resource practices and laws that apply to their careers regardless of their field. Class content is delivered through lectures, group discussion, learning activities, and case studies. Co-requisite: BUS 293 Disney Co-Op Internship.

BUS 248 Disney Organizational Leader (3) This course examines the universal principles of leadership, including specific application to the Disney culture. It is designed to build repeatable and transferable leadership knowledge and skills. These skills are applied both within the context of the class and in earning and living environments of the internship experience. These skills are completely transferable to commercial organizational contexts. The content is delivered by a subject-matter expert in the field of leadership through lectures, group discussions, learning activities, self-assessment, project development and presentation, and situational studies. Co-requisite: BUS 293 Disney Co-Op Internship.

BUS 277 Disney Marketing You: Personal and Career Development Strategies (3) The Disney College Program Marketing You Course uses directed discussion and cooperative learning experiences to both define a personal brand for career marketing and to focus students who do not have clear career objectives. This course is designed to maximize the Disney College Program Internship experience, as well as all prior/subsequent work experience, utilizing the transferable skills noted in the Secretary of Labor's SCANS (Secretary's Commission of Achieving Necessary Skills 1991) report. While the Disney College Program is a non-technical skill internship, it produces the type of skills required in the workplace. The student will learn how to market the SCANS report skills of communication, customer service, problem solving, conflict resolution, decision-making, self-management, and creative thinking. Key elements of the course include the development of a career focus and a personal

marketing plan. The marketing plan allows a student to develop a personal brand, 30-second commercial, resume, and networking strategy. The students will also learn interviewing and negotiation techniques. Prerequisites: Full or Part-time status; Minimum 2.0 G.P.A. Co-requisite: BUS 293 Disney Co-Op Internship. Cannot be substituted for GEN 154 or CNL 175.

BUS 290 CO: Cooperative Work Study (3) A course designed to prepare students to work after graduation. A learning contract containing specific educational objectives that relate to both the work experience and the field of study is developed between the student and a faculty co-op coordinator. Course requirements include a minimum of 180 hours of work, the maintenance of a work journal to record hours worked and duties performed, other work as required by the intructor and a final term paper. The student's performance will be evaluated by the co-op faculty coordinator on the basis of meeting the objectives in the learning contract and satisfactory evaluation by the employer. A letter grade will be awarded. No experiential credit is given for previous work in the field. The work experience cannot be used to satisfy the requirements of any other course.

BUS 293 CO: Disney Co-Operative Internship (9) The Disney Co-Operative Internship uses a directed working and learning experience to expand knowledge of successful organizational practices. This course is designed to meet a participant's need for an integrated work-study internship program that provides transferable knowledge and skills to all participants. Students must register for one of the following courses at Onondaga and Disney: Corporate Analysis, Corporate Communication, Advanced Studies in Hospitality Management, Creativity and Innovation, Marketing You: Personal and Career Development Strategies, Human Resource Management, or Organizational Leadership. Students must have full- or part-time status with a minimum G.P.A. of 2.0. Students are responsible for all transportation costs to and from Florida. Students receive an hourly wage. They are housed on Disney property; housing costs are deducted from their weekly paycheck. Students must register for this course the same semester they participate in the Disney experience. This course cannot be taken concurrently with BUS 290. Prerequisites: full- or part-time status and minimum G.P.A. of 2.0; co-requisite: BUS 178, 210, 218, 240, 247, 248, or 277.

Computer Forensic Science

FOR MORE INFORMATION CONTACT EITHER THE COMPUTER STUDIES DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W230, (315) 498-2427 OR THE CRIMINAL JUSTICE DEPARTMENT IN MAWHINNEY HALL, ROOM M280, (315) 498-2341.

CFS 130 Foundations of the Internet (3) In this first course in the Web Technology sequence of courses, students will be introduced to Web development concepts and principles. Foundation topics include protocols, Linux commands, file management, remote access, and file transfer. Additionally, students will learn current industry-standard html/xhtml,cascading style sheets, image editing for web optimization, and the use of various editors. Students will be provided with a Web server account for their use. Additionally, Web accessibility will be discussed and incorporated.

CFS 140 Introduction to Computer Forensics (3) This course is an introduction to the principles of information assurance and security. Topics include security investigation, analysis, implementation, maintenance, and design.

CFS 210 Terrorism and the Criminal Justice System (3) This course introduces the student to the study of terrorism. It will focus on both domestic and foreign varieties of this unique form of organizational crime and its implications for the American criminal justice system. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CFS 232 Cybercrime (3) This course focuses on computer based crime and cybercrime issues facing the American criminal justice system. The course explores computer based crime investigations, the importance of preserving and correctly interpreting digital evidence, the application of cybercrime laws and regulations along with the identification of emerging issues facing the legal system (Courts). Students will also examine the future trends of cybercrime and government responses. Prerequisite: CRJ 101.

Chemistry

FOR MORE INFORMATION, CONTACT THE CHEMISTRY/PHYSICAL SCIENCE DEPARTMENT IN FERRANTE HALL, ROOM F352, (315) 498-2432.

CHE 121 Introductory Chemistry (3) CHE 121 is designed as an introductory chemistry course for non-science majors and would also meet the needs of students who have little or no background in chemistry. CHE 121 is a course that provides the basic chemistry background necessary to continue on to General Chemistry I (CHE 171). This course is not recommended for Health Science students and will not count toward the Math Science degree (MTS.AS). Students are strongly encouraged to co-register for MAT 114 if they intend to continue on to CHE 171. Prerequisite: MAT-087 and placement into college level reading.

CHE 121L Introductory Chemistry Laboratory (1) Laboratory for CHE 121. Illustrative experiments emphasizing the concepts, principles, and techniques presented in CHE 121. CHE 121 must be taken previously or concurrently with CHE 121L. Prerequisite: MAT-087, placement in college level reading.

CHE 121R Introductory Chemistry Recitation (1EQ) Optional recitation section for CHE 121. Provides the opportunity for students to apply the theories, concepts and problem-solving techniques presented in CHE 121. Prerequisite: MAT-087 and placement into college level reading. Co-requisite: CHE-121.

CHE 151 Basic Chemistry for the Health Sciences I (3) A study of chemistry at an introductory level, intended for students in the paramedical sciences (nursing, dental hygiene, respiratory therapy, etc.) Topics include the nature of atoms; ionic and covalent bonding; nomenclature; chemical change and equilibrium; gas laws; properties of water and aqueous solutions; acids, bases and pH; and an introduction to organic and biochemical compounds. This course presupposes some knowledge of elementary algebra. Not open to Math-Science students. Prerequisites: College-level reading and placement into MAT 087 or higher.

CHE 151L Basic Chemistry for the Health Sciences Laboratory I (1) Optional laboratory for CHE 151; illustrative experiments emphasizing the concepts, principles, and techniques presented in CHE 151. Three laboratory hours per week. Prerequisite or co-requisite: CHE 151 and placement into MAT 087 or higher.

CHE 151R Basic Chemistry for the Health Sciences Recitation I (1EQ) Optional recitation section intended for students concurrently registered in CHE 151. The recitation provides the opportunity for students to apply the theory, concepts and problem-solving techniques presented in CHE 151.

CHE 152 Basic Chemistry for the Health Sciences II (3) A study of organic chemistry and biochemistry at the introductory level. Topics include the structure and properties of aliphatic and aromatic hydrocarbons, functional groups, carbohydrates, lipids, proteins,

enzymes, vitamins, and drugs. Not open to Math-Science students. Prerequisite: CHE 151 or CHE 171 and Permission of Instructor. Fall semesters only.

CHE 171 General Chemistry I (3) A study of atomic structure, chemical bonding, stoichiometry, kinetic molecular theory and the states of matter, solutions, ionic reactions, oxidation and reduction, acid and base theories, thermochemistry, molecular geometry, gas laws, and intermolecular forces. Prerequisites: MAT-114 and placement in college level reading. Students are expected to have mastered high school (Regent's) chemistry or successfully completed CHE 121. Students are strongly encouraged to co-register for MAT-143 to be prepared for CHE-172.

CHE 171L General Chemistry I Laboratory (1) Laboratory for CHE 171. Illustrative experiments emphasizing the concepts, principles, and techniques presented in CHE 171. CHE 171 must be taken previously or concurrently with CHE 171L. Prerequisite: MAT 114 and placement in college level reading. Students are expected to have mastered high school (Regent's) chemistry or successfully completed CHE 121.

CHE 171R General Chemistry I Recitation (1EQ) Optional recitation section for CHE 171. Provides the opportunity for students to apply theories, concepts and problem-solving techniques presented in CHE 171. Prerequisites: MAT-114 and placement in college level reading. Co-requisite: CHE-171.

CHE 172 General Chemistry II (3) A study of solutions, colligative properties, kinetics, chemical equilibrium, thermodynamics, electrochemistry, and basic organic chemistry and biochemistry. Prerequisites: CHE 171, MAT 143.

CHE 172L General Chemistry II Laboratory (1) Laboratory for CHE 172. Illustrative experiments emphasizing the concepts, principles, and techniques presented in CHE 172. Prerequisite: CHE 171, CHE 171L and MAT 143. Optional lab for CHE 172.

CHE 172R General Chemistry Recitation II (1EQ) Optional recitation section for CHE-172. Provides the opportunity for students to apply theories, concepts and problem-solving techniques presented in CHE-172. Prerequisite: MAT-143. Corequisite: CHE-172.

CHE 203 Quantitative Analysis (4) Topics covered include error and statistical treatment of data, chemical equilibrium, gravimetric analysis, various types of volumetric analysis, electrochemistry, spectrophotometry, and introduction to analytical separations. The laboratory portion of the course includes traditional and modern methods of gravimetric and volumetric analysis, and elementary instrumental methods. Three class hours and four laboratory hours. Prerequisites: CHE 172 and MAT 114 or higher. Spring semesters only.

CHE 205 Organic Chemistry I (4) An introduction to the chemistry of alkanes, alkenes, alkynes and alkyl halides. Emphasis is placed on mechanisms of reactions and the relationship of structure to reactivity. Four class hours each week. Prerequisites: CHE 172 & 172L and placement into college level reading.

CHE 205L Organic Chemistry I Laboratory (1) Laboratory for CHE 205. An introduction to the chemistry of alkanes, alkenes, alkynes and alkyl halides. Laboratory work is concerned with experience in the necessary experimental techniques for synthesis and isolation and analysis of the above classes of compounds. Prerequisite: CHE 172 and CHE 172L, placement in college level reading. CHE 205 must be taken previously or concurrently with CHE 205L.

CHE 206 Organic Chemistry II (4) A continuation of CHE 205 with more emphasis on mechanisms, nomenclature and properties of conjugated dienes, arenes, alcohols, ethers, carboxylic acids, aldehydes, ketones, carboxylic acid derivatives and amines, and the study of qualitative organic analyses. Four class hours each week. Prerequisites: CHE-205.

CHE 206L Organic Chemistry II Laboratory (1) Laboratory for CHE 206. An introduction to the chemistry of alcohols, aldehydes, aryl amines, carboxylic acids, and esters. Laboratory work is concerned with experience in the necessary synthesis, isolation, purification and analysis of the above classes of compounds. Prerequisite: CHE 205 and CHE 205L, placement in college level reading. CHE 206 must be taken previously or concurrently with CHE 206L.

Chinese

FOR MORE INFORMATION OR ASSISTANCE WITH PLACEMENT INTO APPROPRIATE COURSE-LEVEL, CONTACT THE MODERN LANGUAGES DEPARTMENT IN MAWHINNEY HALL, ROOM M308, (315) 498-2305.

CHI 101 Elementary Chinese I (3) This learner-centered course is designed for students with little or no previous knowledge of Chinese. Students acquire skills that will both allow them to engage in basic survival and social dialogue, and give them a foundation to continue their study of Chinese. Fall semesters only.

CHI 102 Elementary Chinese II (3) This course is a sequel to CHI 101 Elementary Chinese I. It builds upon the basic grammatical, linguistic, communicative and cultural concepts learned in CHI 101. Spring semesters only.

Cinema

FOR MORE INFORMATION, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNEY HALL, ROOM M310, (315) 498-2313/2266.

CIN 210 Study of Short Film (3) From early "one-reelers" to current offerings on dedicated Web sites, international festivals, and film schools, this course studies the history, form, and purpose of classical and contemporary short films. Students will view, discuss, and write about the unique aspects of the short narrative film, with its dazzling array of themes and styles. As these award-winning independent films often feature actors, writers, and directors prominent in commercial films and television shows, the course provides an opportunity to examine the relationship between 5-25 minute short films and full-length films by the same writers or directors. Prerequisite: ENG 104.

CIN 211 Comedy Films (3) Studies the development of film comedy from its humblest origins to its most sophisticated forms. The course breaks down into studies of the physical, clown tradition of comedy, and the more sophisticated verbal comedy. An emphasis on key comic performers, writers, and directors helps make this an intellectual study of why comedy is universally appealing.

CIN 212 Horror and Fantasy Films (3) A study of the classic myths of horror, with an emphasis on the literary origins of horror tales, and a close study of such significant books as Dracula and Frankenstein, with interpretations of why such terrifying concepts have continuously proven popular the world over, and a study of the way in which Hollywood motion pictures have both extended and distorted the varied tales.

CIN 216 American Film Directors (3) This course allows students to study the contributions to the art of film of the great American film directors. In a given semester one director such as Stanley Kubrick, Quentin Tarantino, or Martin Scorsese will be discussed in terms of his contribution to important genres, film techniques, and pop culture influences, among other possible topics. Students will view the

director's films as well as sample the literature from which the director chose his screenplays.

CIN 218 The American Hero in Film (3) This course will trace the development of the American Film Hero from early 20th Century to present. The course will concentrate on different genres in American film, depicting a variety of heroes, including: The Early War Film, the Western, the Gangster Film, The Vietnam Era, Film Noir as well as many others. Students will study the novels on which successful film adaptations have been based.

Computer Information Systems

FOR MORE INFORMATION, CONTACT THE COMPUTER STUDIES DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W230, (315) 498-2427.

CIS 100 Information and Computer Literacy (3) This course offers students an overview of the role of technology in society and provides an introduction to digital and information technologies, concepts, and terminologies. Discussions of the Community, Legal, and Ethical issues related to digital devices and the Internet are integral to the nature of this course. This course provides students with opportunities to develop research and critical thinking skills, and will introduce students to continuously evolving and emerging digital technologies and their effects on society. Students will demonstrate the skills needed to be an informed digital citizen, achieve academic and workplace success, and participate in an increasingly globalized environment. Students will use web applications, word-processing, spreadsheet, database, presentation, and other software, as applicable, to learn, search and organize their research, and then present and communicate their findings.

CIS 106 An Introduction to Digital Media (3) This introductory-level course provides a basic hands-on approach for the production and assessment of a team-based digital media project. Utilization of the components found in various software programs will allow students to select a digitally-based group project utilizing various aspects of audio, video and digital media. A culminating project will be distributed via DVD, the Internet/World Wide Web, or some other appropriate channel/medium. A basic knowledge of computers and some background in music and/or musical theory would be helpful but is not required.

CIS 120 Advanced Principles of Information Systems (3) The continuation of CIS 100. Topics include graphics, simple software and hardware management, operating systems, presentation graphics, database applications and current issues in computing and information science that have an impact on today's society. Hands-on modules include projects with current operating systems, a database management system and a collaborative project integrating concepts and techniques learned over the semester. Prerequisite: CIS 100 or Permission of Instructor.

CIS 125 Fundamentals of Computer Information Systems (3) This is the first course for CIS majors or any student interested in exploring the professional field of Computer Information Systems. The course covers the concepts of computing principles and advanced data use. Topics include software and hardware management tools and techniques, file management, presentation software, database applications and concepts, and current issues in computing and information systems having an impact on today's society. The lessons will be presented using traditional classroom lessons and hands-on computer projects. A collaborative project integrating concepts and techniques will be performed by all students.

CIS 130 Foundations of the Internet (3) In this first course in the Web Technology sequence of courses, students will be introduced to Web development concepts and principles. Foundation topics include protocols, Linux commands, file management, remote access, and file transfer. Additionally, students will learn current industry-standard html/xhtml,cascading style sheets, image editing for web optimization, and the use of various editors. Students will be provided with a Web server account for their use. Additionally, Web accessibility will be discussed and incorporated.

CIS 151 Technology and Organizations (3) This is a course on the impact of technologies related to work and organizations. It addresses both the unintended and intended outcomes of technology. Students examine the changing nature of time demands, the relationship between the organization and its members, the "labor saving" device, quality of work life, computer misuse, repetitive strain injuries, and other topics.

CIS 170 Network Fundamentals (3) This course introduces the architecture, structure, functions, components, and models of computer networks. It uses the OSI and TCP layered models to examine the protocols and services used in networking. Students will be introduced to structured IP addressing and Ethernet.

CIS 230 Web Site Design and Development (4) This course will expand upon CIS 130 and will focus on principles of design in the authorship of Web pages. As the focus shifts from basic Web page creation to designing full Web sites, so too will the tools shift from HTML editors to WYSIWYG editors. A topic of discussion will be the issue of accessibility. Further development topics include intermediate to advanced HTML code, intermediate graphics manipulation, JavaScript, Flash and other multimedia, and an introduction to dynamic content. Prerequisite: CIS 130.

CIS 231 Advanced Web Servers (4) Students will learn advanced Web management techniques, with an emphasis on server-side issues. Students will add interactivity to their Web sites through the use of forms and server side scripting. A further exploration of dynamic content will be included. Additionally, students will work with server side databases, including stored procedures. Finally, students will configure and manage a Web server, including virtual hosting, troubleshooting and security. Prerequisite: CIS 125 or Permission of Instructor.

CIS 271 Internetworking I (4) This course expands upon Network Fundamentals advances into Routing and Switching. Students will explore the architecture, components, and operation of Cisco routers, and learn the principles of routing and the routing protocols RIP, EIGRP, and OSPF. They will learn the technologies and protocols needed to design and implement a converged switched network, including virtual LANs, VTP, inter-VLAN routing, and Spanning Tree Protocol. Prerequisite: CIS 170. 3 lecture hours and 2 laboratory hours.

CIS 272 Internetworking II (3) This is an advanced course in networking that explores WAN technologies and integrating network services. Students learn how to implement and configure data link protocols and how to apply WAN security concepts, principles of traffic, access control, and addressing services. A focus on detecting, troubleshooting, and correcting common network implementation issues will be covered to prepare students for the CCNA examination. Prerequisite: CIS 271.

CIS 281 Computer Information Systems Internship (1) This course is designed to provide work experience directly related to the student's area of study in Computer Information Systems. Internships are available throughout the local community. A learning contract containing specific educational objectives that relate both to the work experience and the field of study will be developed between the

student and the Faculty Internship Coordinator. Course requirements include a minimum of 60 work-hours for 1 credit. Each student must maintain a Work/Research Journal to record hours worked and duties performed. A summary reflection presentation/paper/project will be prepared and delivered by the student at the completion of the Internship. The student's performance will be evaluated by the Faculty Internship Coordinator based on accomplishment of the objectives in the learning contract and satisfactory evaluations by the employer/site supervisor. No experiential credit will be given for previous work or research experience. Prerequisites: minimum GPA of 3.0, sophomore standing, and approval of the Faculty Internship Coordinator.

CIS 282 Computer Information Systems Internship (2) This course is designed to provide work experience directly related to the student's area of study in Computer Information Systems. Internships are available throughout the local community. A learning contract containing specific educational objectives that relate both to the work experience and the field of study will be developed between the student and the Faculty Internship Coordinator. Course requirements include a minimum of 120 work-hours for 2 credits. Each student must maintain a Work/Research Journal to record hours worked and duties performed. A summary reflection presentation/paper/project will be prepared and delivered by the student at the completion of the Internship. The student's performance will be evaluated by the Faculty Internship Coordinator based on accomplishment of the objectives in the learning contract and satisfactory evaluations by the employer/site supervisor. No experiential credit will be given for previous work or research experience. Prerequisites: minimum GPA of 3.0, sophomore standing, and approval of the Faculty Internship Coordinator.

CIS 283 Computer Information Systems Internship (3) This course is designed to provide work experience directly related to the student's area of study in Computer Information Systems. Internships are available throughout the local community. A learning contract containing specific educational objectives that relate both to the work experience and the field of study will be developed between the student and the Faculty Internship Coordinator. Course requirements include a minimum of 180 work-hours for 3 credits. Each student must maintain a Work/Research Journal to record hours worked and duties performed. A summary reflection presentation/paper/project will be prepared and delivered by the student at the completion of the Internship. The student's performance will be evaluated by the Faculty Internship Coordinator based on accomplishment of the objectives in the learning contract and satisfactory evaluations by the employer/site supervisor. No experiential credit will be given for previous work or research experience. Prerequisites: minimum GPA of 3.0, sophomore standing, and approval of the Faculty Internship Coordinator.

CIS 286 Systems Analysis and Design (3) This course is the capstone course for Computer Information Systems majors, requiring students to integrate techniques and concepts learned from their other coursework. The course will focus on the phases of the Systems Development Life Cycle (SDLC), and the roles and responsibilities that a systems analyst performs throughout the SDLC process. Students will be expected to work in collaborative, self-directed teams to produce comprehensive projects, culminating in a thorough, concise study of a simulated environment that will be used to research and create a system design. Students will also be expected to present their projects in a professional manner, demonstrating the ability to deliver technical information to a non-technical audience. Prerequisite: CIS 125 or Permission of Instructor.

CIS 291 Information Technology Support I (4) This course will prepare students to work with users of computer software and hardware. Topics include basic hardware components, configurations, installations, troubleshooting, preventative maintenance, safety concerns, and customer service issues. Software issues such as installation and upgrading, BIOS configurations and settings, diagnostic tools and maintenance will also be covered. This detailed hands-on approach will prepare students to take the A+ certification examination administered by the Computer Technology Association (CompTIA). There will be no experiential credit granted for this course. Students will receive 3 hours of instruction and 1 lab hour per week. Prerequisite: CIS 125 or Permission of Instructor.

CIS 292 Information Technology Support II (4) A continuation of CIS 291, this capstone course will prepare the student for working with, and training users in the use of modern software and hardware. Students will learn hardware and software maintenance techniques, including advanced troubleshooting, network and desktop security, and software maintenance. In addition, students spend 30 hours during the semester as an unpaid intern at a local business or non-profit organization troubleshooting hardware and software problems, doing technical research, and learning about the organization they're working at. There will be both individual and team assignments. There will be no experiential credit granted for this course. Students will receive 2 hours of instruction, and perform 4 hours of internship practicum per week. Prerequisite: CIS-291 and (CIS-170 OR CIS-271).

Computer Engineering Technology

FOR MORE INFORMATION, CONTACT THE ELECTRICAL TECHNOLOGY DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W131, (315) 498-2451.

CMT 101 Introduction to Computers and Applications (4) This course is an introduction to basic concepts underlying the computer and its applications in technology and science fields. The focus of the course is on studying the computer for acquiring and presenting information, using spreadsheets to solve problems, collecting and storing data, and word processing. Topics include: hardware and software computer concepts, an introduction to internet in acquiring and sharing information (WWW, User list, and Personal Message Centers), introduction to spread sheet applications in solving problems and charting, use of text editors to write documents (Word Processing), an introduction to technical presentations, and use of application programs for organizing data, and drawing charts and schematics. (Students who have completed CIS 100 or CMT 110 may not take this course for credit.) Prerequisite: MAT 079; prerequisite or co-requisite: MAT 087/088 or Permission of Instructor.

CMT 110 Introduction to Computing (3) The primary objectives of this course are to introduce students to a text editor to write a simple document and to use a spreadsheet program to solve problems related to computer circuits. The topics include: use of a text editor to write and edit a technical document; use of a spreadsheet to solve digital designs, provide graphical solutions, and track data; and integration of data from the spreadsheet and graphics editor into a technical document. Two-hour lecture and two-hour lab. Co-requisite: MAT 101.

CMT 161 Digital Systems for Telecommunications I (4) This course presents topics in hardware and systems as used in the telecommunications industry. Electrical and digital circuits are explored. Binary number systems are discussed as applied to telecommunications equipment. Students will explore hardware to the modular level. Students will demonstrate and simulate digital circuits. Prerequisites: MAT 106, CMT 110.

CMT 171 Digital Electronics (4) An introduction to digital and computer integrated circuits, emphasizing the concepts that are basic

to any digital system: number systems, small-scale and mid-scale gates, programmable logic devices, sequential logic, combinational networks, Boolean algebra, truth tables, Karnaugh maps, state machine design, timing diagrams, and digital arithmetic. Three class hours and a three-hour lab. Prerequisite or co-requisite: Intermediate algebra or equivalent.

CMT 180 Digital Systems for Telecommunications 2 (4) In this course students will be working with hardware and software installation with an introduction of personal computer fundamentals. Students will connect a personal computer to a network, and install and setup a printer. The course will cover managing and supporting Microsoft Windows and operating system configuration, given user related issues, and customization. Students will learn how to maintain a computer with troubleshooting fundamentals. An optional topic would cover Home Technology Integration including surveillance and home automation. The course is composed of lecture and in-class demonstration. Fall semester only. Prerequisite: CMT 161.

CMT 190 Introduction to Microprocessors (4) An introduction to basic principles of micro processor architecture and assembly language instructions. The content of the course is divided into three sections: microprocessor architecture, mnemonics and interfacing I/Os. The course is designed around an 8-bit microprocessor and its mnenomics. Topics included in the course are: overview of computers and micro-computers, microprocessor architecture, bus architecture, memory (R/W Memory, ROM, and EPROM) maps, I/Os, interfacing devices and introduction to the instruction set of the microprocessor. The third section, interfacing I/Os, introduces various I/O techniques such as parallel I/O, serial I/O and interrupts. Three class lectures, one-hour programming session, and two-hour lab. Prerequisite: CMT 171 or CSC 111 or equivalent.

CMT 271 Internetworking I (4) An introduction to the fundamentals of networking. Students will learn the fundamentals of installing, programming and troubleshooting a network based on the OSI (Open System Interconnection) model. Students will be introduced to IP and TCP/IP addressing, including subnet addressing. The hardware components of basic networks, including router, will be covered, along with basic network topologies and designs. Prerequisite: CIS 125 or Permission of Instructor. 3 hours lecture and a 2-hour lab.

CMT 272 Internetworking II (4) The continuation of CMT 271. The students will be introduced to advanced networking concepts. Topics include LANS, WANS and other types of regional networks. Students will learn to segment networks with bridges, routers and switches. Students will also be instructed on configuring and monitoring various types of networks. After successful completion of this course, students will be qualified to pursue a number of industry-standard certifications, including Cisco Certified Networking Associate (CCNA) and Computing Technology Industry Association (Comp TIA) Networking certifications. Prerequisite: CMT 271. 3 hours lecture and a 2- hour lab.

CMT 292 Data Acquisition Using LabVIEW (4) This course is concerned with using the PC as a tool for data acquisition and process control applications. This course uses National Instruments LabVIEW as a programming and implementation vehicle for industrial applications. The topics are divided into groups: General programming design (Specification development, UI design, state machine/data flow architecture, scheduling, and resource management), LabVIEW programming, data acquisition system design (signal types, A/D, D/A, digital, discrete, continuous, sampling, etc) and process control (states, events, logs, etc). All applications use a National Instruments DAQ board to interface with external test equipment and circuits. Emphasis will be placed on designing a project using LabVIEW. Three-hour lecture and a three-hour program development session per week.

Communication

FOR MORE INFORMATION, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNEY HALL, ROOM M310, (315) 498-2313/2266.

COM 100 Introduction to Communication (3) This survey course introduces students to the general field of communication and rhetorical studies. The concepts, principles, and practices of Interpersonal Communication, Public Speaking, and Small Group Communication will be the focus.

COM 111 Social and Professional Etiquette (3) This course introduces students to the development and use of social and professional etiquette rules and customs as currently practiced in the United States. Emphasis is placed on understanding the communicative nature of etiquette and its uses in furthering social and professional interactions. This lecture/demonstration course will include practice in various verbal and nonverbal skills required in the current social and professional climate including instruction in netiquette. Additionally, students will be introduced to etiquette rules and customs from around the world and will practice using these as a way to prepare for the global marketplace.

COM 113 Communication and Health (3) This course offers students the opportunity to learn and practice the unique communication skills needed in the health professions. Communication among professionals, between professional and patient, professional and client, professional and nonprofessional caregiver will be examined. Best practice in intrapersonal, interpersonal, group communication in the healthcare context will be discussed. How to effectively communicate in conflict situations, ethical considerations, and intercultural and multicultural communication are other topics included in this class.

COM 121 News Literacy (3) This course is a survey of the ongoing changes in mass media with a focus on news literacy. Students will be introduced to the skills required to make critical evaluations of news and information sources across the spectrum of traditional and new media, assessing the content for such factors as diversity, accuracy, and bias. Prerequisite: English and reading placement at college level. Students may not receive credit for both ENG 121 and COM 121. Web-enhanced course; online assignments are required.

COM 122 Introduction to Journalism (3) This course will be a survey of the background and importance of journalism in society, including its role in democracy, key stories that shaped history, standard-bearers across news platforms, and the principles and responsibilites essential for fair and credible news reporting. Prerequisite: English and Reading placement at college level. Web enhanced course; online assignments are required.

COM 123 Student Media Reporting (1) This course provides academic credit to students who contribute to student-run college media. Submissions can range from small pieces, such as calendar items and captions, to longer pieces, such as news stories, features, and reviews, for those with more interest and experience in news writing. Students may not receive credit for both ENG 123 and COM 123. Prerequisite: English and reading placement at college level. Web enhanced course; online assignments are required.

COM 157 Electronic Media Writing (3) This course helps students to master the diverse writing styles and formats used in writing for broadcast on radio, television and cable. These include public service announcements (PSAs), station IDs, promotional announcements,

script formats, commercials, news copy, and program materials. Emphasis is on developing broadcast copy style, distinguishing words directed toward the ear and the eye. Students may not receive credit for both ENG 157 and COM 157. Prerequisite: ENG 103.

COM 202 Rhetorical Criticism (3) This is a course in the practical art of rhetorical criticism. The course focuses on the application of standard rhetorical critical methods to communication artifacts. Although rhetorical criticism has its roots in the evaluation of speeches, this course provides students the opportunity to evaluate a wide range of communication artifacts, ranging from speeches to films, music, art, and even architecture. Through rhetorical criticism, students learn to better understand the motives, strategies, and effects of strategic public communication. Class activities, discussions, readings and assignments are designed to develop communication, critical thinking, and analytical skills through an introduction to rhetorical criticism. Prerequisite: Any 100-level Communication course or Permission of Instructor.

COM 204 Advocacy and Opposition (3) Advertising, advocacy and public policy debates all require an understanding of the rhetorical nature of argumentation and persuasion. This course provides opportunities for students to develop that understanding through speeches, debates, group presentation and community interaction. Prerequisite: Any 100-level Communication course or PHI 107 or POS 100 or Permission of Instructor.

COM 206 Voice and Articulation (3) This course is appropriate for students wishing to enter broadcasting, theater, or other careers where voice and articulation are important and for students who wish to enhance their ability to articulate American English. This lecture/demonstration course offers students practice in the use of the voice as a communication tool. Topics covered include: articulation, the aspects of the voice, pronunciation, the vocal mechanism and the International Phonetic Alphabet. Prerequisite: Any 100-level Communication course.

COM 210 Public Speaking (3) Public Speaking is a course designed to acquaint the student with the basic theories and skills of public discourse. Course content includes the importance of audience analysis and adaptation, how to choose an appropriate topic, organization, speech purpose and delivery, and critical analysis of discourse. Word study, effective language use, effective non-verbal skills and critical listening skills are also stressed.

COM 220 Interpersonal Communication (3) This introductory course is designed to acquaint students with the communication skills needed to succeed both academically and socially. Course content includes communication theory, perception, verbal and non-verbal communication, effective listening, assertiveness, awareness of the self as communicator, interpersonal problem-solving, and relational communication. Emphasis is placed on class discussion as a tool for learning and practicing the skills presented in class.

COM 225 Teamwork and Small Group Communication (3) This course is an in-depth study of the nature and process of teamwork and small group communication. Students will study the theory of small group process, the nature of small groups and group dynamics. The course will analyze small group/teamwork issues such as decision-making, problem-solving, creativity, computer mediated group communication, diversity and conflict management. Students will make small group/team presentations, as well as engage in small group/teamwork evaluation. Prerequisite: COM-100 or COM-210 or COM-220 or Permission of Instructor.

COM 227 Writing for Emerging Technologies (3) Fast-paced and widespread developments in technology have changed the way people distribute, access, and understand information. With the Internet serving both as a medium for text and images, and a delivery system for other kinds of digital content, competitive employees in the marketplace must be able to provide clear and effective pieces of Web-based communication and other kinds of documents. This course will discuss the issues surrounding the new technology. Topics covered in the course include First Amendment law and the Internet, "repurposing" stories across platforms, and clear writing techniques. This course may be offered online and/or face-to-face. Students may not receive credit for both ENG 227 and COM 227. Prerequisite: ENG 103.

COM 233 Introduction to Public Relations (3) This course is a survey of the foundational elements of public relations. The class discussions will draw on communication theory to introduce students to the core principles of public relations. Topics covered will include the history and future of public relations, audience analysis and the development of communication strategies for a range of different publics, campaign planning, various types of public relations agencies and their communication styles, social media, social responsibility, and ethics.

COM 240 Persuasion in Everyday Life (3) This course is an investigation of the various communication theories of persuasion as applied to the devising of persuasive messages, the presentation of persuasive messages, and the critical analysis of persuasive messages in a variety of contexts. Class activities, discussions, readings, and assignments are designed to develop communication skills necessary for effectiveness as producers and consumers of persuasive communication.

COM 245 Communication @ Work (3) This course is an introduction to the theory and practice of communication in the workplace. The focus of the course is on analyzing and improving interpersonal communication in a professional context. Topics covered include: meeting management, interview techniques, participation in team and group communication, preparation of professional presentations, managerial communication, diversity in the workplace, and listening skills. This course emphasizes the development of practical and critical skills.

COM 251 News Writing (3) An introductory course in the basics of news reporting and writing, focusing on gathering information, story and sentence structure, accuracy, Associated Press style, and meeting deadlines. Students will write a variety of publication-ready news stories, including college-related events and student public interest stories. Students may not receive credit for both ENG 251 and COM 251. Prerequisite: ENG 103.

COM 252 Feature Writing and Literary Journalism (3) Students will analyze and evaluate feature stories and writing in the genre of literary journalism. Drawing on techniques from the New Journalism, current models of literary journalism, and sound reporting practices, students will write a variety of publication-ready features, including profiles, critiques, and human interest stories. Students may not receive credit for both ENG 252 and COM 252. Prerequisite: ENG 103.

COM 253 Student Media Editing (2) This course provides academic credit to students who serve in editorial roles for student-run college media. Tasks can include assignment and placement of stories; feedback to student reporters; and copyediting, proofreading, and editing of final stories. Students may not receive credit for both ENG 253 and COM 253. Prerequisite: ENG/COM 123 or Permission of Instructor. Web enhanced course; online assignments are required.

COM 272 Communication and Conflict Management (3) This course explores the nature of conflict interaction from a

communication perspective. The course will examine attitudes, conditions, and perceptions that influence communication interaction and conflict. Students will be introduced to communication tools and techniques for effectively managing conflict in interpersonal relationships, groups, the workplace and organizations. Prerequisite: COM-100 or COM-210 or COM-220 or Permission of Instructor.

COM 282 Intercultural Communication (3) This course seeks to improve Intercultural Communication Competence through learning about communication patterns between those with different cultural backgrounds. Topics covered include: verbal and nonverbal differences in cultural expression, intercultural relationships, barriers to effective intercultural communication, methods for overcoming these barriers, stereotyping, intercultural relationships and conflict resolution. Students will learn the distinctive cultural features of one non-Western civilization and will learn to integrate theory with practice and real-life examples.

COM 284 Communication and Gender (3) This course seeks to acquaint students with the unique ways men and women tend to communicate. The focus of this discussion-oriented class is on how gender influences verbal and nonverbal communication, identity formation, listening, speaking,and interpersonal relationships. Additional topics covered will include communication and gender in the workplace and the classroom, as well as the influence of the media on gendered communication.

COM 285 Communication Ethics: Truth and Deception (3) This course analyzes the principles and practices of ethical communication, truth and deception as speech acts, and theories and techniques of verbal and nonverbal deception detection as applied to a variety of interpersonal, public, and professional contexts. We all face ethical dilemmas related to communication situations in our educational, personal, and professional lives on a daily basis. This course seeks to explore the complexity of those situations and to help develop critical thinking and analytical skills through a communication perspective. Prerequisite: C or better in any Communication course.

COM 290 Commumication Seminar (3) This course is designed to introduce students to the power of communication in a variety of applications and contexts. The course introduces students to a range of communication theories, and provides opportunities to apply those theories to communication phenomena. Possible contextual focuses for the course could include: the rhetoric of social movements, strategic communication through song, the rhetoric of religion, family communication, or other emerging topics within the field. Class activities, discussions, readings, and assignments are designed to develop a better understanding of communication theories and skills through critical analysis of communication phenomena. Prerequisites: Any 100-level Communication course AND any 200-level Communication course, OR Permission of Instructor.

Criminal Justice

FOR MORE INFORMATION, CONTACT THE CRIMINAL JUSTICE DEPARTMENT IN MAWHINNEY HALL, ROOM M280, (315) 498-2341.

CRJ 101 Justice System (3) This introductory course is designed to acquaint students with the collection and analysis of crime data, the activities of the components of the criminal justice system, and key criminological theories. Special attention is paid to the interrelationship among law enforcement, courts, and corrections as they work toward balancing public order and individual rights in an increasingly diverse society. Required of all Criminal Justice majors. Prerequisite or co-requisite: ENG 099 and RDG 093, if placements are not at college level, or Permission of Instructor.

CRJ 102 Introduction to Criminal Law (3) An in-depth study and historical approach to the development and understanding of criminal law. A survey of the basic elements required to classify occurrences as crime. Classification of crimes with respect to the segments of society they affect. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 107 Women and Crime (3) Women and Crime is designed to acquaint the student with issues affecting women involved in crime and the Criminal Justice System. The etiology, extent and nature of female crime will be discussed. The involvement of women in each phase of the criminal justice system from arrest, sentencing, and corrections will be studied. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 108 Police Community Relations (3) Designed to explore the interpersonal relations of police officers (male and female) as they deal with various unique and identifiable community ethnic and racial groups. The traditional role expectations of Law Enforcement will be assessed in light of changing community demands for protection and service. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 132 Introduction to Security (3) Historical background of security, nature and scope of private security functions in a modern society, the basic principles of physical security guard services - contract or proprietary, internal loss prevention, defensive systems, electronic devices, fire prevention and safety, the security function in the corporate structure, bomb procedures, hospital security, disaster planning, polygraph procedures, loss prevention and retail theft, career opportunities in the security profession. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 142 Criminal Investigation (3) Investigative methodology in the field of crime, modus operandi, sources of information, crime scene search and recording, collection and preservation of physical evidence, interviews and interrogation, scientific aids, observation and description, case preparation, testimony in court. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 201 Criminology (3) This course examines the nature, function, and causes of crime. Tracing the evolution of crime theory from the 18th Century to the present, focus is placed on the application of theory within the context of contemporary crime control policy, victimization and offender treatment within the criminal justice system. Prerequisite: CRJ 101 and ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 202 Ethics and Criminal Justice (3) This course will explore the ethical issues that confront modern practitioners in the various criminal justice settings. Emphasis will be placed on recognizing and analyzing moral dilemmas confronting criminal justice professionals, both on an organizational and individual level, as well as determining responses to those complex and controversial dilemmas through an understanding of ethical theories, the development of ethical reasoning skills, and the application of appropriate standards and codes of conduct. Approaches to solving ethical dilemmas are applied to the reality of careers in a variety of criminal justice fields such as law enforcement and punishment and corrections, to the role of the prosecutor, defense counsel and judiciary in the administration of justice. Prerequisite: CRJ-101.

CRJ 203 Juvenile Delinquency (3) This course examines the justice system's practice of treating juveniles and adults differently. It addresses the physical, emotional, and social issues faced by juveniles in an increasingly diverse society. Students will study the major

theories proposed as explanations of deviant and delinquent behavior, and will explore the use of theory as a foundation for policy and research. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 206 Juvenile Justice System (3) The main focus of CRJ 206 will be Family Court proceedings. It will explore the circumstances surrounding what happens to a youngster from being taken into custody to adjudication and placement. It will cover the child's passage from detention through Family Court proceedings, i.e., intake, probation and referral to community agencies. Types of placements will be explored, i.e., public vs. private institutions, their criteria for accepting children and the need for follow-up counseling and/or family therapy upon the youth's release and return to society. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 207 Sexual Violence and the Criminal Justice System (3) This course will explore the criminal justice system's response to crimes of sexual violence against both adults and juveniles, including the crimes of child sexual exploitation and the global sex trade industry. The various types of offenders and rehabilitative efforts will be discussed as will the role of law enforcement in all aspects of the investigation and the specific problems that arise in the process of adjudication. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 210 Terrorism and the Criminal Justice System (3) This course introduces the student to the study of terrorism. It will focus on both domestic and foreign varieties of this unique form of organizational crime and its implications for the American criminal justice system. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 212 Organized Crime and Society (3) A systematic exploration of theoretical and practical issues pertinent to organized criminal activity. The organizational structures of traditional and non-traditional groups are studied as well as the historical background beginning in the nineteenth century. The impact on law enforcement is thoroughly reviewed with special emphasis on illegal drug trafficking. The relationships between drug use and crime is examined from the legal and societal viewpoint. Additionally, the relationship between the political environment and organized crime, including the infiltration of legitimate business, is studied. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 215 Criminal Law (3) A study of the scope, purpose, definition, and classification of crimes. Consideration is given to the more common offenses under the Penal Law. A concern for criminal intent, acts of omission and commission, arrest, and search and seizure, along with an introduction to the Criminal Procedure Law, is emphasized. The rules of evidence and their application to proper law enforcement will also be discussed. Prerequisite: Completion of CRJ 101 and ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 216 White Collar Crime (3) An examination of major issues and current problems that are associated with occupational and non-occupational criminal behavior. Public policy and methods of prevention are explored, and a review is conducted of various celebrated investigations which include examples of corporate crime, state authority crime and computer crime. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 217 Crime and the Media (3) The media has a significant impact on the criminal justice system. This course will investigate the interplay among various aspects of the media and the criminal justice system. Students will have the opportunity in class to examine products of the media that relate to police, courts and corrections. The media's portrayals of a diverse population and the subsequent impact on the functioning of the criminal justice system will be explored. The course will analyze the legal and ethical issues faced by both the media and the criminal justice system in the administration of justice in the United States. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 218 Drugs and the Criminal Justice System (3) An examination of the impact of drugs on the criminal justice system including the police, courts and corrections. The history of drugs and alcohol prohibition will be studied within the context of traditional crime and organized crime. Other topics will include the drug problem in relationship to the crime rate, national criminal justice policy strategies and the infiltration of legitimate enterprises by criminal drug organizations. Students will research relevant topics and report their findings as well as their conclusions based upon their research. This course has a criminal justice focus and will not fulfill the New York state mandate for drug and AIDS education for teaching certification of education majors. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 219 Victims, Witnesses, and the Criminal Justice System (3) This course focuses on the impact of crime on its victims and witnesses. Specific types of victims, witnesses, and crime will be studied, including homicide, sexual assault, domestic violence, child maltreatment, and elder abuse. This course requires the student to analyze restitution issues, the treatment of victims and witnesses by the criminal justice system, victims' rights legislation, and contemporary trends in the treatment of crime victims and witnesses. Prerequisite: Placement in ENG 103 and RDG 140/153, or Permission of Instructor.

CRJ 220 Corrections Process (3) This course focuses on the development, organization, and effectiveness of corrections. The legal rights of the probationer, the inmate, and the parolee are examined in detail, providing both the student and practitioner the basis for understanding future developments in corrections. Observations are made as to the effectiveness of modern rehabilitation techniques, obstacles to correctional progress, and strategic errors made in correctional reform. Students are taught to perceive and articulate ethical issues in corrections. Prerequisite: CRJ-101; ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 226 Law Enforcement Process (3) This course covers the history and development of law enforcement in modern society and the various systems of police control; philosophical aspects of police service with an overview of crime and police problems; the process of justice and constitutional limitations on law enforcement; organization and jurisdiction of local, state, and federal agencies; and a survey of professional career opportunities. Students are taught to employ ethical perspectives and judgments in applying this knowledge to related problems and changing fact situations. Prerequisite: CRJ-101; ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 232 Cybercrime (3) This course focuses on computer based crime and cybercrime issues facing the American criminal justice system. The course explores computer based crime investigations, the importance of preserving and correctly interpreting digital evidence, the application of cybercrime laws and regulations along with the identification of emerging issues facing the legal system (Courts). Students will also examine the future trends of cybercrime and government responses. Prerequisite: CRJ 101.

CRJ 235 Private Investigation (3) Explores the entire scope of

procedure and methods necessary in understanding the complex mechanism involved in the field of private investigation. Private Investigation will examine the world of the "private eye" and what laws govern these activities. An in-depth study will be made in intelligence gathering, the polygraph, records and reports, undercover work, surveillance, employing photography as evidence, and the use of actual case histories to illustrate various techniques available to the private investigator. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 240 Capstone Course in Criminal Justice (1) This capstone course is the culmination of the criminal justice student's academic experience. It serves to synthesize the knowledge gained from each course taken within the criminal justice curriculum and better prepare the graduate to continue on to upper-division studies in the discipline or for entry-level career positions in the criminal justice system. Among other requirements, the student will develop and prepare a research project that will result in an end of semester presentation to the class. Prerequisites: Criminal Justice matriculation, Permission of Instructor and completion of 42 credits hours including all required Criminal Justice courses, ENG 103, ENG 104, and a Communication requirement.

CRJ 241 Special Investigations (3) Investigation methodology in the field of crime. Special attention is given to the various aspects of homicide investigation. Also covered is the area of organized crime, forgery, and white-collar crime. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 243 Criminalistics I (3) The collection, preservation, analysis, and interpretation of physical evidence of various types, including latent fingerprints, footprints, tire tracks, tool marks, blood, hair, fabrics, etc.; narcotic identification, fingerprint classification, photography, spectrographic analysis, court presentation, and expert testimony. This course is designed to aid in the training of investigators. It does not qualify one as a criminalist or laboratory technician. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 244 Evidence Analysis (3) This course covers the advanced microscopic and chemical methods of crime detection: DNA, drugs, explosives, poisons, ultraviolet and infrared examinations, advanced optical and instrumental methods of analysis. Special problems and topics of interest in criminalistics are also covered. Prerequisite: CRJ-101; ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 252 Internship (3) A practicum designed to broaden the educational experience of students through appropriate observational work assignments with governmental agencies and private firms. Students may choose to select an internship from either Law Enforcement, Corrections, or Community Service in related Justice agencies. Prerequisite: ENG and RDG placement must be at college level, and Permission of Instructor.

Computer Science

FOR MORE INFORMATION, CONTACT THE COMPUTER STUDIES DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W230, (315) 498-2427.

CSC 109 Algorithm Development (1) This course teaches Computer Science students to develop solutions for simple and complex problems through top-down algorithm and pseudo-code design. Topics will include general program flow structures including linear processing, selection, and iteration. Students will learn the procedures to break problems into smaller pieces in order to develop, refine, and test their algorithms. Co-requisite: CSC 110 or 111, the student's first programming course.

CSC 110 Program Design and Development (4) This is a language dependent introduction course on computer program design and development. Emphasis is on the identification and solution of business problems through systems of computer programs. Programs are described and designed through such tools as program flowcharts, structure charts, and pseudocode. Within this framework, programming languages are treated as tools which can be selected, as appropriate, to implement the designs.

CSC 111 Fundamentals of Computing I (4) This course provides the foundation for a program of study in computer science. It introduces the discipline of computing and the roles of professionals. A contemporary high-level language with appropriate constructs for structured design and structured types is presented. It integrates an introduction to algorithm design, an understanding of abstraction applied to date types and structures, and an appreciation of imperative and object-oriented programming. Programming assignments are an integral part of this course.

CSC 112 Fundamentals of Computing II (4) This course develops the discipline of computing and the roles of professionals by introducing software engineering early in the learning process. This course formally presents abstract date types (ADTs). The ADTs presented are stacks, queues, lists, trees, graphs and tables. Simple sorting and searching techniques, along with their efficiency are studied. The use of pointers and recursion is covered. Programming assignments are an integral part of this course. Prerequisite: CSC 111.

CSC 162 Visual Basic I Programming (4) This course covers the manner in which the computer is used to solve problems. Lectures cover the style and techniques necessary to solve problems using the Visual Basic programming language. Object-oriented programming (OOP) will be covered. This course will allow students to take advantage of the many new capabilities of building applications in a graphical user interface (GUI).

CSC 211 Computer System Organization (4) This course emphasizes the organization and operation of real computer systems at the architectural level. The mapping of statements and constructs in a high-level language onto sequences of machine instruction is studied, as well as the internal representation of simple data types and structures. Topics include the fetch/execute cycle, bus structures, memory hierarchy, addressing modes, and subroutines. Alternative architectures, such as vector and parallel models, are presented. Three lecture hours per week. Prerequisites: CSC 110 or CSC 111.

CSC 221 Software Engineering (4) This course is the capstone course for the AS degree in Computer Science. The course focuses on software engineering and requires a major software project. Topics include: object-orientation, software design tools and techniques (such as data flow diagrams, structure charts, CRC cards, algorithms, pseudocode), software reuse, software test strategies, and documentation standards. Prerequisite: CSC 112.

CSC 222 Game Programming (4) This course is an introduction to game programming techniques and gaming development. Topics include 2D graphics and code generated animation, sound technologies, interactivity, and multi-player games. Prerequisite: CSC 111 or Permission of Instructor.

CSC 224 Application Development for Mobile Devices (4) This course is an introduction to application development and techniques for mobile devices. Topics may include development of games, social applications, and other applications for mobile devices. Four lecture hours. Prerequisite: CSC 111 or POI.

CSC 250 Server Administration (3) This course is an introduction to the administration of servers operating in a client server environment. Students will be introduced to the system software running client server networks, and will learn to install, configure, monitor, and manage a network server. Specific topics include server software installation, protocols, shells, system and user administration, scripts, and daemons. Students will be exposed to several different operating systems and several server applications, such as Web, ftp, database, and mail servers. Three lecture hours. Prerequisite: CIS 130 or Permission of Instructor.

CSC 255 Database Design and Development (3) The fundamentals of database design and implementation are introduced with an emphasis on data relationships. Utilization of a Database Management System (DBMS) and its components will be covered, along with Structured Query Language (SQL) and data security techniques. Prerequisite: CIS/CSC major with sophomore standing.

CSC 263 C++ Programming (4) An introduction to the C++ language which provides software developers with an "extendable" language in which abstract data types suitable for a given application can be created and then used as naturally as built-in data types. While based on the C programming language, C++ provides data and function encapsulation, function overloading, inheritance, strong typing, and other features needed for object-oriented programming (OOP). This makes C++ a true high-level language suitable for professional software engineering. The language constructs and OOP methods are introduced with a series of examples of increasing sophistication which are the basis of project assignments. Four lecture hours and one optional recitation hour per week. Prerequisite: CSC 110 or CSC 111 or Permission of Instructor.

CSC 264 Java Programming (4) This course introduces object-oriented Java using current technical advances in programming methodology, Web-based applications, and applications for hand-held devices. Java methods,classes, objects, inheritance, graphics, animation, and networking are discussed. Four lecture hours per week. Prerequisite: CSC 111 or Permission of Instructor.

CSC 265 Visual Basic Programming II (4) This course builds upon the fundamental topics explored in CSC 162. More advanced topics involving object oriented programming (OOP) will be studied. This includes Graphical User Interface (GUI); File and Database Management; ActiveX controls; Networking, Internet and World Wide Web applications; Multimedia applications; and Dynamic Data Structures. Prerequisite: CSC 162 or Permission of Instructor.

CSC 280 C#.Net Programming (4) This course focuses on the language and programming fundamentals of the C# language and object-oriented programming, in the context of the .NET development environment. Topics covered will include: the .NET platform including common language runtime and framework, Visual Development Environment, Object-Oriented Programming, C# Language and Application Structure, basic GUI constructs, and basic concepts of XML. This course may not be used to fulfill a Liberal Arts elective. Prerequisite: CSC 112 or Permission of Instructor.

Economics

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM M380, (315) 498-2301.

ECO 103 Modern Economic Issues (3) In this course, students will discuss current micro and macro economic issues in an intuitive, non-mathematical format. A wide range of topics are covered with an emphasis on the global economy. This course satisfies the Humanities and Social Sciences Global Awareness requirement and is open to all students.

ECO 104 Personal Finance and Consumer Economics (3) This course is an introduction to financial planning and consumer practices. Topics include: money management, investments, tax planning, estate planning, insurance, real estate, and the purchasing and financing of consumer goods and services.

ECO 160 Poverty, Inequality and Discrimination (3) This course covers various causes of poverty in the U.S. (relative poverty) and in developing nations (absolute poverty), as well as policies, programs, and proposals for improvement. Inequality, stratification, and discrimination are also addressed. This course satisfies the Humanities and Social Sciences Global Awareness requirement and is open to all students.

ECO 203 Principles of Macroeconomics (3) This course is an introduction to the forces that shape overall economic activity and determine productivity, standards of living, economic growth, employment, inflation, interest rates, and business cycles. Prerequisite: MAT 087/088 or equivalent.

ECO 204 Principles of Microeconomics (3) This course is an introduction to microeconomic theory and applications, stressing consumer and producer behavior, price determination, trade, market structures, markets for factors of production, market failure, government failure, and international issues. Prerequisite: Math 087/088 or equivalent.

ECO 209 Money and Banking (3) A study of the nature and function of money and finance, this course outlines the institutional framework of the American financial system and describes and explains the special roles played within the system by financial institutions and markets. Topics include the risk and term structure of interest rates, debt and equity markets, financial structure, financial crisis, financial regulation, financial derivatives, and foreign exchange markets. Prerequisite: MAT 087 or 088 or equivalent.

ECO 219 Fundamentals of Investments (3) This course examines the relationship between risk and return, asset allocation, portfolio theory, and investment vehicles including stocks, bonds, mutual funds, options, and futures. Prerequisite: MAT 087/088 or equivalent.

Education

FOR MORE INFORMATION, CONTACT THE HUMAN SERVICES AND TEACHER EDUCATION DEPARTMENT IN MAWHINNEY HALL, ROOM M280, (315) 498-2341.

EDU 145 Foundations of Tutoring (1) Designed specifically for students interested in tutoring, this course explores the roles and responsibilities of peer tutors. Topics include strategies for one-on-one, small-group, and special population tutoring.

EDU 154 Fostering Creativity Through the Arts (3) This course introduces students to the development of creativity through expressive arts, music, movement, and dramatic play. Concepts related to creativity, curriculum development, and awareness of cultural diversity in the arts will be explored through developmentally appropriate practice. Prerequisite: EDU 180 or Permission of Instructor.

EDU 155 Developmental Care of Infants and Toddlers (3) An overview of methods of fostering the development of infants and toddlers, emphasizing the caregiver role in planning environment and interacting with children. In order to complete some assignments, students must have a child under three years of age available for observation and interaction.

EDU 156 Guidance of Young Children (1) This course focuses on

developmentally appropriate, evidence based approaches and positive guidance strategies for supporting the development of each child. An emphasis will be on supportive interactions and environments. The impact of family, culture, language and ability will also be explored.

EDU 157 Early Childhood Environments (1) This course explores the process of designing developmentally appropriate learning environments for young children. Emphasis will be on physical space, both indoor and outdoor, room arrangement, how the environment supports families, and how to design an environment that is engaging for young children.

EDU 158 Infant-Toddler Development (3) This course examines all domains of infant and toddler development including: prenatal development, language development, cognitive development, motor development, and social/emotional development. Atypical development and the importance of early intervention will also be presented and discussed. In addition, the observation and caregiving skills necessary for a quality infant and toddler program will be presented. In order to complete assignments, students must have a child available to observe. Prerequisite: English and Reading placement at college level.

EDU 172 Classroom Management (3) This course explores guidance theories, applications, goals, techniques, and factors that influence teacher expectations and classroom management issues. The effects of culture and student diversity on the classroom environment will also be explored. Classrooms serving children ages two to twelve years will be addressed.

EDU 174 Teaching Fieldwork: Instruction and Seminar (3) This course orients students to teaching in an inclusive special education classroom and to working with families. Students will work a total of 100 hours over the semester, dividing their focus among the inclusive classroom, a family with a child with disabilities, and the community. The weekly seminar is used to discuss fieldwork experiences, teaching concepts and skills. A medical examination, fingerprinting, and Child Abuse Central Register clearance may be required. Prerequisites: EDU 182 and 230; co-requisites: EDU 272 and 273.

EDU 180 Early Childhood Education: An Introduction (3) This course is designed to introduce prospective early childhood (Birth-2) and childhood (1-6) education teachers to the historical, philosophical and cultural approaches to the study of early childhood education. Students will examine current issues and challenges and begin development of their professional education skills and beliefs. A field component will be required. Prerequisite: English and Reading placement at college level.

EDU 182 Child Growth and Development (3) This is a specialized course in child development which studies the emotional, social, cognitive and physical development from the prenatal period to pre-adolescence. Students will use observation and assessment techniques to build an understanding of growth and development. Multiple influences on child development and learning, including the sociocultural context of development, will be explored. Prerequisite: English and Reading placement must be at college level.

EDU 183 Observation and Assessment of Young Children (3) This course prepares students to use systematic observations, documentation, and other assessment techniques to understand young children's growth and development. Observation and assessment will focus on physical, cognitive, language, and social/emotional development. Students will compile various observations and assessments in a study of one child's development over the course of the semester. An additional component of the course will focus on observation and assessment of early childhood education environments. Prerequisites: EDU 180 and 182, or EDU 180 and PSY 204.

EDU 184 Early Childhood Field Instruction and Seminar I (3) This first-level fieldwork course offers students the opportunity to apply theories learned in previous early childhood education courses to practice. Under the supervision of an experienced early childhood teacher/caregiver, each student develops basic interaction, guidance, and supervision skills. The course also focuses on implementing and evaluating developmentally appropriate activities for children. The weekly seminar is used to discuss fieldwork experiences, teaching concepts and skills. Fieldwork must be completed at the Children's Learning Center on campus, an NAEYC accredited program, or other program approved by the instructor. A medical examination and Child Abuse Central Register clearance are required. Prerequisite: 2.0 overall G.P.A., and EDU 180 and 182 (or PSY 204), or Permission of Instructor; co-requisite: EDU 281.

EDU 185 Teacher and Parent Relationships (1) This course focuses on the dynamics of child-teacher-parent relationships. Students will explore family diversity, parenting styles, effective communication, parent education, and family involvement. Strategies dealing with issues that emerge when working with young children and their families will be studied.

EDU 200 Intentional Teaching, Observation, Assessment, and Curriculum Planning for Young Children (1) This is a specialized course in observation and assessment that focuses on intentionally connecting classroom observations with specific developmental child outcomes. Various strategies will be introduced to guide students to purposeful documentation and use of observation data to plan meaningful curriculum. Prerequisite: English and reading placement at college level.

EDU 230 Human Services With Diverse Populations (3) This course examines the domestic and global contexts of diversity and the impact of ethnicity, race, gender, ability/disability, socio-economic class and sexual orientation on our lives. Students will develop self-awareness regarding their own feelings, assumptions and behaviors in relation to others different from themselves and will explore how these impact their personal values, belief system and interactions with others. Same course as HUM 230; students may not receive credit for both courses. Prerequisite: English and Reading placement must be at college level.

EDU 255 Mathematics, Science, and Technology for Young Children (3) This course investigates the standards, principles, and practices of teaching mathematics, science, and technology to young children. Emphasis is placed on designing integrated math and science activities, and the use of technology, that utilize developmentally appropriate content, processes, environment, and materials. Prerequisite: EDU 281 or Permission of Instructor.

EDU 272 Perspectives on Disabilities: Child, Family, School, and Community (3) Students will explore the traditional and emerging roles and practices of diverse families, school reform efforts, models for effectively developing collaboration, cooperation, and parnership wtih school and community agencies. Prerequisites: EDU 182 and 230; co-requisites: EDU 174 and 273.

EDU 273 Principles of Inclusive Education (3) Students examine various strategies that can be used in inclusive classrooms to teach students with diverse needs. Best practices and current controversies in inclusive education will be examined and discussed. Students will also develop an understanding of their philosophy of inclusive education. Prerequisites: EDU 182 and 230; co-requisites: EDU 174 and 272.

EDU 275 Cultural Foundations of Education (3) This course focuses

on philosophical, historical and cultural approaches to the study of education in the United States. Current educational concerns that affect teaching and schools will be studied. An anti-bias perspective will be emphasized. Students will be required to complete a field component. Prerequisite: PSY 204 or PSY 207 or EDU 182.

EDU 280 Language and Literacy Development in Young Children (3) This course examines the development of language and literacy in young children from birth through the primary years. Students will explore theoretical foundations of early literacy development and the implementation of various models to effectively support young children as readers and writers. Other topics include: working with families to support early literacy development, selecting quality children's literature, assessing early literacy development, integrating literacy throughout the curriculum and adaptations for individual children in diverse and inclusive settings. Prerequisite: EDU 182 or EDU 158 or PSY 204 or PSY 207.

EDU 281 Curriculum Development (3) The theoretical basis for setting educational goals and planning developmentally appropriate experiences for children from birth to eight (with emphasis on preschool to eight) is studied, as well as methods for planning, supervising, and evaluating these experiences. Prerequisites: 2.0 overall G.P.A., and either EDU 182 or PSY 204; co-requisite: EDU 184.

EDU 282 Family, School and Community (3) This course examines the contexts in which children develop, including family, school, and community, and how teachers can work together with parents and community resources to foster the optimum development of children. Prerequisites: EDU 182 and PSY 103 or SOC 103 or Permission of Instructor.

EDU 283 Early Childhood Field Instruction and Seminar II (3) This optional second-level fieldwork course builds on the competencies developed during the first-level fieldwork experience. Particular attention is given to assuming classroom teacher responsibilities of planning, supervising, and evaluating curriculum activities that are developmentally appropriate as well as integrated. The weekly seminar is used to discuss fieldwork experiences, teaching concepts and skills. A medical examination, fingerprinting, and Child Abuse Central Register clearance are required. Prerequisite: EDU 184 or Permission of Instructor.

EDU 285 Early Child Special Education: Introduction (3) This course provides an introduction to special education in early childhood and the early primary grades. The legal foundation of special education, public laws, the New York State Special Education process and contemporary models and issues in the field of special education will be examined. Students will explore the causes, characteristics and educational implications of disabilities. The course will also focus on selecting/modifying appropriate teaching strategies in inclusive early childhood environments and in early primary classrooms. Strategies for working effectively with families and early childhood special education professionals in the context of early childhood programs will also be examined. Exploration of personal competencies and ethical issues in special education will be explored. A field component is required. Prerequisite: EDU 182, PSY 204 or Permission of Instructor.

Electrical Engineering Technology

FOR MORE INFORMATION, CONTACT THE ELECTRICAL TECHNOLOGY DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W143, (315) 498-2451.

ELT 100 Foundations of Electronics (4) An introductory course in instrumentation and laboratory skills for technology students. Various aspects of electrical circuit measurement techniques are investigated in the laboratory, with emphasis placed on component identification, signal tracing, soldering and troubleshooting. Each student will be required to purchase one electronics kit for assembly in the laboratory, as designated by the instructor. Three class hours and a two-hour laboratory. Co-requisite: MAT 087 or Permission of Instructor.

ELT 101 Electrical Power Distribution and Overhead Construction (3) This course primarily deals with concepts and skills that are necessary for the construction and maintenance of overhead electric power distribution systems. Topics include: safety, performing construction from an overhead position on the distribution poles, use of ropes and rigging equipment, and operation and installation of transformers. The course is taught at the National Grid Training Laboratory in Liverpool. Two hours of lecture and two hours of laboratory. Prerequisite: Permission of Instructor.

ELT 120 Ethics in Engineering and Technology (3) This course is an investigation of fundamental ethical issues relating to the fields of engineering and technology, focusing on organizing principles and ethical theory to frame problems that are typically encountered in the engineering industry. Topics to be discussed include: professional responsibility and accountability; honesty and integrity in the workplace; intellectual property; conflicts of interest; environmental issues; risk, safety and product reliability; legal liability; and diversity in the workplace. Contemporary case studies will be examined and debated in the context of such traditional philosophical schools of thought as utilitarianism and Kantian ethics. Prerequisite: ENG 103 or Permission of Instructor.

ELT 131 Electrical Circuits (4) In this course students learn to analyze DC and AC passive circuits using Ohm's Law, Kirchhoff's laws, and Superposition. RC and RL circuits are analyzed for impedance and phase angles. Troubleshooting, analysis by computer simulation using simulation software, and telecommunication applications are stressed throughout. Prerequisites: MAT 107, CMT 110.

ELT 141 Circuits I (4) Course topics include the introduction and use of DC and AC voltage sources, along with resistors, capacitors and inductors in series, parallel and series/parallel circuits. Circuits are analyzed using Ohm's Law, Watt's law, Kirchhoff's current and voltage laws. The course concludes with the application of these basic concepts to high-pass, low-pass, band-pass and band-reject filters. Laboratory exercises emphasize the construction, analysis, measurement and trouble shooting of basic RLC circuits using state of the art laboratory equipment. Thevenin's theorem, Norton's theorem, transformers, the use of algebra, complex numbers, engineering notation and the use of scientific calculators are also covered. Lecture hours and lab hours are required for this course. Prerequisite: MAT 114 or equivalent.

ELT 142 Circuits II (4) This is an advanced course in DC and AC circuit theory. Topics addressed in this course review and expand on the concepts from Circuits I (ELT 141). New topics include Thevenin's, Norton's and superposition theorems, mesh and nodal analysis, magnetism, and fundamental power concepts. Laboratory exercises emphasize circuit construction, analysis and measurement using advanced laboratory equipment. Lecture hours and laboratory hours are required for this course. Prerequisite: Completion of ELT 141 with a grade of C or better.

ELT 153 Electronic Systems for Telecommunications I (4) Students practice the analysis and application of advanced electronic circuits as applied to the telecommunications industry. Topics include frequency

response of filters, op-amps, oscillators, amplitude modulation, noise and LC circuits. Troubleshooting and analysis by computer simulation software is stressed throughout. Prerequisites: ELT 131 and PHY 101.

ELT 161 Electronic Circuits I (4) Introduction to semiconductor theory, devices and circuits. Devices include: diodes, transistors, thyristors and integrated circuits (operational amplifiers & voltage regulators). Circuits include: power supplies, switching and amplifier. Three class hours and a three-hour laboratory. Prerequisite: Completion of ELT 141 with a grade of C or better.

ELT 180 HVAC Electrical Theory and Application (3) This course teaches the fundamental skills of troubleshooting residential and light commercial HVAC electrical system problems. Technicians learn and practice proven diagnostic techniques that they can apply immediately. The goal of the course is to provide technicians with both the skills and confidence necessary to tackle any electrical system malfunction, with emphasis on rapid discovery of the failed component and root cause determination. Prerequisite: Minimum of one year of field experience in servicing and maintaining residential and light commercial HVAC equipment, or Permission of Instructor.

ELT 201 Power Technology (4) This course is an overview of the electric power system from generation to transmission, distribution, and delivery of electric power. Topics include: methods of generating electricity such as hydro, thermal coal, thermal nuclear, solar and gas turbine; transmission system voltages and construction; Wye and Delta distribution systems; transformers, single phase and three phase banks for common delivery voltages; electric service construction and building wiring methods; and electric safety. The course is taught at the National Grid Training Laboratory in Liverpool. Prerequisite: ELT 101; prerequisite/co-requisite: MAT 088 or Permission of Instructor.

ELT 215 Programmable Logic Controllers (4) Designed to introduce students to the basic principles that govern the function and operation of the programmable logic controller (PLC). It focuses on the common input and output devices that are typical in sequential and process control applications. Topics include: PLC applications, logic concepts and ladder diagrams, CPU, memories, input/output devices, safety issues, maintenance techniques, I/O and memory addressing, ladder logic programming language, design of relay operated process, and proper installation methods. Three lecture hours and a three-hour laboratory. Prerequisites: CMT 171 and ELT 141, or Permission of Instructor.

ELT 221 Home Technology Integration (4) This course explores devices, communication systems and protocols (Home Area Network) used at the consumer's home or small business with emphasis on energy management. It includes the use of home alternative energy sources, smart meters and connection to the grid. The course includes planning, implementation and management of HTI systems. Three class hours and three laboratory hours per week. Prerequisite: ELT 141 and CMT 171.

ELT 222 Introduction to Alternative Residential Energy Systems (4) Students practice the analysis and application of physical level services and methodologies as applied to residential alternative energy sources. Topics include power requirement estimation, solar, wind, and hydrogen fuel cell technologies as well as geothermal heating and cooling. Cost analysis and the time required to "break-even" are also included. Three class hours and three laboratory hours per week. Prerequisite: ELT 161.

ELT 257 Electronic Systems for Telecommunications II (4) Students practice the analysis and application of advanced electronic circuits as applied to the telecommunications industry. Topics include frequency modulation, communication techniques (digital, wired, and wireless), transmission lines, antennas, and fiber optics. Troubleshooting and analysis by computer simulation software is stressed throughout. Prerequisite: ELT 153.

ELT 258 Advanced Electronics (4) Applications of solid state devices in systems, emphasizing power and industrial control circuits. Included are thyristors, operational amplifiers, timers, voltage regulators, opto-electronics, and motor control. This course may be modified in response to rapid technological changes, to ensure that the most important devices are included. Three class hours and a three-hour laboratory. Prerequisites: ELT 142 and 261.

ELT 261 Electronic Circuits II (4) This course covers circuits with active devices and electronic amplifier circuit concepts including voltage and current sources, gain, attenuation, I/O impedances, frequency response, multistage effects, and decibel math. Devices studied are BJT and FET transistors, LEDs and opto-isolators, thyristors, integrated op-amps, instrumentation amplifiers, 555-timers, and selected ICs. Three class hours and three laboratory hours per week. Prerequisite: Completion of ELT 161 with a grade of C or better.

ELT 265 Communication Systems (4) This course focuses on radio communications circuits and systems, including tuned amplifiers, mixers, carrier signal modulation, transmission, demodulation, transmission lines and antennas. Emphasis is placed on circuits and concepts common to many types of systems. Circuits of super heterodyne receiver systems are investigated in the laboratory. Three class hours and a three-hour laboratory.

ELT 285 Power Systems I (4) This course is a review of AC circuit concepts including Kirchhoff's Laws, vector algebra, phasor diagrams, magnetism, and transformer operation. It also covers poly-phase systems including three phase generation, wye and delta connections, as well as AC and DC rotating machinery. Three class hours and a three-hour laboratory. Prerequisite: Completion of ELT 141 with a grade of C or better.

ELT 289 Cooperative Education (3) Designed to provide work experience directly related to the student's field of study. A learning contract, containing specific educational objectives related to work experience and the student's field of study, is developed by the student and the faculty co-op coordinator. Course requirements include a minimum of 180 hours of work in the student's field of study, maintenance of a daily log of hours worked and duties performed, attendance at three two-hour on-campus seminars, and a work-related final project. This will allow the student to earn three credit hours. The student can earn a total of six credit hours with additional 180 hours of work experience (without seminars) and an extended final project. The student's performance will be evaluated by the faculty co-op coordinator on the basis of the objectives in the initial learning contract with a grade of Satisfactory or Unsatisfactory. NOTE: The number of credit hours must be determined at the time of registration. Prerequisite: Approval by the ELT department and the Career and Applied Learning Center.

Electronic Media Communications

FOR MORE INFORMATION, CONTACT THE ELECTRONIC MEDIA COMMUNICATIONS DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W150, (315) 498-2321.

EMC 101 Mass Media Communications: An Introduction (3) This course presents an overview of mass media as public communication and traces the histories and technological developments of print, film, radio and television broadcasting, cable and satellite communications,

the Internet, and interactive media. Topics covered include laws and regulations, news and commerce, media management and business practices, journalistic ethics, international electronic media, content delivery, and ratings and audience feedback, with special emphasis on the role of mass media in society.

EMC 144 Audio/Video Production: An Introduction (4) This course is designed to give the student a basic overview of audio and video production. Theory and terminology are introduced through lecture and hands-on application. The student will be introduced to the skills necessary to operate audio and video equipment in studio settings and begin to develop visual and aural literacy. This course is a requirement for all other Electronic Media Communications production courses. Five lecture/production hours per week. Prerequisite: EMC majors or Permission of Instructor. Fall semesters only.

EMC 155 Digital Audio Production (3) This course is intended to give the student a practical as well as a theoretical approach to digital audio production. Emphasis is placed on the use of digital audio in sound recording, audio editing, multi-track mixing, and audio processing. The student will be exposed to audio production/editing procedures and techniques. Prerequisites: EMC 144; EMC majors only. Spring semesters only.

EMC 159 Television Studio Production (4) This course stresses the importance of effective aural and visual communication, teamwork, and problem-solving skills necessary for success in the process of television studio production. Television studio production techniques and disciplines are explained, demonstrated, and applied. This course builds on basic production techniques and skills developed in EMC 144 Introduction to Audio/Video Production by engaging the student in more demanding assignments and more sophisticated production work. Particular emphasis is placed on developing critical thinking and analytical skills, as they apply to production. Five lecture/production hours per week. Prerequisites: EMC 144; EMC majors only. Spring semesters only.

EMC 160 Radio Station: An Introduction (3) This radio course is designed to introduce the student to the terminology, technology, concepts, and structure of radio broadcast stations. Topics covered will include FCC rules and regulations, station organization, sales, ratings, promotions, control room operations, departmental interrelationships, technological applications and industry trends. Prerequisites: EMC 144; EMC majors only. Spring semesters only.

EMC 169 Video Field Production (3) This course is designed to introduce the student to the creative aspects and fundamental technical requirements of single-camera video field production. Topics covered include the mechanics of field camera operation, location lighting and sound recording, and basic digital video editing. Principles of aesthetic film theory such as mise-en-scene, picture composition, the relationship of sound to image, continuity and visual narrative are discussed and applied in practice. Pre-production planning and design, including conceptualization, storyboard creation, site surveys, and legal and copyright concerns are covered as well. EMC Majors only. Pre-requisite: EMC 144 or POI. Spring semesters only.

EMC 190 Internship I (3) This course is designed to provide work experience directly related to the student's field of study. The student, working with the faculty co-op coordinator, will develop a learning contract containing specific educational objectives as they relate to that work experience and the student's field of study. Course requirements include a minimum of 120 hours of work in the student's field of study; maintenance of a daily log which includes hours worked and duties performed; participation in resume, cover letter, and interviewing workshops; regular meetings with the faculty coordinator; and a final work-related project determined by the faculty member. Prerequisites: EMC 144 and POI; sophomore-level EMC majors only. Students must have a G.P.A. of 2.5 or higher and obtain the recommendation of an EMC faculty member.

EMC 249 Electronic News Gathering: an Introduction (3) This course is designed to introduce students to the concepts and practices of professional news gathering for electronic media. The role of news in radio and television is explained, with emphasis on identifying and contrasting basic forms of news delivery: 24-hour news, local/network newscasts, breaking news, live updates, etc. Through classroom exercises, students will learn and practice the techniques of determining a story's newsworthiness, researching, copywriting, interviewing, producing, writing to the image and editing a virtual news story. Additional importance will be placed upon ethics and professionalism in electronic news. Prerequisites: EMC 169; EMC majors only. Fall semesters only.

EMC 251 Sportscasting I (3) This course is designed to present an in-depth study of the world of Sports Communications, concentrating specifically on Fall and Winter Sports (intercollegiate and scholastic levels). Special emphasis will be placed on football, soccer, ice hockey, and volleyball. Radio/TV students will become familiar with the techniques used to research, produce, facilitate, report and analyze sporting events. Special training and actual "hands on" experience in reporting/ producing College and area college/high school sporting events is scheduled. Guest lecturers from the Sports Communications field are also scheduled. Prerequisites: EMC 144 and EMC 159; EMC majors or Permission of Instructor. Fall semesters only.

EMC 252 Sportscasting II (3) This course is designed to present an in-depth study of the world of Sports Communications, concentrating specifically on Spring and Summer (intercollegiate and scholastic levels). Special emphasis will be placed on basketball, baseball, softball, and lacrosse. EMC students will become familiar with the techniques used to research, produce, facilitate, report and analyze sporting events. Special training and actual "hands-on" experience in reporting/ producing College and area college/high school sporting events is scheduled. Guest lectures from the Sports Communication field are also scheduled. Prerequisites: EMC 144, EMC 159; EMC majors only or Permission of Instructor. Spring semesters only.

EMC 259 Digital Video Editing (4) This course is designed to enable the student to become proficient in the technical and creative aspects of non-linear digital video editing and its role in the production process. Editing concepts such as story building and pacing, techniques such as continuity and parallel editing and examples of single-camera, post-produced programs are discussed and analyzed. Planning for post-production and media management are emphasized. Three lecture/two production lab hours per week. Prerequisites: EMC 169; EMC majors or Permission of Instructor. Fall semesters only.

EMC 260 Radio Station Operations (3) This course provides the basic principles of contemporary radio station programming, focusing on formatting concepts and strategies, marketing, promotion, production, news operations, and the practical applications. Emphasis will be placed on the student's application of programming strategies through the use of the College's Internet Radio. Prerequisites: EMC 160; EMC majors. Fall semesters only.

EMC 265 Sound Design and Production for Digital Media (3) This course is designed to introduce students to the technical and creative aspects of loop-based audio production and how it is used in many types of digital media productions. Students will analyze and create audio to be used in media projects ranging from radio programming

and television/video programming to DVD's and Web sites. Prerequisites: EMC 155; EMC majors or Permission of Instructor. Fall semesters only.

EMC 269 Television News Production (4) This course focuses on the skills necessary to create content and produce a weekly television newscast. Methods of news delivery are analyzed, and students will put into practice the theories learned in EMC 249. Students will conduct effective research, practice effective interviewing techniques, and produce, report, and write copy for television news. Students will work in teams to produce a live weekly newscast. Emphasis will also be placed on ethics and professionalism, as well as legal considerations, as they pertain to producing and developing electronic news. Five lecture/production hours. Prerequisites: EMC 249 or Permission of Instructor; EMC majors only. Spring semesters only.

EMC 275 Producing for Radio (4) This course is a culmination of audio theory and practical skills learned by students in previous radio courses. Students will produce original programming in the areas of news and public affairs, documentaries, sports, college/community interest, and arts and entertainment. Emphasis will be placed on the student's ability to provide informational, educational, and entertainment programming for the college Internet radio station. Three lecture/two production lab hours per week. Prerequisites: EMC 260, ENG/JRN 157. Spring semesters only.

EMC 286 DVD Authoring (4) This course provides a hands-on approach to the conceptualization, design, production, and assessment of video projects completed on DVD. The course will focus on strategic planning (including scripting and flow charts), creation of video and audio content, proper encoding of media, file management, creation of interactive menus, proper linking of all media assets within the DVD, and outputting projects to a DVD disc. Topics of discussion will include the history, characteristics, various types, and user interactivity of the DVD format, as well as various types of digital media files and managing those files on a network. Three lecture/two production lab hours per week. Prerequisites: EMC 259; EMC majors only or Permission of Instructor. Spring semesters only.

EMC 289 Television Producing and Directing (4) This course is designed to build upon and improve the student's studio production skills, to further an understanding of the multi-camera production process, and to become proficient in directing a multi-camera, multi-source studio production. Emphasis is placed on the correct use of television directing terminology. The aesthetic principles of producing, set and lighting design, sound, visualization, and continuity are identified and applied. Five lecture/production hours per week. Prerequisites: EMC 159; EMC majors only. Spring semesters only.

EMC 290 Internship II (3) This course is designed to provide work experience directly related to the student's field of study. The student, working with the faculty co-op coordinator, will develop a learning contract containing specific educational objectives as they relate to that work experience and the student's field of study. Course requirements include a minimum of 120 hours of work in the student's field of study; maintenance of a daily log which includes hours worked and duties performed; participation in resume, cover letter and interviewing workshops; regular meetings with a faculty coordinator; and a final work-related project determined by the faculty member. Prerequisites: EMC 190 and POI; EMC majors only. Students must have a G.P.A. of 2.5 or higher and obtain the recommendation of an EMC faculty member.

Emergency Management

FOR MORE INFORMATION CONTACT THE PUBLIC SAFETY TRAINING CENTER IN MULROY HALL, ROOM R125, 315-498-6046.

EMG 150 Principles of Emergency Management (3) Principles of Emergency Management is intended to provide information that will enable persons just entering the profession or expanding their roles to have the ability to work with emergency management issues. The course tracks the history of Emergency Management from the days of Civil Defense and provides an overview of the characteristics, functions, and resources of an integrated system and how various emergency management services work together in an integration of resources and capabilities. Emphasis will be placed on how this system is applied to all hazards for all government levels, across the four phases and all functions of emergency management. Additionally, this course addresses the National Incident Management System, its components, and its relationship to Emergency Management. Through case studies, students will learn how Emergency Management has worked and evolved over the years.

EMG 152 Public Safety Critical Incident Management (1) Public Safety Critical Incident Management provides students with information relevant to public safety forces' (fire, police, and emergency medical services) roles and responsibilities when responding to an emergency. Additionally, the course provides information dealing with support service agencies and the concerns and roles of private business and local government in supporting public safety forces in emergency situations. The course provides information to encourage cooperation of all groups and agencies at the scene of an emergency, with a key component focusing on the goals and critical tasks of each public safety agency operating at a given scene. Prerequisite: EMG major or Permission of Instructor.

EMG 155 Introduction to Public Safety Response (3) Introduction to Public Safety Response will provide the student with a base-line understanding of the principles of responding to many types of emergencies. Course topics include: emergency response activities from police, fire crew, emergency medical service and business/industry perspectives; terrorism-related incidents and their specific response activities; and the interpretation and analysis of case studies to allow the student to develop an understanding of the needs of each discipline, and the importance of working together to manage emergencies. The course will provide basic incident command training, meeting the requirements of the National Incident Management System (NIMS). Students who take EMG 155 cannot also receive credit for EMG 152, EMG 182, or EMG 184.

EMG 162 Resource and Donations Management (3) This course is designed to provide Resource Management Coordinators with the knowledge and skills they need to perform resource management functions within the overall framework of the emergency operations center (EOC). This performance-based course is intended to introduce local officials (i.e., representatives of local governments and leaders of local voluntary organizations) to the concept of donations management and their roles and responsibilities in the donations management process. This course will also review the roles and responsibilities of the Resource Unit Leader, Supply Unit Leader, and other subordinate positions identified by the National Incident Management System's Incident Command System. Prerequisite: EMG major or Permission of Instructor.

EMG 165 Hazardous Waste Operations and Emergency Response (2) This course provides a comprehensive overview, covering all facets of hazardous waste management and emergency response. Topics include practical exercises and training which may be applied to

business, industry, construction and institutions, including Federal and State rules and regulations, handling procedures and proper operation of a designated waste facility, storage, labeling, manifesting, shipment, employee training, proper use of safety equipment, emergency response procedures (spills response and clean up), cost effective waste reduction, and environmental reporting procedures. This course is offered as a one week 40-hour course over the winter intersession and will provide 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) certification as specified in OSHA 29CFR 1910.120.

EMG 170 Public Information Officer Basic Course (3) The Public Information Officer Basic Course provides students with the skills needed to perform public information duties as they relate to emergency management. The course focuses on the definition of the job of the public information officer. The course assists participants with building the skills needed for this position, such as oral and written communication, understanding and working with the media, and the basic tools and techniques PIOs need to do the job. Prerequisite: EMG major or Permission of Instructor.

EMG 176 Disasters in Film and Media (3) Examination of the popular culture pertaining to natural and technological disasters that result from portrayals of catastrophic events in film by the media. Discussion of what can be done to alter myths about human behavior in mass emergency situations.

EMG 178 Emergency Response Planning (3) Planning is an essential function of an effective emergency management program and serves as a tool for emergency professionals for improving disaster management and public safety policies. The Emergency Response Planning course provides emergency management and public safety personnel with the knowledge, skills, and ability to develop or enhance their Comprehensive Emergency Management plans. The course will highlight the importance of building an integrated system for emergency planning that uses multi-agency teams to address mitigation, preparedness, response, and recovery. Prerequisite: EMG 150.

EMG 180 Emergency Management Leadership (3) The Emergency Management Leadership course is designed to provide students with the skills necessary to lead and influence others in the demanding setting of emergency management by increasing their range of skills in a variety of interpersonal areas. Students are taught to clearly identify problems and their root causes in order to be able to determine the appropriate type of decision-making style. Using a suggested process of problem-solving, participants will be able to apply creative solutions to both emergency and non-emergency situations, in an emergency management setting. These skills are then applied to the important issue of managing and developing volunteer resources. Students will learn the necessary skills to make appropriate volunteer assignments, structure programs to maintain or increase the skill levels of volunteers, and motivate volunteers to both maintain readiness and operate effectively during emergency situations. Students may not receive credit for both this course and PSY 211.

EMG 182 Basic Incident Command System (1) The Basic Incident Command System course is designed to increase the participants' knowledge and understanding of the Incident Command System. Utilizing both lectures and small group activities, participants will acquire the ability to organize and manage an incident through implementing the ICS. The material covered during the course includes an introduction to the principles and features of ICS, organizational overview, incident facilities, incident resources, and common responsibilities of key ICS positions. Prerequisite: EMG 152.

EMG 184 Emergency Response to Terrorism (1) The Public Safety Emergency Response to Terrorism course provides the knowledge and skills needed by public safety forces that respond to terrorist acts. The course provides those public safety and related support personnel the information to understand terrorism, its root causes and the motivations behind it. The course also provides methods to enable students to recognize circumstances indicating a potential terrorist attack, and to protect themselves from a variety of potential dangers. Prerequisite: EMG major or Permission of Instructor.

EMG 252 Disaster Response and Recovery (3) The purpose of this course is to introduce students to the basic concepts and operations applicable in a disaster situation (particularly for major disasters) and enhance understanding of what the proper roles and responsibilities of various local and state emergency management officials are, why they matter, and how these roles and responsibilities relate to those carried out by the federal government. To foster multi-level partnership, the course emphasizes the problem-solving aspects of disaster operations as well as associated coordination requirements. This course will also discuss the use of the National Response Plan, Emergency Management's place in the National Preparedness Goal, and current trends in disaster mitigation efforts. Prerequisite: HSD 150 or Permission of Instructor.

EMG 262 Intermediate Incident Command System (1.5) The Intermediate Incident Command System course is designed to increase the partcipants' knowledge and understanding of the Incident Command System. Utilizing both lectures and small group activities, participants will acquire the ability to organize and manage staffing. The material covered during the course includes organization and staffing, organizing for incidents and events, incident resource management, air operations, and incident and event planning. Prerequisite: EMG 182.

EMG 278 Emergency Operations Center Management (1.5) The EOC Management course provides students with the knowledge and skills they need to design, initiate, build and operate an Emergency Operations Center. The curriculum is designed using a performance-based approach, which emphasizes learning activities that are easily transferable to the job. Prerequisite: EMG major or Permission of Instructor.

EMG 280 Emergency Exercise Program Management (3) The Emergency Exercise Program Management course is intended to provide participants with the knowledge and skills to develop and conduct disaster exercises that will test a community's emergency operations plan and operational response capability. Prerequisite: EMG 150.

EMG 282 Advanced Incident Command System (1.5) The Advanced Incident Command System course is designed to increase the participants' knowledge and understanding of the inherent flexibility of the Incident Command System to manage major or complex incidents. Utilitzing both lectures and small group activities, participants will require the ability to organize and manage major or complex incidents. The material covered during the course includes command and general staff duties and responsbilities, unified command, major incident management and area command structures. Prerequisite: HSD 262.

EMG 283 Practical Applications of Incident Management (3) The complexity of incident management is exacerbated when incidents deal with protecting lives and property. Large incidents typically managed by Emergency Managers require not only the didactic aspect of incident management education, but require the ability to use many principles taught in most emergency management courses. The purpose of this course is to allow a student to demonstrate an understanding of Emergency Operations plans and to apply the

National Incident Management System principles and practices to a large, complex incident. Students will be required to research resource needs and the financial implications of decisions while using the Incident Command System.

EMG 284 Terrorism Response Planning for Communities and Schools (3) This course will help emergency planners, first responders, and others at all levels to review their preparedness efforts and response capabilities to a terrorist incident. It will also assist participants in the ongoing re-evaluations of threats, their current emergency operations plan and the implications of a terrorist incident on continuity of critical services and long-term recovery. The course also provides participants with the basic information and tools needed to develop effective plans for the wide array of potential emergencies that schools may face. Participants completing the course will be able to explain the importance of effective planning to others and to lead individuals in their school and community through the process of developing an effective multi-hazard program. Students cannot receive credit for both this course and HSD 160.

EMG 285 Emergency Management Internship (3) These 60 hours of practical experience in the business or government community will allow Emergency Management students to put various skills and knowledge they have gained through coursework to use. Students may find themselves creating hazard analyses, updating comprehensive emergency management operation plans, or observing incident managers at work, as well as other Emergency Management operations recommended by the supporting agencies. Prerequisite: Permission of Department.

EMG 286 Incident Action Planning for Rapidly Expanding Disasters (1.5) The complexity of incident management is exacerbated when incidents deal with protecting lives and property. Large incidents typically managed by Emergency Managers require not only the didactic aspect of incident management education, but require the ability to use many principles taught in most emergency management courses. This is a companion course to EMG 278 which will allow a student to demonstrate an understanding of Emergency Operations plans and to apply the National Incident Management System principles and practices to a large, complex expanding disaster. Students will be required to research resource needs and the financial implications of decisions while using the Incident Command System.

English

FOR MORE INFORMATION, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNEY HALL, ROOM M310, (315) 498-2313/2266.

ENG 099 Basic Composition (3EQ) This is a developmental writing course for students who need more individualized instruction and intensive practice in composing and editing short expository prose than is provided in ENG 103. This course does not satisfy Freshman English credit requirements. (Additional tutoring in the Writing Skills Center may be required.) This foundational course provides 3 equivalent credit hours toward a full-time load and is based on 3 equivalent credit hours; it carries 0 credit hours of academic credit. Prerequisite: Onondaga Community College placement test. Students who have taken the Level of English Proficiency (LOEP) as part of their placement examination may not register for ENG 099. They must register for ESL 115, ESL 116, or ENG 103, as specified on their placement test summary.

ENG 103 Freshman Composition and Literature I (3) This course develops the skills and forms necessary for writing college-level expository prose. Methods for developing content; organizing information and ideas; and presenting that material to a reader clearly, concisely, and coherently will be taught. Various readings may be used as a source of models and ideas. Prerequisite: Onondaga Community College placement test and/or satisfactory completion of ENG 099 or ESL 116.

ENG 104 Freshman Composition and Literature II (3) Teaches students to comprehend, respond to and use the ideas of others in their own writing. Skills such as analytic and critical reading and writing, summarizing, and paraphrasing are developed through the study of literature. Term paper form will also be taught. Prerequisite: ENG 103.

ENG 121 News Literacy (3) This course is a survey of the ongoing changes in mass media with a focus on news literacy. Students will be introduced to the skills required to make critical evaluations of news and information sources across the spectrum of traditional and new media, assessing the content for such factors as diversity, accuracy, and bias. Prerequisite: English and reading placement at college level. Students may not receive credit for both ENG 121 and COM 121. Web-enhanced course; online assignments are required.

ENG 122 Introduction to Journalism (3) This course will be a survey of the background and importance of journalism in society, including its role in democracy, key stories that shaped history, standard-bearers across news platforms, and the principles and responsibilites essential for fair and credible news reporting. Prerequisite: English and Reading placement at college level. Web enhanced course; online assignments are required.

ENG 123 Student Media Reporting (1) This course provides academic credit to students who contribute to student-run college media. Submissions can range from small pieces, such as calendar items and captions, to longer pieces, such as news stories, features, and reviews, for those with more interest and experience in news writing. Students may not receive credit for both ENG 123 and COM 123. Prerequisite: English and reading placement at college level. Web enhanced course; online assignments are required.

ENG 157 Electronic Media Writing (3) This course helps students to master the diverse writing styles and formats used in writing for broadcast on radio, television and cable. These include public service announcements (PSAs), station IDs, promotional announcements, script formats, commercials, news copy, and program materials. Emphasis is on developing broadcast copy style, distinguishing words directed toward the ear and the eye. Students may not receive credit for both ENG 157 and COM 157. Prerequisite: ENG 103.

ENG 203 World Literature I (3) The course sequence (ENG 203-ENG 204) chronologically surveys major works of world literature with emphasis on Western literature and its relationship to the cultural trends of the period. A wide and varied range of readings is available to the student. The survey should lead to an awareness of the objectives and forms of literary art and to a knowledge of Western culture as great writers have mirrored it. Course covers the period from the Ancients through the Renaissance. Prerequisites: ENG 103 and ENG 104.

ENG 204 World Literature II (3) The course sequence (ENG 203-ENG 204) chronologically surveys major works of world literature with emphasis on Western literature and its relationship to the cultural trends of the period. A wide and varied range of readings is available to the student. The survey should lead to an awareness of the objectives and forms of literary art and to a knowledge of Western culture as great writers have mirrored it. Course covers the period from the Enlightenment to the present. Prerequisites: ENG 103 and ENG 104.

ENG 205 Creative Writing-Nonfiction (3) This course will allow students to explore, write, and revise original non-fiction. Topics covered will include autobiographical and biographical writing, personal essays, memoirs, literary journalism, nature and/or science writing, historical writing, magazine writing, and reviews. Students will consider and use structure, characterization, unity and rhythm, and voice and tone, along with other literary devices, in their own writing. They may also be required to attend readings of non-fiction outside of scheduled class times. Prerequisite: ENG 104 or Permission of Instructor.

ENG 206 Creative Writing-Poetry (3) Students will write and revise original poetry, considering language, imagery, rhythm, structure, point of view, story, theme, and other poetic elements. Students will study the styles and techniques of classic and contemporary poets. They may also be required to attend poetry readings in the area. This course does not fulfill a Humanities' literature requirement. Prerequisite: ENG 104 or Permission of Instructor.

ENG 207 Creative Writing-Fiction (3) Students will write and revise original fiction, both segments and complete stories, using language, dialogue, character development, action, setting, and plot in the service of a theme or message. Students will read and view the styles and techniques of classic and contemporary writers of fiction. They may also be required to attend readings of fiction in the area. This course does not fulfill a Humanities' literature requirement. Prerequisite: ENG 104 or Permission of Instructor.

ENG 208 Creative Writing-Drama/Script (3) Students will write and revise original, narrative scripts for the stage or screen, using dialogue, character development, action, setting, and plot in the service of a theme or message. Students will read and view the styles and techniques of classic and contemporary scriptwriters or playwrights. They may also be required to attend professional film, theatre, and TV productions in the area. Instructor will specify if the course focuses on scripts for the TV and film screen or for the theatre. This course does not fulfill a Humanities' literature requirement. Prerequisite: ENG 104 or Permission of Instructor.

ENG 209 Dramatic Literature I (3) A study of the early development of dramatic literature and its social relationships. First semester covers major contributions from Aeschylus to Ibsen. Prerequisites: ENG 103 and ENG 104.

ENG 210 Dramatic Literature II (3) A study of modern drama from Ibsen to the present. Either semester may be taken independently. Prerequisites: ENG 103 and ENG 104.

ENG 211 Intermediate Composition (3) This course explores the origins and development of the essay form in an academic context through the study of various historical and contemporary essays and asks students to apply this knowledge and experience to their own writing. Students will practice reading and writing different kinds of essays, explore the limits of the essay form, and practice and develop research skills. Additionally, students will become familiar with composing and revising techniques through a series of writing workshops. Students have the opportunity to leave the class as better and more versatile writers. Prerequisites: ENG 103 and ENG 104.

ENG 213 Children's Literature (3) Examines literature for children from the preschool level through the middle school level. Topics covered include history and development, research skills, criticism, major authors, and major forms: poetry, picture books, fairytales (folktales), fantasy, problem novels, multicultural, fiction and non-fiction. Emphasis is on the teaching of the knowledge and critical skills needed to locate, comprehend, analyze, evaluate, and present the literature. Prerequisites: ENG 103 and ENG 104.

ENG 215 Mythology (3) The first concern of the course is the survey of Greek and Roman mythologies: their origin, development, interpretation, and use by both classical and modern writers. In addition, some attention is given to Norse and Celtic mythologies, their relationships to classical mythology and use in British literature. Prerequisites: ENG 103 and ENG 104.

ENG 217 Science Fiction (3) An examination of Science Fiction through its major movements: Classic (pre-1930), Golden Age (1930-1959), New Wave (1960-1974), and Contemporary (1975-present). Includes the study of themes within the genre. Prerequisites: ENG 103 & ENG 104.

ENG 221 English Literature I (3) A critical and historical survey of English literature from Beowulf to the Romantic Age. Although the literature is presented historically, the central emphasis of the course is on the works themselves. Prerequisites: ENG 103 and ENG 104.

ENG 222 English Literature II (3) A critical and historical survey of English literature from the Romantic Age to the present. Although the literature is presented historically, the central emphasis of the course is on the works themselves. Prerequisites: ENG 103 and 104.

ENG 223 American Literature I (3) A critical study of major American writers of the 19th Century. The literary works are viewed in their relationship to the cultural movements and intellectual history of American civilization. Prerequisites: ENG 103 and ENG 104.

ENG 224 American Literature II (3) A study of major American writers of the 20th Century. The literary works are viewed in their relationship to the cultural movements and intellectual history of American civilization. Prerequisites: ENG 103 and ENG 104.

ENG 225 African American Literature I (3) A reading, writing, and discussion course that studies literature written by African American authors. Students read poetry, novels, short stories, plays, sermons, and folktales in order to develop their critical appreciation of literature, as well as understand the unique condition of people of African descent living in America. The first semester surveys literature written by and about African Americans from the 1750's to the 1950's. Prerequisites: ENG 103 and ENG 104.

ENG 226 Literature of the Black American II (3) A reading, writing, and discussion course which studies works by modern Black American authors of the 1960's to the present. Though the main focus of the course is on understanding literature in general, the themes of the works emphasize the special condition of Black people in America. Either semester may be taken independently. Prerequisites: ENG 103 and ENG 104.

ENG 227 Writing for Emerging Technologies (3) Fast-paced and widespread developments in technology have changed the way people distribute, access, and understand information. With the Internet serving both as a medium for text and images, and a delivery system for other kinds of digital content, competitive employees in the marketplace must be able to provide clear and effective pieces of Web-based communication and other kinds of documents. This course will discuss the issues surrounding the new technology. Topics covered in the course include First Amendment law and the Internet, "repurposing" stories across platforms, and clear writing techniques. This course may be offered online and/or face-to-face. Prerequisites: ENG 103 and ENG 104.

ENG 229 The Novel (3) A focused study of the novel examining its development, characteristics, and themes. Students will read, discuss, and write about the work of various novelists within their social, ideological, and/or historical contexts. The class will emphasize the analysis of the novel as a genre as well as its technical and formal aspects. Novels chosen for this course represent a variety of

perspectives, time periods, cultures, and/or nationalities. Prerequisites: ENG 103 and ENG 104.

ENG 230 Women's Literature (3) A reading, discussion, and writing course that covers several time periods and genres to focus on the unique problems and accomplishments of women writers. Analyses of literary works will focus on gender and the cultural climate in which the studied writers worked. Prerequisites: ENG 103 and ENG 104.

ENG 231 The Bible As Literature (3) This course is an introduction to the Hebrew Bible (Old Testament) and Christian Bible (New Testament) as literary texts. It will include an examination of literary forms and genres in the Bible, the influence of non-biblical literary sources and analogues, the relationship between history and the Bible, the settings and cultures in which biblical events took place, the process by which the Bible was written and edited, and the influence of the Bible on Western literature. Prerequisites: ENG 103 and ENG 104.

ENG 233 Shakespeare (3) An introduction to the study of Shakespeare's dramatic and poetic corpus, this course will present students with the opportunity to interpret and analyze his work. A variety of interpretive lenses will be used to better understand Shakespeare's work in both his time and our own. Readings will include representative sonnets and the three major genres of the drama. Film adaptations may be used to supplement the reading material. Prerequisites: ENG 103 and ENG 104.

ENG 239 American Folklore (3) This course investigates types of folklore found in the United States, including aspects such as definition, classification, origin, variation, and function in contemporary culture. It explores how traditions (oral, customary, and material folklore) develop within any group of people who share a common interest, experience or background, whether it be race, ethnicity, region, occupation, class, family, age, gender, sexual orientation, (dis)ability, special interest, etc. Through readings, films, and discussion focused on examples of diverse groups, students will learn how the lore of a group both expresses and shapes the experience, concerns, and values of the group. Students will collect, classify, analyze, and share the traditions of their own groups as well. Learning to recognize the dynamics of folklore within their own groups, students will gain the skills necessary to understand and respect the traditions of groups other than their own. Prerequisites: ENG 103 and ENG 104.

ENG 241 American Autobiography As Literature (3) A survey of American autobiographies during the nation's history. The class will examine the cultural issues raised by each autobiographer's quest for identity, and investigate the ways autobiographers shape their lives in words.

ENG 245 New Immigrant Literature (3) This course examines literature reflecting the American experience of immigrants and expressing their search for roots and cultural identity, both in the U.S. and in journeys back to their homelands. The class will explore cultural issues raised in fiction, poetry, drama, and memoirs of writers from a number of countries. Discussion and writing assignments will focus on both analyzing the literature and on examining the students' experiences. Prerequisites: ENG 103 and ENG 104.

ENG 250 Voices of Diversity (3) Studies of the pride and prejudice encountered by minority groups in American culture, as expressed in literature and film. At least three of the following "voices", their songs and their outcries, will be heard each semester: the gay and lesbian voice; the Asian-American voice; the Hispanic voice; the Jewish voice; the new immigrant voice; the Native American voice; the voices of the homeless, the drugged, the disenfranchised, and other minority voices. Prerequisites: ENG 103 and ENG 104.

ENG 251 News Writing (3) An introductory course in the basics of news reporting and writing, focusing on gathering information, story and sentence structure, accuracy, Associated Press style, and meeting deadlines. Students will write a variety of publication-ready news stories, including college-related events and student public interest stories. Students may not receive credit for both ENG 251 and COM 251. Prerequisite: ENG 103.

ENG 252 Feature Writing and Literary Journalism (3) Students will analyze and evaluate feature stories and writing in the genre of literary journalism. Drawing on techniques from the New Journalism, current models of literary journalism, and sound reporting practices, students will write a variety of publication-ready features, including profiles, critiques, and human interest stories. Students may not receive credit for both ENG 252 and COM 252. Prerequisite: ENG 103.

ENG 253 Student Media Editing (2) This course provides academic credit to students who serve in editorial roles for student-run college media. Tasks can include assignment and placement of stories; feedback to student reporters; and copyediting, proofreading, and editing of final stories. Students may not receive credit for both ENG 253 and COM 253. Prerequisite: ENG/COM 123 or Permission of Instructor. Web enhanced course; online assignments are required.

ENG 259 Report and Technical Writing (3) A course that provides training in the preparation of professional and technical written reports. Attention is paid to the development of the student's ability to design a coherent report, to organize ideas, and to understand and use specific forms, stylistic conventions, and standard language. Prerequisites: ENG 103 and ENG 104.

ENG 282 Introduction to Critical Theory (3) The goal of this course is to introduce students to several schools of critical theory widely used in literary analysis, including deconstruction, post-colonialism, feminism, Marxism, semiotics, and psychoanalysis. By the end of this course, students will be familiar with the major arguments and questions of the schools studied. This coverage will include where ideas intersect across schools, key debates at the heart of critical analysis, and practical applications. Most usefully, students will complete the course by performing analytical tasks in at least two critical schools. Prerequisites: ENG 103 and ENG 104.

Engineering Science

FOR MORE INFORMATION, CONTACT THE CHEMISTRY/PHYSICAL SCIENCE DEPARTMENT IN FERRANTE HALL, ROOM F352, (315) 498-2432.

ENS 150 Introduction to Engineering (3) An introduction to the engineering discipline/profession. Topics covered will include the following: an introduction to the various types of engineering majors and professions, engineering design and analysis methods, elementary engineering statistics and data analysis, computer literacy, working in a team setting, oral and written communications, use of practical engineering tools, and engineering ethics. Coverage of computer literacy may include word processing, spreadsheet, and presentation software (MS Word, Excel, PowerPoint), graphical applications software (CAD or solid modeling), scientific programming, and mathematical or laboratory software applications.

ENS 201 Digital Logic Design (4) An introductory course in digital logic designed for Electrical and Computer Engineering students. Topics include: number systems, Boolean algebra, minimization of Boolean expressions, combinational and sequential networks, state machine design, and networks for arithmetic operations. Prerequisite: MAT 161 or Permission of Instructor; co-requisite: MAT 162.

ENS 207 Engineering Mechanics I (Statics) (3) Basic concepts, vector algebra, forces and moments about a point and a line. Free body diagrams, equilibrium conditions in two and three dimensions. Plane trusses, frames and machines. Forces in beams and cables. Application of friction in machines. Centroids and moments of inertia of lines, areas, and volumes. Principal axes and principal moments of inertia, Mohr's circle. Prerequisite: PHY 105.

ENS 208 Engineering Mechanics II (Dynamics) (3) Kinematics and kinetics of particles. Energy and momentum methods. Central force and space dynamics, relative motion, impact. Kinetics of systems of particles. Plane kinematics and kinetics of rigid bodies. Energy and momentum methods. Three-dimensional dynamics of rigid bodies. Prerequisites: ENS 207, MAT 263.

ENS 208R Engineering Mechanics II Recitation (1EQ) Recitation for ENS 208 course.

ENS 210 Electrical Circuit Analysis (4) A first course in basic circuit theory. Topics covered include: circuit definitions, voltampere relationships for circuit elements, Kirchhoff's laws; resistive circuit analysis including loop and nodal analysis, network theorems; transient behavior of R-L, R-C, and R L-C circuits; sinusoidal steady-state analysis and phasors; introduction to active devices such as transistors and operational amplifiers and applications of network theorems to circuits with active devices. Prerequisite: PHY 205.

ENS 212 Mechanics of Materials (3) First course in the development of the mechanics of deformable bodies, primarily for engineering students. Topics include: theories of stress and strain, deformations, Hooke's law, axial loads, shearing loads, bending loads, Mohr's Circle, shear and bending moment diagrams, elastic stability and deflection of beams. Prerequisite: ENS 207; co-requisite: MAT 264.

Environmental Technology

FOR MORE INFORMATION, CONTACT THE CHEMISTRY/PHYSICAL SCIENCE DEPARTMENT IN FERRANTE HALL, ROOM F352, (315) 498-2432.

ENV 101 Introduction to Environmental Technology (4) This course provides an overview of the environmental technology field and also serves as the introductory course for the Environmental Technology program. The course applies the chemical, geological and biological sciences to environmental issues, and relates these issues to various possible career paths. Topics covered in the course include: governmental processes; hazardous materials, pollution and related health effects; basic ecology; hazardous and non-hazardous waste disposal; biofuels and alternative energy technologies. In addition, the laboratory portion of the course will provide hands-on experience with work associated with the environmental industry. Three hours lecture and three hours laboratory per week. Fall semesters only.

ENV 103 Introduction to GIS (3) This course introduces fundamental concepts of Geographic Information Systems and the major functionality contained within the ArcGIS software system. In course exercises, students follow the GIS analytical process and work with a variety of software tools to solve realistic mapping problems. This course emphasizes practical GIS and GPS (Geographic Positioning System) skills. ArcGIS is now used in fields as diverse as emergency management, law enforcement, business, engineering, etc. ENV 103 is a required course for the Environmental Technology AAS degree program.

ENV 104 Applied GIS (3) This course applies fundamental concepts of Geographic Information Systems and the major functionality contained within the ArcGIS Desktop software system, as well as its extensions, Spatial Analyst and 3D Analyst, building on the concepts covered in ENV 103. In course exercises, students follow the GIS analytical process and work with a variety of tools to solve realistic environmental problems, eventually presenting the result of an independent project in a professional grade presentation. This course emphasizes practical GIS and GPS (Geographic Positioning System) skills. ENV 104 is an elective course for the Environmental Technology AAS degree program. Prerequisite: ENV 103. Spring semesters only.

ENV 110 Field Experience in Environmental Technology - Geoscience (1) A one credit field course designed for those students contemplating a career in Environmental Technology. The class will visit active, unrestricted sites currently undergoing remediation for soil and/or water contamination. Sampling protocols and proper field notetaking will be practiced. Two classroom sessions and two all day field trips during the fall semester.

ENV 162 Biofuels, Biomaterials, and Alternative Energy Technologies (3) Bioenergy, Biomaterials, and Alternative Energy Technologies (ENV 162) will provide a general overview of various current and emerging bio-based and other sustainable technologies for the production of energy, fuels, and materials. ENV 162 will introduce the fundamentals of the biorefinery concept for sustainable manufacturing, along with more detailed investigations of specific bioprocesses and renewable energy technologies. Specifically, the course will highlight several biomaterials (i.e. bio-plastics, -chemicals, -pharmaceuticals), biofuels (i.e. bio-ethanol, -butanol, -methanol, -diesel, -methane, and -hydrogen), and alternative energy technologies (i.e. wind, solar, hydrological, geothermal, and fuel cells). Prerequisite: CHE 171 (formerly CHE 103) or BIO 151.

ENV 165 Hazardous Waste Operations and Emergency Response (2) This course provides a comprehensive overview, covering all facets of hazardous waste management and emergency response. Topics include practical exercises and training, which may be applied to business, industry, construction and institutions, including Federal and State rules and regulations, handling procedures and proper operation of a designated waste facility, storage, labeling, manifesting, shipment, employee training, proper use of safety equipment, emergency response procedures (spills response and clean up), cost-effective waste reduction, and environmental reporting procedures. This course is offered as a one week 40-hour course over the winter intersession and will provide 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) certification as specified in OSHA 29CFR 1910.120. Winter sessions only.

ENV 201 Internship in Environmental Technology - Geoscience (2) This course is designed for students in their last semester of the ETG AAS degree program, enabling them to gain real world experience with a private consulting firm or government agency. Students will spend a minimum of 40 hours working with a qualifying business or agency and attend two three-hour seminars. Spring semesters only.

English as a Second Language

FOR MORE INFORMATION, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNEY HALL, ROOM M310, (315) 498-2313/2266.

ESL 098 Basic Grammar, Writing and Speaking (3EQ) This is a developmental grammar and writing course for non-native English speakers who need more specific, individualized practice in using grammar for effective written and oral communication in academic settings. It also exposes students to the formal conventions of writing and speaking by providing extensive practice on several aspects of academic writing, including drafting, composing, editing and revising. Students will apply the grammatical and discursive practice necessary

in becoming more familiar with all aspects of Standard American English. ESL 098 is designed to complement ESL 114 (Listening and Speaking) and ESL 115 (English as a Second Language II) and prepare students for the possible cultural barriers and affective issues associated with attending college. This foundational course provides 3 equivalent credit hours towards a full-time schedule and is based on 3 equivalent credit hours; it carries 0 credit hours of academic credit. Co-requisite: ESL-114 & 115.

ESL 114 Academic Listening and Speaking (3) For ESL students only. This course develops the oral and listening skills necessary for communicating effectively in an academic environment. Focus is on improving pronunciation, stress and intonation while speaking, as well as enhancing vocabulary and acquiring deeper understandings of syntactical and semantic functions of oral English. The course also teaches the skills students will need to enhance their abilities to listen for content, take notes and participate in classroom discussions.

ESL 115 English as a Second Language II (3) Designed for non-native speakers of English. Emphasis is on building verbal English skills and in using standard English as a written medium. Focus is on developing sentences and paragraphs that are organized, grammatical, and fluent. This course does not satisfy Freshman English Requirements. For ESL students only.

ESL 116 Composition for International Students (3) A course in short composition for native speakers of other languages, with emphasis on individualized instruction, paragraph development and organization, intensive practice in the proofreading skills required of English grammar, and attendant English vocabulary development. Prerequisite: ESL 115 or placement test.

Fire Protection Technology

FOR MORE INFORMATION CONTACT THE PUBLIC SAFETY TRAINING CENTER IN MULROY HALL, ROOM R125, 315-498-6046.

FPT 111 Firefighting Standards I (3) This course will introduce the student to basic firefighting techniques and equipment. The course will follow the National Fire Protection Association 1001 Level I Standard. The student will be required to successfully complete both written and practical national accreditation exams.

FPT 112 Firefighting Standards II (3) This course will introduce the student to advanced firefighting techniques and equipment. The course will follow the National Fire Protection Association 1001 Level II Standards. The student will be required to successfully complete both the written and practical national accreditation exams. Prerequisite: Permission of Instructor.

FPT 121 Fire Service Supervisor (3) This course will follow the guidelines of the National Fire Protection Association 1021 Levels I and II Fire Officer Training and Professional Qualifications. Supervision, motivation, leadership, discipline, communication and problem solving will be studied individually and in group activity. Prerequisite: Permission of Instructor.

FPT 141 Fire Service Instructor (3) This course will focus on the information and skills necessary for fire service instructors to meet the requirements of NFPA 1041 Levels I and II. Beginning with analysis of the challenges, safety issues and legal considerations fire instructors will face, students will consider dimensions of the learning process as well as strategies and approaches for planning, delivering, managing and evaluating fire service training.

FPT 150 Introduction to Fire Protection (3) A survey course dealing with the broad field of fire suppression. Included are statistics of fire loss, agencies involved in fire protection, basic organization and functions of a fire department, private fire protection, fire prevention methods, and a review of current and future fire protection problems.

FPT 151 Building Construction (3) A study of types of building construction by systems and methods with particular emphasis on fire problems peculiar to each type. Causes and indications of building collapse. The New York State Building Code viewed from construction requirements with emphasis on fire and public safety provisions. Effect of fire on construction materials. Standard methods of testing and rating materials for flame spread characteristics.

FPT 152 Fire Fighting Tactics and Strategy (3) Deals with the effective utilization of manpower, equipment, and apparatus. Emphasis will be placed on fire-planning, fire ground organization, large fire tactical problems, command functions, utilization of staff personnel, communications procedures, water supply problems, and strategic considerations of community protection during large fires or major emergencies. Prerequisite: FPT 150.

FPT 153 Legal Aspects of Fire Protection (3) A study of the police power; considerations of liability, negligence, rights and responsibilities of fire department members while performing their duties. The law of arson and its specific application, an examination of the various court systems. A study of the See v. Seattle decision and its effect on fire prevention activities.

FPT 155 Hazardous Materials (3) A study of the chemical and physical characteristics of hazardous materials such as explosives, flammable and combustible liquids, oxidizing and corrosive materials, compressed gases and radioactive materials. Emphasis will be placed on storage, handling, and fire control procedures.

FPT 156 Fire Hazards and Their Control (3) A study of common and special fire hazards of both the causative and contributive types. Identification and evaluation of degree of severity are stressed, together with appropriate means of control of hazards. Relevant local and national codes and standards are emphasized.

FPT 157 Fire Hydraulics (3) A course in incompressible fluids covering principles of fluid statics and dynamics, pipe friction, flow measurements, orifice calculations, pumps and other hydraulic devices. Applications are related to fire protection systems and equipment. Public water system design with reference to American Insurance Association standards will be covered.

FPT 158 General Chemistry for Fire Science (3) A study of general chemistry from the viewpoint of hazardous material. Aspects of combustion are studied in detail. A prerequisite for advanced Fire Science course dealing with hazardous materials. No laboratory. Evenings only.

FPT 159 General Chemistry for Fire Science (3) A study of general chemistry from the viewpoint of hazardous materials. Aspects of combustion are studied in detail. A prerequisite for advanced Fire Science course dealing with hazardous materials. No laboratory. Evenings Only.

FPT 160 General Physics for Fire Science (3) A one-semester study of selected topics in general physics for students enrolled in the Fire Science curriculum. Includes topics in mechanics, fluid mechanics, electricity, heat. No laboratory. Three class hours.

FPT 162 Introduction to Incident Safety (3) A survey course covering a wide range of safety topics applicable to business, industry, construction and institutions. Included are the history and objectives of the safety profession; specific activities such as hazard evaluation, accident analysis and record-keeping; and specialized topics such as material handling, workers compensation, fire protection and industrial hygiene. The course will enhance the knowledge of those

with limited experience in safety while providing a basic understanding of the role of the safety profession for those with no experience.

FPT 163 Introduction to Occupational Safety and Health (3) Introductory course on the Management of Safety in business for students who have had CRJ/FPT 162 (or direct experience) in safety. It is designed to provide an overview of the basic concepts of Modern Safety Management Systems that are used to develop and maintain an effective safety program. It will aid present and future safety managers in developing a formal safety program. In particular, the following sections are covered: Introduction, Basic Safety Concepts and Methods, Principles of Safety Management, and Special Techniques, Problems and Auxiliary Functions. The students will prepare class assignments to reinforce their understanding of the concepts presented and gain actual experience in developing a formal Safety and Health program.

FPT 164 Introduction to Industrial Hygiene (3) Covers the fundamentals of industrial hygiene and occupational safety. Provides basic information on the recognition, evaluation and control of hazardous chemicals and agents in the work place. Topics cover the measurement of hazardous materials in the work environment, toxicology, responses to toxic agents, ventilation, noise, government regulations, medical surveillance, and protection equipment.

FPT 250 Fire Department Administration (3) A study of the administrative aspects of Fire Department operation. Included for study are basic administrative and management procedures, personnel administration, budget keeping, record systems, operational study techniques, public relations, line and staff functions, supervisory responsibilities, and related subjects. Emphasis will be placed on current administrative problems, and methods of developing solutions to these problems. Prerequisite: FPT 150.

FPT 251 Fire Protection Systems (3) A study of fire detection and extinguishing devices and systems of both automatic and manual types. Included for study are fire extinguishing agents, portable extinguishing equipment, fixed systems of various types, and detection and signaling systems. Stress will be placed on the operating characteristics, advantages and limitations, and methods of inspection and testing.

FPT 252 Fire Investigation (3) This course deals with the proper methods of investigating fires, of both the accidental and incendiary types. The fundamentals of arson investigation are covered including handling of evidence, liaison with the police services in criminal fires, and interrogation of witnesses. Also included are use of photography and scientific aids to investigation. Prerequisite: FPT 150 or Permission of Instructor.

FPT 253 Fire Prevention and Inspection (3) This course deals with the establishment of an effective community fire prevention program. Included for study are the organization of a fire prevention bureau, necessary codes and ordinances, establishment of an effective inspection program, record keeping procedures, handling of orders and complaints, and development of an adequate public education and information program.

FPT 254 New York State Code Compliance (4) This course introduces the practices necessary for students to know to become New York State Code Compliance Technicians. Course content includes all material offered through the NYS Code courses 9A, 9B, and 9C. Major topics include administration and enforcement, principles of fire-safe design, and inspection of existing buildings and facilities. Students who successfully complete the course, including 100% participation, will be eligible to take the NYS Certification examination for Code Compliance Technician.

French

FOR MORE INFORMATION OR ASSISTANCE WITH PLACEMENT INTO APPROPRIATE COURSE-LEVEL, CONTACT THE MODERN LANGUAGES DEPARTMENT IN MAWHINNEY HALL, ROOM M308, (315) 498-2305.

FRE 101 Elementary French I (3) This learner-centered course is designed for students with little or no previous knowledge of French. Students acquire basic grammatical and lexical skills that will enable them to communicate in routine social or professional situations within an authentic cultural context. Upon successful completion of FRE 101, students may enroll in FRE 102. This course also fulfills the Global Awareness requirement at Onondaga.

FRE 102 Elementary French II (3) This course is a sequel to Elementary French I. It builds upon the basic grammatical, linguistic, communicative and cultural concepts learned in FRE 101. Upon successful completion of FRE 102, students may enroll in FRE 201. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: FRE 101, or two to three years of high school French, or Permission of Instructor.

FRE 201 Intermediate French I (3) This dynamic course draws upon previously acquired knowledge, while introducing students to more complex grammatical and lexical structures to further develop communicative proficiency and cultural knowledge. The course is conducted mostly in French. Upon successful completion of FRE 201, students may enroll in FRE 202. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: FRE 102, or four years of high school French, or Permission of Instructor.

FRE 202 Intermediate French II (3) This course is a sequel to Intermediate French I. It expands upon complex grammatical and lexical structures. It is conducted entirely in French and provides a solid foundation for advanced study. Upon completion of FRE 202, students may enroll in any intermediate-high level course. Students who successfully complete the FRE 202 level have fulfilled their language requirement for the A.A. in Humanities and Teacher Prep programs. The three additional credits may be taken either as a language course or as a general elective. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: FRE 201, or five years of high school French, or Permission of Instructor.

FRE 205 French Conversation, Composition and Reading I (3) Intensive work in conversation and composition based on reading and analysis of representative literary masterpieces. Oral and written reports in French. Class conducted in French. Solid preparation in grammar recommended.

Food Service Administration

FOR MORE INFORMATION, CONTACT THE BUSINESS ADMINISTRATION DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W324, (315) 498-2435.

FSA 100 Food Service Sanitation (2) Designed and approved by the National Restaurant Association Education Foundation so that students may become certified in Sanitation and Safety. The course is an intensive study of proper sanitation and safety through purchasing, storage, preparation, service of food, and hiring of personnel. Must be taken prior to/with FSA 103.

FSA 103 Basic Food Preparation (4) Students are introduced to the fundamentals of basic food production for hotels, restaurants, and institutions. Included is a history of the culinary arts; exposure to

sanitation, hygiene and safety standards; operation of equipment; and cooking procedures. Demonstration of the preparation of foods will be provided by the instructor followed by student preparation in such categories as hot foods, cold foods, and baking. Prerequisite or co-requisite: FSA 100.

FSA 104 Restaurant Operations (4) Designed to elaborate on the techniques of food preparation and dining room service in a restaurant. Emphasis will be placed on practical application of cooking techniques and dining room service for various types of food service facilities. Students will function in all positions of employment, gaining skills in such areas as quantity food production, menu development, waiter/waitress service, food estimation, intermediate management responsibilities, inventory principles, and food production systems analysis. Prerequisite: FSA 100 and FSA 103, or Permission of Instructor. Approved uniform required.

FSA 107 Cooking Basics (3) This course is designed to provide content information and skill practice in the basic fundamentals of cooking and baking. Areas of cookery to be covered are: baking: cookies, desserts and bread products; hot food preparation: vegetables, soups, stews, saute', stir fry, pasta and grains. Nutritional food selection, menu planning and cultural influences on the American diet will also be emphasized. A lab fee is required. This course is not open to students matriculated in the Hospitality Management or Professional Cooking Curricula.

FSA 112 Creative and Functional Culinary Arts (1) This culinary arts course will cover the use of key main ingredients in the preparation of appetizers, soups, salads and entrees. Mise en place, production issues, equipment selection and use, taste, color and selection of appropriate ingredients for each student to properly present his/her culinary creation will be emphasized. A materials fee will be charged. Prerequisite: FSA 103, or advanced-level culinary skills and Permission of Instructor.

FSA 114 Patisserie I (1) This culinary arts course teaches concepts, skills and techniques for preparing dessert items. Topics to be covered include: individual pastries and desserts, decorative chocolate and sugar, pate choux and finishing of cakes. A materials fee will be charged. Prerequisite: FSA 103, or advanced-level culinary skills and Permission of Instructor.

FSA 116 Artisanal Bread Baking (1) This course is an advanced-level baking course building on skills acquired in FSA 103, or equivalent skills. Students will learn to combine artisanal bread making science and theory with hands-on practice to develop skill and technique in the production of various bread products. The course will emphasize fermented breads such as baquettes, brioche and other preferments. Uniform required, general lab fee. Prerequisite: FSA 103 or Permission of Instructor.

FSA 201 Hospitality Management (3) A continuation of the study of management functions as they relate to the food service industry. This second-level course covers the principles of personnel management and product merchandising necessary for the successful operation of food service facilities. Spring semesters only.

FSA 202 Food Service Cost Controls (3) A detailed study of how to set up and maintain cost control systems. The course focuses on important areas such as how to gather and use cost control information, profit planning, and the economics of the food service industry. Prerequisites: BUS 102, BUS 105. Spring semesters only.

FSA 204 Purchasing, Storage and Handling (3) A study of the fundamental principles and practices of purchasing, storing, and handling food items and supplies needed in restaurants, hotels, and institutions. The student will acquire working knowledge of such concepts as standards, grades, specifications, methods of ordering, requisitions, and the use of production records, proper receiving procedures, storage methods, issuing, and proper temperatures and holding items. Spring semesters only.

FSA 207 Meal Planning and Equipment Selection (3) Designed to provide the student with the knowledge and skills necessary to properly plan a menu and the physical food service layout to produce and serve that menu. Topics to be covered will relate to traditional, specialty and "trendy" menu types along with the proper production and service layout. The student will create a business plan for establishing a food service operation. Fall semesters only.

FSA 210 Catering and Advanced Culinary Arts (4) This course is designed for students who have successfully completed a basic food preparation principle course and a quantity food preparation/restaurant operations course. The course will provide the fundamentals for operating and working in a catering organization. Through the operation of an on-campus curriculum-based catering organization, the student will rotate through all positions within a catering business. Students will also develop skills in special areas of food preparation such as hors d'oeuvres, baking and pastry, American, and International cuisines. Prerequisites: FSA 100, 103, and 104. Approved uniform required. Fall semesters only.

FSA 217 Fundamentals of Chocolates (1) This course focuses on the principles and techniques of chocolate tempering and preparing chocolate pralines, truffles, and chocolate-dipped candies utilizing a variety of different chocolates, fillings, and decorating techniques. Students will have the opportunity to design and create chocolate showpieces and amenities, using chocolate and various decorating techniques. Prerequisite: FSA 103 or advanced culinary or pastry skills. Approved uniform required.

FSA 218 Classical Tortes (1) This course focuses on advanced classical torte production, technique, and finishing skills. Emphasis is on developing flavors, textures and decorative components used in the creation of international classical tortes. In each class session, students will be introduced to a classical torte and its characteristics, and have the opportunity to practice classical torte production. Prerequisite: FSA 103 or advanced culinary or pastry skills. Approved uniform required.

FSA 219 Cake Decorating (1) This course focuses on concepts, skills and techniques for advanced cake decorating. Topics to be covered are preparing and icing cakes, design techniques, butter cream basics, gum paste sugar flowers, ornaments, inscription, drapery and toppers for cakes. In each class session, students will be introduced to a topic and have the opportunity to practice decorating cakes. Prerequisite: FSA 103 or advanced culinary or pastry skills. Approved uniform required.

FSA 220 International Cuisine (2) This course is a study of the terminology, cooking techniques, and menu planning of foods from around the world. Asian, Mediterranean, South American, North American, and European cuisines are explored. In each class session, students will be introduced to a topic and have the opportunity to practice international cuisine. Prerequisite: FSA 103, or advanced culinary pastry skills with Permission of Instructor. Approved uniform required.

First Year Seminar

FOR MORE INFORMATION, CONTACT THE INTERDISCIPLINARY STUDIES DEPARTMENT IN WHITNEY HALL, ROOM W233, (315) 498-2326.

FYS 101 First Year Seminar (1) First Year Seminar addresses such

topics as goal setting, time management, interpersonal relationship building, communication skills, resilience, and student resource identification. The course focuses on giving first-year students the support needed to successfully navigate their college and career paths.

General Studies

FOR MORE INFORMATION, CONTACT THE GENERAL STUDIES DEPARTMENT IN MAWHINNEY HALL, ROOM M294, (315) 498-2551.

GEN 152 Human Adjustment (3) A learning experience through which students may derive a better understanding of themselves, their relationships to others, and how they adjust to their environment. Students learn about the process of adjustment and are introduced to concepts and skills that promote adjustment. Current theories in psychology provide the framework for discussion of topics that include self-concept, identity, personality, aging, sex role, stress and health, and maladjustment.

GEN 154 Comparative Vocational Planning (3) Designed to introduce students to methods of occupational planning and to expose them to available career choices. Integrated concepts include an evaluation of individual capabilities, preferences and goals. Students will also learn about the processes of the job search, resume writing, and interviewing.

Geography

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM M380, (315) 498-2301.

GEG 101 Introduction to Geography (3) The purpose of this course is to provide an introduction to the basic concepts and methodology of world regional geography. Because geography incorporates aspects from multiple disciplines, we will examine geographic regions and introduce relative location, population characteristics, cultural features, physical environment, resources, major cities, economic development and historical perspectives. Furthermore, through individual projects, each student will introduce him or herself to world affairs and how events in one place can influence events in distant locations. Finally, basic geographic concepts will be introduced to help explain the variable character of the humanized earth.

GEG 203 Economic Geography (3) Economic Geography investigates how the global economic system works within a spatial framework. It focuses on the production, distribution and consumption of wealth in society and why wealth is not evenly distributed globally, regionally and locally. Topics covered include the shift from Command Economy to Market Economy in the former communist bloc; the American era of Fordism and the Dollar; the shift to Flexible Specialization/Production and its impact on laborers today; and the new space-economy dominated by strategic alliances, sourcing, free trade zones and trading blocs. A global perspective will be used to discuss the topics in the course.

Geology

FOR MORE INFORMATION, CONTACT THE CHEMISTRY/PHYSICAL SCIENCE DEPARTMENT IN FERRANTE HALL, ROOM F352, (315) 498-2432.

GEO 105 Oceanography (3) Introductory survey of oceanography relating the physical, chemical, geological, biological, meteorological, and engineering aspects of the field. This course satisfies the science elective requirement of the Math-Science curriculum and also satisfies the science requirement of those curricula which require science. Three class hours or equivalent per week. No prerequisite.

GEO 105L Oceanography Laboratory (1) Includes investigation of ocean waters in terms of physical and chemical properties, and the interactions of the water on air, sediments, coastal areas, and life forms. This course is intended for those who wish to deepen their understanding of oceanography and/or have a laboratory science requirement to satisfy. One three-hour session per week. Prerequisite/co-requisite: GEO 105.

GEO 106 Environmental Geology (3) An introduction to the principles of applied geological science related to solving environmental problems. As such the course provides an introduction into scientific studies of human interaction with the geologic environment, including the lithosphere, hydrosphere, atmosphere and biosphere. Topics of study will include human population dynamics, soil generation and erosion, energy and mineral resources and management, waste management and disposal, water resources and water rights, water and air pollution, climate change, and related geologic principles that interact with these environmental problems. This course along with its optional laboratory course GEO-106L satisfies the requirements of those curricula demanding a science or laboratory science course. Only GEO-106L may be used with this course to represent a single laboratory science course. GEO-106 consists of three one-hour lectures or equivalent. Prerequisite: MAT-087 or higher.

GEO 106L Environmental Geology Lab (1) This is a laboratory component to the Environmental Geology lecture (GEO-106). The laboratory provides practical hands-on experience for applied geological problems. Topics of study will involve waste management and methods of waste disposal including: sewage treatment, landfilling, recycling, waste minimization, and incineration. In addition, surface water and ground water hydrogeology will be investigated, especially in terms of groundwater resources. Basic mapping skills will also be investigated. Lastly, laboratory identification of rocks and minerals will be included in laboratories, while considering the economic uses and availability of these rocks & minerals. This course is intended for those who wish a deeper understanding of environmental geology and/or have a laboratory science requirement to satisfy. The class will consist of one three-hour session per week. Prerequisite: MAT-087 or higher, co-requisite GEO-106.

GEO 107 Violent Earth: Natural Hazards and Disasters (3) In this course, students will investigate the earth processes that have a direct, often sudden and violent, impact on human society. Tornadoes, floods, wildfires, earthquakes, hurricanes, droughts, and volcanic eruptions are naturally occurring events that often have major impacts on humans. Students will explore the atmosphere, hydrosphere, biosphere, and geosphere in their study of extreme events. Each disaster will be presented first as a hazard, then as a case study where students will investigate the human response to each extreme event and discuss prediction, risk analysis, and policy implications related to disaster preparedness, mitigation, and prevention measures. At the end of the course, students will understand the earth processes that drive hazardous events, illustrate how these processes interact with our civilization, and describe how we can better adjust to their often devastating effects. Satisfies the science elective requirement of the Math/Science Curriculum and also satisfies the science requirement for those curricula that require science. GEO 107 consists of three one-hour lectures per week or equivalent. Prerequisite: MAT 087 or higher.

GEO 151 Physical Geology (3) This course is an introduction to the science of geology. This course considers the various rock and mineral

types and their chemistry, the structures and deformation of the Earth's crust due to plate tectonics and related phenomena like earthquakes and volcanism. It also deals with the actions of the wind, running water, ground water, and glacial ice in shaping the surface of the Earth. Topics covered include aspects of geochemistry, geophysics, geomorphology, geochronology, stratigraphy, and hydrology. This course along with its optional laboratory course GEO-151L satisfies the sequential laboratory science requirement for the Math-Science curriculum. GEO-151 consists of three one-hour lectures or equivalent. Prerequisite MAT-087 or higher.

GEO 151L Physical Geology Lab (1) This is the laboratory component to the Physical Geology lecture (GEO-151). The laboratory provides practical hands-on experience in a variety of geologic disciplines including: collection and analysis of geologic data, identifying common rocks and minerals samples, examination and interpreting of aerial photos, satellite images, topographic and geologic maps, and the construct and analyze topographic profiles. Techniques used in relative and absolute age dating of geologic materials, evaluation of earthquake hazards and investigation of stream and groundwater environments will also be explored. This course is intended for those who wish a deeper understanding of the science of geology and/or have a laboratory science requirement to satisfy. One three hour session per week. Prerequisite/co-requisite: MAT-087 or higher. Co-requisite: GEO-151.

GEO 152 Historical Geology (3) A detailed study of the physical, chemical, and biological evolution of Earth utilizing concepts and principles introduced in Physical Geology. Stratigraphic and tectonic principles are utilized in the interpretation of geologic history with emphasis on regional geologic history. Both lecture and laboratory will include fossil identification, geologic mapping, microscopic analysis of rocks and fossils, and fieldtrips using geologic field techniques. GEO-152 consists of three one-hour lectures or equivalent per week. Prerequisites: GEO-151 and GEO-151L.

GEO 152L Historical Geology Laboratory (1) This laboratory component to Historical Geology Lecture (GEO-152) provides hands on application to theories and concepts discussed in the lecture component. Student will revisit the most common rock forming minerals and rocks while learning how to interpret geologic maps. A main theme of this laboratory is identifying fossils and their paleoecology. Students will learn field techniques such as measuring stratigraphic columns, using a brunton compass, and determining the speed of dinosaurs based from trackways. Multiple fieldtrips during lab will provide ample application of field techniques and environmental interpretation. Common fossils found in New York state will be emphasized, but students will also have an overview of Earth's total 4.56 billion year history of evolution. This laboratory is designed to provide a student the opportunity to use geologic and evolutionary principles. One three hour session per week. GEO-152 must be taken previously or concurrently with GEO-152L. Prerequisite: GEO-151, GEO-151L.

GEO 203 Introduction to Forensic Geology (4) Forensic Geology is designed for math/science majors, criminal justice majors and non-science majors who have an interest in forensic science and the academic and/or professional experience needed to handle the subject matter. The purpose of this course is to introduce students to the use of different geologic materials and techniques that can be used to solve crimes and disputes. Details from actual criminal cases and disputes will be used as examples in this course. This course includes a variety of geologic topics including rocks, minerals, other geologic materials, geologic and topographic maps, fossils, air particles and pollutants, and soils. Laboratory and classroom experience will include the analysis of different techniques employed in forensic geology. These techniques include fluorescence, stereoscopic analysis, optical microscopy, and various chemical analyses. Prerequisite: GEO 151 or 106, or Permission of Instructor.

GEO 205 Hydrology (4) This course introduces students to fundamental concepts and methods of analysis pertaining to the flow of surface/groundwater, water resources, water quality and contamination. Laboratory and classroom experience will include: the physics of water; descriptions and mathematics of water's movement in the surface water, vadose and groundwater settings; basic elements of soil mechanics and soil description; exploratory drilling and well installation; conducting and analyzing a pump test; surface water flow analysis and measurement; and analysis techniques of water chemistry. Several laboratories involve field work in and around the Onondaga campus measuring stream flow, installing and developing wells, testing wells, and collecting water samples. This course prepares students for the environmental field (governmental and consulting) and graduate programs in the environmental and hydrologic sciences. Three hours lecture and three hours laboratory per week. Prerequisite: MAT 143 or 151. Spring semesters only.

GEO 290 Geology of the Bahamas (3) A two-week, three credit course of fieldwork in biology and geology in a tropical marine setting. Environments, present and past, to be studied by snorkeling and walking include: beach, intertidal, coral reef, and associated shallow water habitats. Studies include evening lectures and independent research projects. Location: The Gerace Research Center, San Salvador Island, Bahamas. San Salvador is at the eastern end of a chain of 700 islands and cays that form the Commonwealth of the Bahamas. Requirements: The program is open to undergraduate and graduate students. No prior coursework is required to participate; however, some background in general biology, geology, or oceanography is helpful.

German

FOR MORE INFORMATION OR ASSISTANCE WITH PLACEMENT INTO APPROPRIATE COURSE-LEVEL, CONTACT THE MODERN LANGUAGES DEPARTMENT IN MAWHINNEY HALL, ROOM M308, (315) 498-2305.

GER 101 Elementary German I (3) This learner-centered course is designed for students with little or no previous knowledge of German. Students acquire basic grammatical and lexical skills that will enable them to communicate in routine social or professional situations within an authentic cultural context. Upon successful completion of GER 101, students may enroll in GER 102. This course also fulfills the Global Awareness requirement at Onondaga. Fall semesters only.

GER 102 Elementary German II (3) This course is a sequel to Elementary German I. It builds upon the basic grammatical, linguistic, communicative and cultural concepts learned in GER 101. Upon successful completion of GER 102, students may enroll in GER 201. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: GER 101, or two to three years of high school German, or Permission of Instructor. Spring semesters only.

Health

FOR MORE INFORMATION, CONTACT THE HEALTH, PHYSICAL EDUCATION AND RECREATION DEPARTMENT IN THE HEALTH AND PHYSICAL EDUCATION BUILDING, ROOM H202, (315) 498-2282.

HEA 106 Studies in Health and Wellness (1) Wellness is a dynamic process of balancing multiple lifestyle factors to achieve personal heartiness and happiness. The connections between personal choices and health outcomes are emphasized, along with ways to recognize

the signs and symptoms of common causes of illness and death in the United States. Students will be introduced to strategies and resources which enable them to make informed decisions about their wellness. Topics discussed include: stress management, diet, substance use, relationships, sex and sexuality, exercise, and chronic and communicable diseases. Formally numbered as HEA 206.

HEA 207 Personal Health (3) An in-depth course for those students seeking greater knowledge in health. Covered are a broad range of topics similar to those discussed in PEH 206 and PEH 210, but in greater detail.

HEA 208 Human Sexuality (3) This course examines the developmental and social aspects of human sexuality as developed within the individual and within relationships. Topics include sexual anatomy and physiology, reproduction, sexual development, childbirth, sexual diversity, sexually transmitted diseases, various sexual problems and dysfunction and an exploration of community resources.

HEA 209 Drugs and Wellness (3) This course is designed to introduce students to the physiological, psychological, and sociological effects of drug use, abuse, and dependency on wellness. Topics covered enable students to make informed decisions about drug use including: over-the-counter drugs, prescription drugs, herbal remedies, dietary supplements, caffeine, tobacco, alcohol and illicit drugs. In addition, community resources that assist individuals with drug dependence will be identified to assist individuals with wellness. There are no prerequisites for this course.

HEA 213 Managing Stress for Health and Well- Being (3) A study of the fundamental theories and applications of the mind-body phenomenon. The interconnectivity of the physical, mental, emotional, and spiritual aspects of the human condition will be discussed. Other topics include stress reaction and its relationship to specific illnesses and diseases and intervention strategies. Relaxation techniques are introduced and practiced.

Health First Aid

FOR MORE INFORMATION, CONTACT THE HEALTH, PHYSICAL EDUCATION AND RECREATION DEPARTMENT IN THE HEALTH AND PHYSICAL EDUCATION BUILDING, ROOM H202, (315) 498-2282.

HFA 203 Responding to Emergencies (2) This course is designed to develop safety consciousness and train individuals in the skills and emergency procedures necessary to render assistance to others. It stresses the basic steps for handling cardiac emergencies with adults, infants and children, along with the first aid skills necessary for treating soft tissue injuries, bleeding control, and other sudden illnesses. All of these skills are taught under American Red Cross standards leading to certification in CPR, First Aid, and use of the Automated External Defibrillator (AED) device. This course is appropriate for home and working environments, and is not intended for professional rescuers. This course does not meet the Health or Physical Education activity requirement.

HFA 204 Cardiopulmonary Resuscitation (1) Taught under American Red Cross standards leading to professional-rescuer certification in CPR, this course enables students to provide appropriate initial care for breathing and cardiac emergencies in adults, infants and children. Included in the course: two-rescue CPR, use of a resuscitation mask and bag-valve mask, and special rescue situations. The course is intended for public safety personnel, athletic trainers, lifeguards, emergency response teams, and health care professionals. (This will not fulfill the Physical Education Health requirement.)

HFA 214 CPR Recertification (0.5) Taught under American Red Cross guidelines. This course is for public safety personnel, lifeguards, athletic trainers, emergency response team members and health care professionals who need to update and recertify in professional rescuer skills. Prerequisite: Current CPR card issued within one year or Permission of Instructor.

HFA 215 Community CPR and First Aid (1) Taught under American Red Cross guidelines. This course leads to certification in Community CPR and First Aid and stresses the basic steps to follow in recognizing and caring for breathing and cardiac emergencies in adults, infants and children. Includes first aid skills for soft tissue injuries, bleeding control, splinting and other sudden illnesses. Appropriate for home and working environments. This course is not intended for professional rescuers. There are no prerequisites for this course.

History

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM M380, (315) 498-2301.

HIS 101 World History I (3) World History I is the first in a two-course sequence tracing the rise of world civilizations. It will examine the social, political, intellectual, and economic development of civilizations in Eurasia, Africa, and the Americas from the beginning until the 16th century. Main themes are the Neolithic revolution, urbanization, early empires, conflicts, and interconnections through trade, culture, and religions. More broadly the course will expose students to the use of primary and secondary sources and to the identification of change over time, causality, and contingency in historical knowledge.

HIS 102 World History II (3) World History II is the second in a two-course sequence tracing the rise of world civilizations. It will examine the modern social, political, intellectual, and economic development of civilizations in Eurasia, Africa, and the Americas from the 16th century to the present. Main themes include interdependency between the old and the new world, splendor, trade, and power in China, India, the Ottoman Empire, and Africa, the formation of modern citizenship in a global perspective, the great divergence, imperialism and decolonization, and the contemporary integrated world. More broadly the course will expose students to the use of primary and secondary sources and to the identification of change over time, causality, and contingency in historical knowledge.

HIS 103 History of Western Civilization (3) The first course in a two-course sequence: an historical survey of Western Civilization from its origins to c. 1600. It examines the political, economic, social, cultural, religious, and intellectual developments that shaped the West, including its relationship with other regions of the world. Topics covered include its origins in the ancient Near East, Greece, and Rome; Judaism, Christianity, and Islam; medieval Europe and Byzantium; the Renaissance; European colonization; and the Protestant Reformation. Students will analyze primary and secondary sources.

HIS 104 History of Western Civilization (3) The second in a two-course sequence: an historical survey of Western Civilization from c. 1600 to the present. It examines the political, economic, social, cultural, religious, and intellectual developments that shaped the West, including its relationship with other regions of the world. Topics covered include the Scientific Revolution, early modern state-building, colonialism, the Enlightenment, the French Revolution, the rise of modern political ideologies, imperialism, the World Wars, the Cold War, and terrorism. Students will analyze primary and

secondary sources.

HIS 105 Early American History (3) A survey of early American history emphasizing political, social, and intellectual trends. Students are introduced to works of major historians and to various interpretations of American history. The course will cover early American history from its beginnings through the early National period.

HIS 106 American History in the 19th Century (3) A continuation of HIS 105, covering American history from the early National period through the 19th century.

HIS 107 Modern American History (3) America in the twentieth century, covering the major trends and movements in modern American history. A continuation of HIS 105, HIS 106.

HIS 125 American Social History: A Film Study (3) A study of United States social and cultural movements since the late 19th century, with special emphasis on minority groups - Native Americans, African Americans, women, workers, immigrants, dissenters. In addition to lectures and books, the course will rely extensively on the use of media to illustrate the course of American history. No prerequisite.

HIS 207 History of the North American Indian (3) A survey of American Indian history with emphasis upon pluralistic beginnings, the culture of American Indian groups, Indian-White contacts, the impact of Federal Indian policy, and persistence and change in American Indian culture. No prerequisite, though it would be preferable to have taken HIS 105 and 106.

HIS 208 History of the Iroquois (3) This course will cover the history of the Iroquois peoples. It will describe the historical origins and development of the Iroquois Confederacy, and delve into issues that have had an inpact on the confederacy over the years. Current legal problems, such as land claims, gaming, and taxing authority battles will be analyzed and discussed.

HIS 209 History of American Women (3) A chronological and topical study of women as a group and as members of different social classes, from the colonial period to modern America. Women's contributions to American social, cultural, economic, and political life are emphasized, along with their struggle for civil, legal, and political rights.

HIS 210 History of Women and Medicine in America (3) A study of American medical theories and practice from the 18th century to the present. Emphasis is given to changing views of women's sexuality, women as patients, and as medical practitioners within the context of social and cultural history. Prerequisite: HIS 209 strongly recommended, or Permission of Instructor.

HIS 213 End of Empire: British Imperialism Since 1900 (3) This course is a study of world history and global issues through an examination of the British Empire in the twentieth century. Students will assess how British power operated and how it controlled its huge far-flung Empire. Independence movements from both the British and indigenous populations' perspectives, and the lasting ramifications of British rule, will be investigated.

HIS 214 The Global History of Sexuality (3) This course is an introduction to the scholarly study of the global history of sexuality. Its main focus is to help students develop an understanding of ancient Greek and Roman societies based on comparisons with African and Indian societies of the Early Modern and Modern periods. Students will reflect on the influence of Western society on non-Western cultures. They will explore the changing ways that individuals, moral authorities, the tribe/state and scientific experts have conceptualized sexuality and gender. Topics covered include: age and rites of passage; childhood and adulthood; marriage; conception, birth, infanticide; the family; love; male and female homosexuality; women and property; and sex and politics.

HIS 216 U.S. Foreign Policy Since 1914 (3) This course is an introduction to United States foreign relations from World War I to the present. We examine foreign policies of U.S. presidents, debates among foreign policy analysts, and the way other nations have regarded the United States. Topics include imperialism, spread of American culture, the Cold War, different approaches to international cooperation, unilateralism, multilateralism, the role of military force, and changes in U.S. national security needs.

HIS 217 History of Work in America (3) This course examines labor in the United States from the early 1600s to the present, with special emphasis upon the working class and organized labor after 1830. We will explore major themes in the changing nature of work including conditions, experiences, outlooks, and conduct of workers. Topics include the history of strikes, organizing, and unionism; pink collar work; slave labor and indentured servitude; the effects of war on labor conditions; and gender and race in the workplace.

HIS 219 History of European Women Since 1500 (3) This course is an introduction to the history of women in Europe since the Reformation. Women in all parts of Europe, including Turkey and the European colonies, will be studied. Topics include women at work, in the family, in politics, and in communities as well as female heads of state, scientists, artists, and political activists. The course examines how European women, once defined by their family and marital status, have gained independence and individuality. The course also examines the effects on women of cultural and legal change since 1500. Sources focus on women's perspectives on their own lives. Representations of women in film, art, and literature will be used.

HIS 221 Mayas and Aztecs: An Introduction to the History of Ancient Mesoamerica (3) This course introduces students to the pre-Columbian civilizations of Mexico and Central America, advanced cultures begun long before the common era and lasting for several thousand years. These ancient and still mysterious peoples will be observed and examined, peoples who constructed vast cities and great pyramids some only recently rediscovered, who developed sophisticated calendars and writing systems still not completely understood, and who created religious and political systems that endure in modified forms to this day.

HIS 223 African American History Through the Civil War Era (3) This course examines chronologically and topically the development of African-Americans from Africa, emphasizing the West African kingdoms, through the Civil War Era. West African culture and social life will be discussed in order to show how that culture was exploited by Europeans in the development of the slave trade. Students will spend several weeks studying the development of the institution of slavery and how slaves psychologically adapted to that lifestyle. The course also emphasizes the development of free black communities in America during this period and the motivations for and efforts of African and non-African Americans to end slavery. The course concludes with a discussion of the reality and myth of Black participation in the Civil War and Reconstruction. Prerequisite: ENG 103.

HIS 224 African American History 1890 to the Present (3) This course examines chronologically and topically the development of African Americans from the post-Civil War Era to the present. Students will examine African American responses to the legal institutionalization of segregation, self-help, education and the vote. Between discussions of Black participation in World Wars I and II,

students will investigate the Harlem Renaissance and the development of jazz and the blues. Following a discussion of the Civil Rights Movement, the course will conclude with a discussion of Black conservatism. Prerequisite: ENG 103.

HIS 226 History of the Civil Rights Movement (3) This course examines chronologically the efforts by African Americans to obtain full civil rights from the pivotal period of 1940-1955 to the present. The class focuses on first-hand recollections of the Movement by African and non-African Americans, documentary and popular film representations of the Movement, and federal and state government responses to the Movement. The class discussions will seek to dispel the myths about the Movement while exposing the stereotypes, distortions, and romanticism that surround the Movement. An integral part of that discussion will be evaluating the strategies utilized by those advocating and those opposing the movement for civil rights. The course concludes with an extensive discussion of black conservatism and efforts to "turn back the clock" on civil rights gains. Prerequisites: ENG 103 and ENG 104.

HIS 240 The Plains Indians (3) This course is a study of the Plains Indians from their earliest beginnings to the present time. It will take a detailed look at the rise and development of Plains Indian societies, nomadic and village dwellers; the contact and conflict with Euro-Americans; the challenges faced by the Plains Indians to their traditional way of life during the early reservation years; and the struggle by the Plains Indians to retain tribal sovereignty, politics and culture. The course will make extensive use of visual artifacts, paintings, photographs and film to illustrate and analyze the historical and mythic images of the Plains Indians.

HIS 250 The History of Ancient Egypt (3) This course details the history of Ancient Egypt from the Neolithic through the Roman period. The course examines the development of history in the Nile River Valley, including the economic, political, social, and religious developments, which shaped the region and formed the basis for much of the later cultures of the Near East. Topics covered include European colonialism and the development of early historiography in the Near East, state formation, the age of pyramid building and the reasons for monumental architecture, the significance of early documentation and the cultural legacy of literature, the rise of imperial Egypt, the art and significance of mummification, the tomb of Tutankhamun, and the impact of the Hellenistic age. Students will analyze the significance of primary sources in forming a historical narrative of Egyptian history.

HIS 261 The Civil War (3) This course will examine the American Civil War (1861-1865) in its many aspects. Such topics as the origins of the crisis, the break-up of the Union, the major military campaigns, the actions and motives of Lincoln, Grant, Lee, Davis, and other key players will be explored, as well as the legacy of the war for future generations of Americans. Though military affairs will be emphasized, social, political and economic topics will be covered as well. There will be an extensive use of media.

HIS 276 American West: Film Study (3) We will study the settlement of the American West as it has been reflected in popular literature and films, focusing on the distinction between the actual frontier experience and the way that experience has been presented to us in our entertainment. Special emphasis will be placed on the Plains Indian, the mountain men, and the cowboys.

HIS 286 The American Worker: A Film Study (3) This course studies the American working class since the late Nineteenth Century and how Hollywood film has depicted the struggle of working people to enhance their lives within the capitalist system. The course will explore through lecture, film and readings such topics as the rise of the union movement; the great strikes; ideological controversy within the labor movement; and the role played by African-Americans, women, immigrants and radicals in working class history. Students will view in class major films dealing with the working class, such as The Molly Maguires, Matewan, The Grapes of Wrath, On the Waterfront, Salt of the Earth, and Norma Rae.

HIS 292 Collision of Cultures: America and Europe (3) This course will explore the collision of cultures that resulted from the voyages of Columbus and the European contact with the American continents. The life and career of Columbus and the Spanish conquest of the new world will be covered. The impact of this conquest on both European and American cultures and on subsequent world history will be examined.

Health Information Technology

FOR MORE INFORMATION, CONTACT THE BUSINESS ADMINISTRATION DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W324, (315) 498-2435.

HIT 101 Introduction to Health Information Technology (3) This course introduces the student to health information management practices. Emphasis will be placed on electronic information systems in hospitals and physicians' offices. Manual information systems will also be discussed. The student will study the history of the health information management profession and professional ethics. Students will evaluate healthcare documentation against regulatory, accreditation and facility specific standards. 3 hours lecture 1 hour laboratory

HIT 102 Legal Aspects of Health Information (3) This course is designed to provide the student with an overview of the legal and regulatory requirements for the maintenance, retention, and dissemination of health information and the role of patient documentation in legal proceedings. Major topics include: federal and state regulations; accreditation standards; the federal and state legal system; authorizations and consents, release of information, concepts of liability; civil procedures; compliance and the role of risk management.

HIT 103 Health Information Systems in Non-Hospital Settings (3) This course will introduce students to information systems in various facilities other than hospitals. Health information requirements and functions in both manual and electronic systems will be covered. The course will also address documentation and processes for reimbursement, regulations, and accrediting standards. Prerequisite: HIT 101 or Permission of Instructor; co-requisites: HIT 102 and 223.

HIT 110 Coding and Classification Systems I (3) This course is designed to familiarize the student with coding and classification systems used in health information management. Emphasis will be on outpatient coding, classification, and reimbursement systems including CPT, HCPCS, APG's, and RBRVS. Students will become familiar with both manual and automated systems. Prerequisite: HIT 101, BIO 171 or Permission of Instructor. Spring semesters only.

HIT 120 Medical Terminology (3) This course will provide a detailed study of the meaning of medical terms that relate to medical science and human anatomy. Medical specialties including pathology, radiology, and pharmacology, as well as abbreviations used in the health care field, will be covered. In addition to definitions, pronunciation and spelling will be emphasized.

HIT 201 Health Statistics and Data Analysis (3) This course reviews descriptive and vital statistics, reporting documents, definitions and formulae for computing hospital and public health statistics. It will cover the management of health information as it relates to data

collection, analysis and presentation. Topics will include the collection, analysis and display of data for quality assurance, utilization review, risk management and reimbursement. Prerequisites: HIT-103, MAT-087 or equivalent.

HIT 202 Management of Health Information Service (3) This course introduces the student to the management functions of planning, organizing, directing and controlling. Human resource management and work flow will also be covered. In addition to health information management services, the functions of quality and utilization management and organizational compliance will be addressed. Prerequisites: HIT 102, HIT 201, HIT 205, HIT 212

HIT 205 Computer Applications in Health Information Management (3) This course is designed to familiarize the student with computer applications used in health information. Emphasis will be placed on the development, use, and maintenance of the electronic health records. Other topics covered include the various applications used in health information management. Importance and methods for confidentiality and security systems will also be addressed. Prerequisites: HIT 101, HIT 102, HIT 103, HIT 110 and HIT 223.

HIT 210 Coding and Classification Systems II (4) This course is a continuation of HIT 110. It is designed to familiarize the student with coding and classification systems used in health information management. Emphasis will be on Inpatient coding, classification, and utilizing ICD-9-CM. Reimbursement systems including DRG's, negotiated rates and capitated payments will be discussed. Students will become familiar with both manual and automated systems. Student cost for required texts for this course is approximately $150. Class consists of three hours of lecture and two laboratory hours. Prerequisite: HIT 110 or Permission of Instructor; co-requisite: BIO 221. Fall semesters only.

HIT 212 ICD-10-CM/PCS (4) This course focuses on the ICD-10-CM and ICD-10-PCS classification systems. The course will introduce students to the professional standards for coding and reporting of diagnostic inpatient and outpatient services and inpatient procedure services. Coding characteristics, conventions, and guidelines will be applied in identifying and accurately assigning codes to diseases, conditions, and procedures. Health records, manual and computerized coding methods, and coding references will be utilized in the coding process. Class consists of three hours of lecture and two laboratory hours. Prerequisite: BIO-171, BIO-172. Co-requisite: BIO-221.

HIT 215 Healthcare Reimbursement (3) This course is the study of the principles of reimbursement and the practice of insurance processing in a variety of healthcare settings. Prospective payment systems, revenue cycle management, utilization management and pay-for-performance will be reviewed. Case-mix management, including the assignment and reporting of codes for diagnoses and procedures/services will be covered. Inpatient, skilled nursing, and outpatient cases will be reviewed to identify issues of fraud and abuse. Prerequisites: HIT 110, HIT 212.

HIT 223 Professional Practice Experience I (1) This course is designed to give students the opportunity to observe health information departments and systems in non-hospital settings. Students are assigned on a rotating basis to a variety of health related sites, including health regulatory agencies, ambulatory care, long-term care and other non-hospital facilities for a total of 40 hours. Co-requisites: HIT 101, HIT 103. Spring semesters only.

HIT 225 Supervised Professional Practices II (3) Students in the health information technology program are required to complete a clinical practicum at the technical level. The main purpose of this practicum is to integrate the didactic (lecture) component with the clinical (practice) components. Students will utilize the knowledge they have gained from the classroom lectures and laboratory experiences in the clinical setting. Each student will spend 15 days (120 hrs.) in a health care facility. The student is responsible for the arrangement and costs of transportation to and from the clinical site. Prerequisites: HIT 101, HIT 102, HIT 110, and HIT 223; co-requisite: HIT 210.

HIT 227 Supervised Professional Practices III (3) This course is a continuation of HIT 225 and is designed to give students practical experience in health information management and supervisory issues. Students will utilize the knowledge they have gained from the classroom lectures and laboratory experiences in the clinical setting. Each student will spend 15 days (120 hrs.) in a health care facility. The student is responsible for the arrangement and costs of transportation to and from the clinical site. Prerequisite: HIT 225; co-requisites: HIT 202 and 205.

HIT 229 Professional Practice Experience II (3) Students in the Health Information Technology program are required to complete a professional practice experience within a healthcare setting. The main purpose of this experience is to integrate the didactic (lecture) component with the clinical (practice) component. Students will utilize the knowledge they have gained from the classroom lectures and laboratory experiences in the clinical setting. Each student will spend 15 days (120 hours) in a healthcare facility. The student is responsible for the arrangement and costs of transportation to and from the clinical site, parking, and proper work attire. Prerequisite: HIT-101, HIT-102, HIT-110, HIT-201, HIT-205, HIT-212. Co-requisite: HIT-202.

HIT 230 Advanced Seminar in Health Information Technology (1) This course is designed to review and integrate previous HIT courses and clinical experiences. Exploration of career opportunities, preparation of resume, job search and interviewing for positions in health information technology will also be covered. This consists of a three-hour lecture which meets for five weeks. Co-requisite: HIT 227.

Hotel Technology

FOR MORE INFORMATION, CONTACT THE BUSINESS ADMINISTRATION DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W324, (315) 498-2435.

HTL 230 Housekeeping and Properties Management (3) A detailed examination of the servicing of the guest in a lodging establishment. Critical attention is applied to the care and preventive maintenance of both public and private areas within the hotel edifice with emphasis on equipment, personnel and modern innovations. Prerequisite: FSA 100. Fall semesters only.

HTL 232 Front Office Management (3) The day-to-day operations of the front office are examined from the progression of a room reservation to check-out. Room rate determination, billing systems, fiscal and accounting policies are emphasized. Traditional methods and systems are compared to computerized contemporary methods. Prerequisites: CIS 100, BUS 105. Spring semesters only.

HTL 234 Meeting Management Planning (3) Meeting Management Planning provides the student an opportunity to explore the functions of planning, developing, budgeting, marketing, and evaluating meetings and special events. Fall semesters only.

Human Services

FOR MORE INFORMATION, CONTACT THE HUMAN SERVICES AND TEACHER EDUCATION DEPARTMENT IN MAWHINNEY HALL, ROOM M280, (315) 498-2341.

HUM 150 Human Services Theory, Skills, and Resources (3) This course introduces students to career fields in Human Services and other helping professions. It also teaches the beginning interpersonal skills and techniques essential for effective human services workers. Theories covered include human development, and the effects of family, culture, social systems and diversity on the development of the individual. Students will learn how to apply this knowledge when working with people, and be introduced to the range of community resources for human services. Students will also explore career goals, clarify their personal and professional values, select a Human Services option and begin the process of identifying a field internship placement for HUM 164: Field Instruction. Prerequisite: English and Reading placement must be at college-level proficiency.

HUM 152 Human Services: Beginning Skills And Competencies (3) This course introduces students to the skills and competencies necessary for professional and ethical conduct appropriate to career fields in Human Services. The course addresses the emotional and psychological stamina needed to work in the Human Services field; examines the importance of empathy when assisting individuals, children, families and people with disabilities in Human Services settings; and provides students with the tools to communicate effectively with clients and other Human Service professionals. Students will develop critical thinking and problem-solving skills using case study examples, and receive training in stress management and coping techniques to promote wellness. Teaching approaches include lecture, discussion, modeling, role play, and large and small group activities. Prerequisite: HUM 150 or Permission of Instructor.

HUM 162 Introduction to Social Work Practice (3) The student is introduced to generic social work methods; aspects of practice; the concepts of generalist; social systems interventions; and comprehensive social work service to individuals, small groups, and the community. Prerequisite: HUM 150 or Permission of Instructor.

HUM 164 Human Services Field Instruction and Seminar I (3) This course is the required supervised practice experience enabling the student to develop competency for the delivery of Social Work, Counseling, or Alcohol and Substance Abuse Counseling services at the Associate Degree level. The introductory learning experience allows the student to begin to develop a generalist knowledge base of Human Services, Social Work, Counseling, or Alcohol and Substance Abuse Counseling practice. Students will complete a 100-hour field placement at a site approved by the department. A medical examination, tuberculin test, background check and/or fingerprint review may be required. Prerequisites: 2.0 overall G.P.A., HUM 150, and one of the following theory courses: HUM 162, 260, or 268, or Permission of Instructor.

HUM 165 Introduction to Counseling (3) This course is an introduction to three broad areas of counseling: historical and professional foundations of the counseling profession, counseling theories, and counseling specialties (focusing on specific populations with whom counselors work or professional practices in which they are engaged). It is designed to provide an understanding of the counseling profession, an overview of the developments of counseling, fundamental counseling theories, and the variety of counseling specialty areas of practice. It is recommended that students take PSY 103 General Psychology before taking this course.

HUM 203 Child Welfare and Social Work (3) This course presents the student with an overview of the child welfare system, particularly as it pertains to working with children and families within the discipline of social work and the community-at-large. Utilizing a strengths-based empowerment perspective in child welfare, the course will provide basic knowledge and understanding of the historical and ongoing development of the child welfare system, explore current services offered in child welfare agencies and examine practice decisions based on several social work methodologies. The impact of culture norms and the social marginalization of populations will be discussed as they relate to the definitions of abuse and the welfare of children and families. Prerequisite: HUM 150 or Permission of Instructor.

HUM 205 Psychosocial Impact of HIV/AIDS (3) This course provides a forum for students to learn about the history and social environment of HIV/AIDS, patterns of infection and psychosocial issues such as stigma, isolation, trauma, grief and poverty. Students will also explore the role of politics, public health, and community action, and the student's responsibility to family, friends, and the community, both personally and as a professional in the helping professions.

HUM 230 Human Services With Diverse Populations (3) This course examines the domestic and global contexts of diversity, the impact of ethnicity, race, gender, ability/disability, socio-economic class and sexual orientation on our lives. Students will develop self-awareness regarding their own feelings, assumptions and behaviors in relation to others different from themselves, and will explore how these impact their personal values, belief system and interactions with others. Same course as EDU 230; students may not receive credit for both courses. Prerequisite: English and Reading placement must be at college level.

HUM 257 Crisis Intervention Counseling (3) This course is intended as an introduction to crisis intervention theories, models, and specific interventional therapeutic techniques. The course focuses on intervention, theories, and concepts in situational and developmental crises and is designed to assist students to acquire basic helping skills in crisis intervention counseling. Prerequisite: HUM 162, 165, 260, or 268, or Permission of Instructor; PSY 103 is recommended.

HUM 260 Social Work Interviewing and Counseling (3) This course addresses the functions, roles, and techniques essential for effective social work/ human services work. It encompasses social work values, knowledge and skills in the interviewing and the counseling relationship. Prerequisite: HUM 150 or Permission of Instructor.

HUM 261 Social Work Policy (3) This course examines the history of social welfare and institutionalized social services and the impact on social workers and other helping professionals. Topics include: child welfare, public health, racism, sexism and the evolution of social work as a profession. Prerequisite: HUM 150 or Permission of Instructor.

HUM 263 Human Services Field Instruction and Seminar II (3) This course is an optional second-level field internship. The in-depth learning experience builds on the competencies of the first level and allows students to further develop their knowledge base of Human Services, Social Work, Counseling, or Alcohol and Substance Abuse Counseling practice. Students will complete a 100-hour field placement at a site approved by the department. A medical exam, tuberculin test, background check and/or fingerprint review may be required. Prerequisite: HUM 164 or Permission of Instructor.

HUM 265 Aging and the Family (3) This course is an introduction and overview of the process of aging, including interactions between the biological, psychological, social, and economic aspects of aging in our society. Areas such as nutrition, health, housing, employment and retirement will be explored with an emphasis on the interdependence

of all these areas. The present status of the elderly and possible changes that might prevent or remedy the problems they face in today's society will be discussed.

HUM 267 Families in Crisis: Human Services Intervention (3) This course will introduce a study of families in crisis using intervention dynamics as the major treatment methodology. Focus is on specific developments and situational crises, which interfere with family functioning and coping abilities. The course will discuss social services, institutional services, and the role of the crisis counselor.

HUM 269 Social Work and People With Disabilities (3) This course will include a brief history of disabilities in our society, with definitions and discussion of various disability groupings, providers, services and interventions as well as many of the current issues that individuals with impairments and disabilities face today. It considers the impact of the Americans with Disabilities Act of 1900 (ADA) and its effect on public awareness and attitudes. Prerequisite: HUM 150 or Permission of Instructor.

HUM 270 Assertiveness Training (1) The purpose of this course is to learn the theory of assertiveness training as a method for developing skills in assertive communication, to conduct oneself in an effective, direct, appropriate manner in interpersonal situations, especially at work. Teaching approaches include lecture, discussion, modeling, role rehearsal, videotaping, etc. Prerequisite: English and Reading placement must be at college-level proficiency.

Interior Design

FOR MORE INFORMATION, CONTACT THE ARCHITECTURE + INTERIOR DESIGN DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W352, (315) 498-2687

IND 101 Exploring Sustainability, Design, and The Built Environment (3) This course is an exploration of global built environments, with a focus on explaining significant design styles, movements, and trends within the context of the arts, politics, technology, business, the sciences, the social sciences, and an emphasis on sustainability. Using an interdisciplinary approach, the course discusses the recent history of design in the built environment - what has impacted it and why. It is part of the three-course foundation for all Architecture and Interior Design students and is also a Liberal Arts elective. Prerequisite: ARH/IND major or placement in ENG 103.

IND 110 Foundation Studio 1 (4) This foundation studio will be used to explore design principles. Freehand, manual drafting and digital techniques will be introduced that help the student appreciate forms, texture and composition. Instruction will be given in pencil techniques, perspective principles, and the use of digital tools. This course will develop the required graphic skills to prepare architecture and interior design students for the next three semesters of course work. This class meets 6 hours per week. Co-requisites:ARH/IND 101 and 170.

IND 111 Design Studio 2 (4) This is the first of three design studio courses. Students begin to explore elements of design and their relationships in three dimensions. Design concepts and processes are discussed in detail. Architectural and interior design concepts of space, organization, circulation, scale, structure, volume, massing, fenestration and materials are analyzed and discussed. This class meets 6 hours per week. Prerequisites: ARH/IND 101, 110, and 170; co-requisites: ARH/IND 120 and 140.

IND 120 Drafting Studio 1: Wood Frame (3) This course will develop basic architectural drafting skills (digital and manual). The student will demonstrate an understanding of these skills through the development of a set of architectural drawings for a wood frame house or similar structure. This class meets 4 hours per week. Prerequisite: ARH/IND 101, 150, and 170; co-requisite: ARH/IND 140 or Permission of Department.

IND 140 Wood Frame Construction (3) This is a lecture course covering the materials and methods of contemporary residential construction, including sustainability and the latest building science. The characteristics, properties, performance and application of materials and systems used in wood frame construction will be discussed.

IND 170 Technology: Design and Production (3) This course will develop the technology skills required for architecture and interior design students. The students will learn how to create, modify, communicate, collaborate, transmit and present solutions to problems using specific software applications including AutoCAD, SketchUp, ANGEL CMS, and PowerPoint. Co-requisites: ARH/IND 101 and 110.

IND 215 Design Studio: Commercial (4) Students are expected to apply their knowledge of basic design principles, concepts, and design process to analyze and solve commercial interior design problems. Students study and apply principles of programming, concept getting, space planning, and elements of design, including material and finish selections, to create functional, attractive, accessible and sustainable commercial interiors. This design studio course focuses on specific user groups and commercial project types such as institutional, corporate, and retail. Oral presentation and manual and digital graphic 2D and 3D techniques are utilized to communicate project solutions. This class meets for six hours per week. Prerequisite: IND 111; co-requisites: IND 246 and 256. Fall semesters only.

IND 216 Design Studio: Residential (4) Students are expected to apply their knowledge of basic design principles, concepts, and design process to analyze and solve residential interior design problems. Students study and apply principles of programming, space planning, and elements of design to create functional, attractive, accessible, and sustainable residential interiors. Special emphasis is placed on kitchen and bath design, and on National Kitchen and Bath Association (NKBA) guidelines and standards. Oral presentation, and manual and digital graphic 2-dimensional and 3-dimensional techniques are utilized to communicate project solutions. This class meets 6 hours per week. Prerequisite: ARH/IND 111; co-requisite: IND 247. Spring semesters only.

IND 230 History of Architecture and Interiors 1 (3) This is a survey course that traces developments in design, construction, materials and interiors from Prehistory to the dawn of the Renaissance. The comparative method is used to study the impact of economic, religious, political, sociological and technological develpments on resultant building types, architectural forms, interior designs, furnishings and decorative arts.

IND 231 History of Architecture and Interiors 2 (3) This is a survey course that traces developments in design, construction, materials and interiors from the dawn of the Renaissance to the present day. The comparative method is used to study the impact of economic, religious, political, sociological and technological developments on resultant building types, architectural forms, interior designs, furnishings and decorative arts.

IND 240 Residential Interiors (3) This course is an introduction to design and decoration of residential interiors. Topics include design principles and elements, approaches, sustainable environments and materials, furniture and decorating styles, fabrics, window treatments,

accessories, and business practice. Prerequisites: ARH/IND 101, 110 and 170, or Permission of Department.

IND 246 Interior Finish Systems and Furnishings (3) This course concentrates on a comparative analysis of commonly used floor, wall, and ceiling finish systems for residential and commercial building interiors. Furnishings, furniture and office landscape systems will also be discussed. Prerequisite: ARH/IND 140; co-requisite: IND-215.

IND 247 Kitchen and Bath Fundamentals (3) This course is an introduction to the fundamentals of residential kitchen and bath design and construction. The course focuses on three main areas: product knowledge, mechanical/electrical systems, and project/business management. National Kitchen and Bath Association (NKBA) guidelines and standards form the basis of instruction. Non-interior design students with the appropriate background may take this course with permission of the department. Co-requisite: IND 216. Spring semesters only.

IND 256 Graphic Communications (3) This is an advanced course in perspective rendering. Students are expected to apply perspective drawing skills acquired in IND 150 to generate color renderings of building interiors and exteriors. Students taking Design Studio II are encouraged to take this course concurrently and to use their design solutions as a base for required rendering projects in IND 256. Prerequisite: IND 110 or Permission of Department.

IND 266 Independent Study (1)

IND 290 Internship in Interior Design (1) This course is designed for students in their second year of interior design coursework, giving them an opportunity to obtain real-world experience in the interior design and construction industry. Internships and co-op job opportunities are available throughout the community; however, there is no guarantee of internship placement. The ultimate responsibility for obtaining a placement rests with the student. Assistance is provided by department faculty and the Career and Applied Learning Center. Internships may be paid or unpaid. A learning contract containing specific educational objectives that relate to both the work experience and academic studies is developed between the student and a faculty internship coordinator. Course requirements include a minimum of 60 hours of work per credit, maintenance of a work journal, and a final paper. Open to IND majors only. Prerequisites: Approval of department, minimum G.P.A. of 2.5, and sophomore standing.

IND 291 Internship in Interior Design (1) This course is designed for students in their second year of interior design coursework, giving them an opportunity to obtain real-world experience in the interior design and construction industry. Internships and co-op job opportunities are available throughout the community; however, there is no guarantee of internship placement. The ultimate responsibility for obtaining a placement rests with the student. Assistance is provided by department faculty and Onondaga's internship office. Internships may be paid or unpaid. A learning contract containing specific educational objectives that relate to both the work experience and academic studies is developed between the student and a faculty internship coordinator. Course requirements include a minimum of 60 hours of work, maintenance of a work journal, and a final paper. Open to IND majors only. Prerequisites: Approval of department, minimum G.P.A. of 2.5, sophomore standing.

IND 292 Internship in Interior Design (1) This course is designed for students in their second year of interior design coursework, giving them an opportunity to obtain real-world experience in the interior design and construction industry. Internships and co-op job opportunities are available throughout the community; however, there is no guarantee of internship placement. The ultimate responsibility for obtaining a placement rests with the student. Assistance is provided by department faculty and the Career and Applied Learning Center. Internships may be paid or unpaid. A learning contract containing specific educational objectives that relate to both the work experience and academic studies is developed between the student and a faculty internship coordinator. Course requirements include a minimum of 60 hours of work per credit, maintenance of a work journal, and a final paper. Open to IND majors only. Prerequisites: Approval of department, minimum G.P.A. of 2.5, and sophomore standing.

IND 293 Internship in Interior Design (2) This course is designed for students in their second year of interior design coursework, giving them an opportunity to obtain real-world experience in the interior design and construction industry. Internships and co-op job opportunities are available throughout the community; however, there is no guarantee of internship placement. The ultimate responsibility for obtaining a placement rests with the student. Assistance is provided by department faculty and the Career and Applied Learning Center. Internships may be paid or unpaid. A learning contract containing specific educational objectives that relate to both the work experience and academic studies is developed between the student and a faculty internship coordinator. Course requirements include a minimum of 120 hours of work, maintenance of a work journal, and a final paper. Open to IND majors only. Prerequisites: Approval of department, minimum G.P.A. of 2.5, and sophomore standing.

IND 294 Internship in Interior Design (3) This course is designed for students in their second year of interior design coursework, giving them an opportunity to obtain real-world experience in the interior design and construction industry. Internships and co-op job opportunities are available throughout the community; however, there is no guarantee of internship placement. The ultimate responsibility for obtaining a placement rests with the student. Assistance is provided by department faculty and the Career and Applied Learning Center. Internships may be paid or unpaid. A learning contract containing specific educational objectives that relate to both the work experience and academic studies is developed between the student and a faculty internship coordinator. Course requirements include a minimum of 180 hours of work, maintenance of a work journal, and a final paper. Open to IND majors only. Prerequisites: Approval of department, minimum G.P.A. of 2.5, and sophomore standing.

Italian

FOR MORE INFORMATION OR ASSISTANCE WITH PLACEMENT INTO APPROPRIATE COURSE-LEVEL, CONTACT THE MODERN LANGUAGES DEPARTMENT IN MAWHINNEY HALL, ROOM M308, (315) 498-2305.

ITA 101 Elementary Italian I (3) This learner-centered course is designed for students with little or no previous knowledge of Italian. Students acquire basic grammatical and lexical skills that will enable them to communicate in routine social or professional situations within an authentic cultural context. Upon successful completion of ITA 101, students may enroll in ITA 102. This course also fulfills the Global Awareness requirement at Onondaga.

ITA 102 Elementary Italian II (3) This course is a sequel to Elementary Italian I. It builds upon the basic grammatical, linguistic, communicative and cultural concepts learned in ITA 101. Upon successful completion of ITA 102, students may enroll in ITA 201. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: ITA 101, or two to three years of high school Italian, or Permission of Instructor.

ITA 201 Intermediate Italian I (3) This dynamic course draws upon previously acquired knowledge, while introducing students to more complex grammatical and lexical structures to further develop communicative proficiency and cultural knowledge. The course is conducted mostly in Italian. Upon successful completion of ITA 201, students may enroll in ITA 202. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: ITA 102, or four years of high school Italian, or Permission of Instructor.

ITA 202 Intermediate Italian II (3) This course is a sequel to Intermediate Italian I. It expands upon complex grammatical and lexical structures. It is conducted entirely in Italian and provides a solid foundation for advanced study. Upon completion of ITA 202, students may enroll in any intermediate-high level course. Students who successfully complete the ITA 202 level have fulfilled their language requirement for the A.A. in Humanities and Teacher Prep programs. The three additional credits may be taken either as a language course or as a general elective. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: ITA 201, or five years of high school Italian, or Permission of Instructor.

Labor Studies

FOR MORE INFORMATION, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNEY HALL, ROOM M310, (315) 498-2313/2266.

LBR 207 Communication @ Work (3) This course is an introduction to the theory and practice of communication in the workplace. The focus of the course is interpersonal communication in a professional context. Topics covered include: meeting management, interview techniques, participation in team and group communication, preparation of professional presentations, managerial communication, diversity in the workplace, and listening skills. This course emphasizes the development of practical and critical skills. Prerequisite: Any 100-level COM course or Permission of Instructor.

LBR 255 Labor History (3) A review of the major developments in American labor history form colonial times to the present with special emphasis on the changing goals of labor, early union efforts, the evolution of labor legislation, the development of the AFL and the CIO, the changing relationship between employer and employee.

Literatures, Cultures and Civilizations

FOR MORE INFORMATION, CONTACT THE MODERN LANGUAGES DEPARTMENT IN MAWHINNEY HALL, ROOM M308, (315) 498-2305.

LCC 220 French Literature and Civilization in English I (3) A survey of French literature and civilization from the Middle Ages to the Renaissance, examining representative works within the context of artistic, historical and intellectual developments. Lectures and readings in English. This course fulfills the SUNY Gen Ed western civilization requirement as well as the Global Awareness requirement for the A.A. in Humanities and Social Sciences. However, it does NOT fulfill the foreign language requirement for any degree program.

LCC 245 Latin American Civilization in English (3) A one-semester course examining the geographical areas, Indian cultures, Spanish heritage, and 20th century problems of Latin America. Lectures and readings in English. This course fulfills the SUNY Gen Ed requirement for other world civilizations as well as the Global Awareness requirement for the AA in Humanities and Social Sciences. However, it does NOT fulfill the foreign language requirement for any degree program.

Law Enforcement

FOR MORE INFORMATION, CONTACT THE PUBLIC SAFETY TRAINING CENTER IN MULROY HALL, (315) 498-6046.

LEC 102 Principles of Law for Campus Peace Officers (4) This course is an introduction to the law as required of Campus Peace Officer candidates. Topics include jurisdiction and responsibilities of law enforcement, criminal and civil adjudicatory process and court structure, constitutional law, penal law, criminal procedure law, juvenile law, civil liability, ancillary NYS statutes, and vehicle and traffic law. Departmental permission required. Only open to Campus Peace Officers.

LEC 103 Principles of Law for Law Enforcement Officers (7) All Police Officer Recruits must, by law, enroll in and graduate from a Municipal Police Training Council-accredited Police Academy Program. The Law Enforcement Certificate Program is the equivalent of an accredited Police Academy. Graduates receive a completion certificate that, along with several other training components (including physical training and a practical internship), certifies them as eligible to serve as sworn police officers. The program consists of 32 credits covering such topics as Principles of Law for Law Enforcement Officers, Law Enforcement Procedures and Proficiencies, Investigation Techniques for Law Enforcement Officers, and Community Relations for Law Enforcement Officers. Fees are required for uniform and equipment.

LEC 104 Campus Peace Officer Procedures (4) Campus Peace Officer Procedures teaches candidates the various topics, knowledge, actions and procedures required of a peace officer. Topics include observation and patrol procedures, reacting to and dealing with bombs and bomb threats, the nature and control of civil disorder, domestic violence, crimes in progress, traffic enforcement procedures, arrest processing and dealing with intoxication (alcohol). Only open to Campus Peace Officers.

LEC 104L Campus Peace Officer Procedures - Subject Management Proficiency (4) Students are instructed in the basic physical/psychomotor skills required of a peace officer candidate. Students become certified as competent in the areas of arrest techniques, defensive tactics, the use of aerosol and impact devices, and riot control formations. Only open to Campus Peace Officers.

LEC 105 Law Enforcement Procedures (8) All Police Officer Recruits must, by law, enroll in and graduate from a Municipal Police Training Council-accredited Police Academy Program. The Law Enforcement Certificate Program is the equivalent of an accredited Police Academy. Graduates receive a completion certificate that, along with several other training components (including physical training and a practical internship), certifies them as eligible to serve as sworn police officers. The program consists of 32 credits covering such topics as Principles of Law for Law Enforcement Officers, Law Enforcement Procedures and Proficiencies, Investigation Techniques for Law Enforcement Officers, and Community Relations for Law Enforcement Officers. Fees are required for uniform and equipment.

LEC 105L Law Enforcement Procedures - Proficiency (5) All Police Officer Recruits must, by law, enroll in and graduate from a Municipal Police Training Council-accredited Police Academy Program. The Law Enforcement Certificate Program is the equivalent of an accredited Police Academy. Graduates receive a completion certificate that, along with several other training components (including physical training and a practical internship), certifies them as eligible to serve as sworn police officers. The program consists of 32 credits covering such topics as Principles of Law for Law Enforcement Officers, Law Enforcement Procedures and Proficiencies, Investigation Techniques

for Law Enforcement Officers, and Community Relations for Law Enforcement Officers. Fees are required for uniform and equipment.

LEC 108 Campus Peace Officer Investigation Techniques (4) Campus Peace Officer Investigation Techniques teaches candidates the various topics, knowledge, actions and procedures required to investigate a crime. Topics include information development, interviewing techniques, physical evidence, injury and death cases, sex crimes, criminal investigation techniques specific to larceny (specifically, auto theft, burglary, robbery and arson), narcotics and dangerous drugs, case preparation, organized crime and missing or abducted children. Only open to Campus Peace Officers.

LEC 109 Law Enforcement Investigation Techniques (4) All Police Officer Recruits must, by law, enroll in and graduate from a Municipal Police Training Council-accredited Police Academy Program. The Law Enforcement Certificate Program is the equivalent of an accredited Police Academy. Graduates receive a completion certificate that, along with several other training components (including physical training and a practical internship), certifies them as eligible to serve as sworn police officers. The program consists of 32 credits covering such topics as Principles of Law for Law Enforcement Officers, Law Enforcement Procedures and Proficiencies, Investigation Techniques for Law Enforcement Officers, and Community Relations for Law Enforcement Officers. Fees are required for uniform and equipment.

LEC 110 Community Relations for Campus Peace Officers (2) This course covers community relations issues and skills for the candidate. Topics include community relations, community resources, services to victims and witnesses, crime prevention, crimes against the elderly, ethical awareness issues, cultural diversity, bias related incidents, sexual harassment issues and contemporary issues with which law enforcement is confronted. Only open to Campus Peace Officers.

LEC 111 Community Relations for Law Enforcement Officers (2) All Police Officer Recruits must, by law, enroll in and graduate from a Municipal Police Training Council-accredited Police Academy Program. The Law Enforcement Certificate Program is the equivalent of an accredited Police Academy. Graduates receive a completion certificate that, along with several other training components (including physical training and a practical internship), certifies them as eligible to serve as sworn police officers. The program consists of 32 credits covering such topics as Principles of Law for Law Enforcement Officers, Law Enforcement Procedures and Proficiencies, Investigation Techniques for Law Enforcement Officers, and Community Relations for Law Enforcement Officers. Fees are required for uniform and equipment.

LEC 113L Campus Peace Officer Procedures - Tactical & Emergency Response (4) Students are instructed regarding vehicular response to emergency situations. Other topics include the establishment of the National Incident Command System and implementation of basic life support procedures. Only open to Campus Peace Officers.

LEC 114 Phase 2 - Basic Course for Law Enforcement Officers (2) Course topics include the proper circumstances and uses of firearms; counter terrorism issues, actions and reactions techniques; command and control issues for first responders; and tactics associated with detecting fraudulent identification documents. Prerequisite: Only sworn police officers may attend the basic course for police officers (phase 2); co-requisite: LEC 114L.

LEC 114L Phase 2 Laboratory - Basic Course for Law Enforcement Officers (5) Students are instructed in and are certified as competent in the areas of firearms training, counter-terrorism, DWI detection, standard field sobriety testing, and supervised field training review and orientation. Open to sworn police officers. Co-requisite: LEC 114.

LEC 120 EMS Certified First Responder (3) An introduction to EMS systems. Topics include: patient assessment, airway management, shock/hemorrhage control, trauma orientation, medical emergencies/OB emergencies and cardiology overview/defibrillation/CPR skills. Credit for this course may not be applied to any degree or certificate requirements. All EMS courses are offered in conjunction with the Onondaga County EMS Bureau. Contact the EMS Bureau for registration information.

LEC 126 Police Supervision (3) This course covers those areas pertinent to law enforcement supervision such as administrative procedures, leadership, effective communication, community relations, National Incident Management System and national response plan. The General Municipal Law requires that all first-line supervisory personnel complete this course. This course is open to sworn personnel only.

LEC 128 Instructor Development for Law Enforcement Officers (2) This course will give police personnel the ability to research, prepare and communicate knowledge in the field of law enforcement. Lessons focus on setting instructional objectives, factors that influence adult learning, communication skills, the instructional process, and methods of evaluating course effectiveness. Prerequisite: This course is open to sworn law enforcement personnel only.

Library

FOR MORE INFORMATION, CONTACT THE LIBRARY DEPARTMENT IN COULTER HALL, ROOM C112, (315) 498-2335.

LIB 100 The Art of Inquiry (1) A seminar in practical general education with emphasis on such questions/issues as: What is the art of inquiry and how does it relate to the idea of the library? What questions are most worth asking? What does it mean to tend to things artfully? What is the "gift of reading"? This course will be of special value for students who are interested in finding their teachers.

LIB 210 Real-World Research (1) Finding information today is easier than it's ever been before. But can you be sure what you've found is accurate? That question forms the basis of LIB 210. Topics include: types of information resources (e.g. Internet, print, etc.); search techniques; primary resources; critical evaluation; copyright and intellectual property issues; and the use and value of libraries and information centers in the twenty-first century. Students will learn how to locate and access high-quality, authoritative information. In addition, students will attain a basic familiarity with primary research methods and interpretation.

Mathematics

FOR MORE INFORMATION, CONTACT THE MATHEMATICS DEPARTMENT IN MAWHINNEY HALL, ROOM M210, (315) 498-2328.

MAT 079 Pre-Algebra (3EQ) This course will provide students with concepts and techniques associated with pre-algebra mathematics. Topics include arithmetic of fractions, decimals, proportions, and percent and an introduction to signed number operations. This course will emphasize both skill development and an application of these skills to real world situations.

MAT 084 Mathematical Literacy (4EQ) This course focuses on mathematics for everyday life. It integrates fluency with numbers, proportional reasoning, data interpretation, algebraic reasoning, modeling, and communicating quantitative information.

Mathematical concepts are investigated through group problems and class discussions based on real-life contexts of citizenship, personal finances, and medical literacy. This course prepares students to take a college-level non-STEM course in mathematics, such as MAT 104, 112, or MAT 113. Students placing at this level and needing MAT 114 should take MAT 087 or MAT 088 instead of this course. Prerequisite: Arithmetic skills.

MAT 085 Math Skills and Applications (1EQ) Provides learning reinforcement for students enrolled in the areas of arithmetic, elementary algebra, or intermediate algebra. Both mathematical skills and applications will be emphasized. Students may enroll in this course only with a math diagnostician's recommendation. This course will be offered in a workshop format as needed or as requested by other disciplines requiring math skills (i.e. Nursing, health related professions, Economics).

MAT 087 Beginning Algebra (3EQ) Topics include real number systems, algebraic operations, linear equations, coordinate systems, powers and roots, polynomials and factoring. Prerequisite: Arithmetic skills and some knowledge of algebra.

MAT 088 Beginning Algebra and Applications (4EQ) Topics include real number systems, algebraic operations, linear equations, coordinate systems, powers and roots, polynomials and factoring. The skills and applications component provides students with an opportunity to practice newly acquired skills and to use these skills to solve practical problems. Prerequisite: Arithmetic skills and no prior knowledge of algebra.

MAT 104 Quantitative Reasoning (3) This course focuses on mathematical and statistical reasoning important for decision-making in everyday life. It integrates quantitative literacy with percentages, probability, mathematical modeling, and statistical thinking. Concepts are investigated with hands-on activities using important medical, environmental, and financial decision examples. Communicating mathematics and using appropriate technologies will also be developed in this course. Prerequisite: MAT 084 or 087, or equivalent.

MAT 106 Mathematical Applications I (4) The first course in a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics include trigonometric functions, vectors, units of measurement and approximate numbers, fundamental concepts of algebra, functions and graphs, systems of linear equations, determinants, factoring and fractions, quadratics, variation and geometry (areas and perimeters of common plane figures, volumes and surface areas of common solids). The scientific calculator will be used throughout the course. Open to Telecommunications Technology majors only. This course is not applicable as an elective for any other degree granting program. Prerequisite: Beginning algebra or equivalent.

MAT 107 Mathematical Applications II (4) The second course in a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics include exponents and radicals, exponential and logarithmic functions, ratio, proportion and variation, oblique triangles, graphs of sine and cosine functions, complex numbers and their applications, inequalities, introduction to statistics and a non-rigorous introduction to calculus. A scientific calculator and computer software will be used throughout the course. Open to Telecommunications Technology majors only. This course is not applicable as an elective for any other degree granting program. Prerequisite: MAT 106.

MAT 112 Nature of Mathematics (3) The purpose of this course is to improve problem-solving skills and expand students' understanding of the nature of mathematics. The topics include: problem-solving, number theory, Euclidean and Non-Euclidean geometry, the concept of infinity, probability and optional topics chosen from topology, chaos, and fractals. This course is primarily for liberal arts students entering fields of study which do not have a strong mathematical emphasis. Prerequisite: Beginning Algebra, Mathematical Literacy, or equivalent.

MAT 113 Contemporary Mathematics (3) The purpose of this course is to show a direct connection between mathematics and concrete real-life problems. Topics will include voting theory, routing problems (graph theory), and either scheduling, fair division or apportionment. This is a course primarily for liberal arts students entering fields of study which do not have a strong mathematical emphasis. Participation in group work is required for classroom sections. Prerequisite: Beginning Algebra, Mathematical Literacy, or equivalent.

MAT 114 Intermediate Algebra With Applications (4) Topics include solving linear equations and inequalities, graphs, functions, systems of equations, polynomials and polynomial functions, factoring, rational expressions and equations, radical expressions and equations, geometric concepts, quadratic equations, and applications. This course will not count toward any elective credit for Math/Science majors. Prerequisite: Beginning algebra or equivalent.

MAT 115 Modeling for Decision Making (3) Linear systems, matrices, linear programming, mathematics of finance, counting procedures, sets, probability, functions, exponents. Use of specific technology will be required. Not open to Math/Science students. Prerequisite: Intermediate algebra, college algebra or equivalent.

MAT 116 Decision Making With Calculus (3) This is the second of a two-semester sequence designed for business transfer and CIS students. Topics include: limits; instantaneous rates of change; differentiation; exponential and logarithmic functions; antiderivatives; indefinite integrals; definite integrals; and applications to business, managerial and social sciences. Not open to Math/Science majors. Prerequisite: MAT 115.

MAT 118 Exploring Statistics (3) This is an introductory statistics course for non-STEM majors. Topics include: random sampling, graphical displays of data, measures of central tendency and dispersion, normal distribution, standard scores, confidence intervals, hypothesis testing, Student t distribution, two-way tables, probability, correlation and regression. Prerequisite: Placement into college level mathematics. Not open to Math/Science or Engineering Science majors or to anyone having earned credit in MAT 151 or BUS 219. A calculator with two-variable statistics capabilities may be required.

MAT 119 Mathematics for Technical Disciplines I (4) This is the first course in a two-semester sequence of dimensional analysis, intermediate algebra, geometry, trigonometry, graphs and control charts, with an understanding of basic statistics. Topics included are: scientific and engineering notation, significant figures, unit conversion, fundamental concepts of algebra, functions and graphs, solving linear and quadratic equations, systems of equations, right triangle trigonometry, basic statistics, graphs and control charts. The scientific calculator will be used throughout the course. This course is intended for technical majors. Prerequisite: MAT 114 or equivalent, or Permission of Instructor.

MAT 120 Mathematics for Technical Disciplines II (3) This is the second course in a two-semester sequence of dimensional analysis, intermediate algebra, geometry, trigonometry, graphs and control charts, with an understanding of basic statistics. Topics included are: trigonometry (including identities), logarithms, exponential and logarithmic equations, variation, graphing with log and semi- log

scales, and brief introduction to differentiation and integration of polynomials. The scientific calculator will be used throughout the course. This course is intended for technical majors. Prerequisite: MAT 119 or POI.

MAT 121 Math for Elementary Teachers (4) This course is the first of a two-semester sequence designed for the prospective B-2, 1-6, 5-8, and B-6 teacher. Students who plan to transfer to a four-year institution in Adolescence or Childhood Education should take this course and MAT 122. Students will develop an understanding of the mathematical curriculum recommended by the National Council of Teachers of Mathematics (NCTM) Standards. Topics include: sets, numeration systems, whole numbers, integers, rational numbers, real numbers, and number theory. A hands-on problem-solving technology-based approach will be emphasized throughout this course. This course fulfills the math requirement for only the following degrees: Human Services and Teacher Education, and the Liberal Arts and Sciences degrees in Adolescence Education, Childhood Education, General Studies, and Humanities and Social Sciences. Prerequisite: Beginning algebra and successful completion of the MAT 121 Competency Test.

MAT 122 Math for Elementary Teachers II (4) This course is the second of a two-semester sequence designed for the prospective B-2, 1-6, 5-8, and B-6 teacher. Students who plan to transfer to a four-year institution in Adolescence or Childhood Education should take this course and MAT 121. Students will develop a comprehensive understanding of the mathematical curriculum as recommended by the National Council of Teachers of Mathematics (NCTM) standards. Topics will include: geometry, probability, statistics and the metric system. A hands-on, problem-solving, technology-based approach will be emphasized throughout the course. This course fulfills the math requirement for only the following degrees: Human Services and Teacher Education, and the Liberal Arts and Sciences degrees in Adolescence Education, Childhood Education, General Studies, and Humanities and Social Sciences. Prerequisite: MAT 121.

MAT 142 Trigonometric Functions (1) A functions approach to the study of trigonometry. The basic trigonometric functions of real numbers are discussed. Graphing calculator use is required. Prerequisite: Intermediate algebra, college algebra or equivalent.

MAT 143 Pre-Calculus With Trigonometry (4) This course is designed to provide the necessary foundation for a standard calculus course. Topics include absolute value and quadratic inequalities, functions and their equations, exponential and logarithmic functions and their applications, right triangle trigonometry, law of sines and law of cosines, trigonometric functions (circular) and their inverses, trigonometric identities and equations, addition and multiple angle formulas, and binomial theorem. Graphing calculator use is required. Prerequisite: Grade of C or better in MAT 114 Intermediate Algebra, College Algebra, or equivalent.

MAT 151 Statistics I (4) Topics covering the descriptive and inferential aspects of statistics will include: frequency distribution, graphs, measures of central tendency and dispersion, probability, probability distributions, binomial and normal distributions, introduction to sampling theory, estimation theory, and hypothesis testing (mean, variance, proportions, etc.). Computer software and graphing calculator applications will be an integral component of this course. A graphing calculator with specific statistical capabilities will be required. Credit will not be given for both MAT 151 and BUS 219. Prerequisite: MAT 116 or MAT 143 or equivalent.

MAT 152 Statistics II (3) A continuation of Statistics I to include the topics two-sample analysis, linear and multiple regression, correlation, analysis of variance, non-parametric statistics and Chi-square goodness of fit. Time series analysis and/or statistical process control as time permits. Computer software and graphing calculator applications will be an integral component of this course. A graphing calculator with specific statistical capabilities will be required. Credit will not be given for both MAT 152 and BUS 220. Prerequisite: MAT 151 or BUS 219 or equivalent.

MAT 161 Calculus I (4) A first course in calculus for students in mathematics, science, computer science, and engineering. Basic analytic geometry, functions, limits and continuity, derivatives of algebraic and trigonometric functions, chain rule, implicit differentiation, antiderivatives, definite integrals, Fundamental Theorem, applications of derivatives and integrals. Graphing calculator use is required. Prerequisite: Four years of college-preparatory mathematics (including trigonometry) or MAT 143 or Permission of Instructor.

MAT 162 Calculus II (4) A second course in calculus for students in mathematics, science, computer science, and engineering. Applications of integrals; derivatives and integrals of exponential, logarithmic, and inverse trigonometric functions; indeterminate forms and L'Hopital's rule; techniques of integration; improper integrals; numerical integration; infinite series; polar graphs. Graphing calculator use is required. Prerequisite: MAT 161.

MAT 241 Linear Algebra (3) This elective for Engineering, Computer Science, and Liberal Arts and Sciences: Mathematics and Science majors introduces students to the deductive style of higher-level mathematics courses. Topics include systems of linear equations, matrices, real vector spaces, subspaces, linear independence, basis, dimension, row and column space of a matrix, rank, linear transformations, kernel, range, matrix of a linear transformation, determinants, eigenvalues, and eigenvectors. Prerequisite: MAT 161 or equivalent.

MAT 251 Discrete Mathematics (3) Study of theoretical bases of set theory, logic, techniques of proof, number systems, functions, relations, algorithms, graph theory, counting, permutations, combinations, binomial co-efficients, recurrence relations, induction and recursion, and trees. Prerequisite: MAT 161 or Permission of Instructor.

MAT 263 Calculus III (4) The following topics are studied: vectors, vector functions, 3-dimensional analytic geometry, partial derivatives, total differentials, gradients, multiple integrals, line integrals, Green's theorem, Stokes's theorem. Prerequisite: MAT 162.

MAT 264 Differential Equations (4) A course designed primarily for Math/Science and Engineering majors. Topics include: definitions, first-order differential equations, linear equations of order two and higher, Laplace transforms, series solutions, systems of differential equations, numerical solution methods, modeling applications. Prerequisite: MAT 162 or equivalent.

Mechanical Technology

FOR MORE INFORMATION, CONTACT THE MECHANICAL TECHNOLOGY DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W142, (315) 498-2442.

MET 150 Introduction to Engineering (3) An introduction to the engineering discipline/profession. Topics covered will include the following: an introduction to the various types of engineering majors and professions, engineering design and analysis methods, elementary engineering statistics and data analysis, computer literacy, working in a team setting, oral and written communications, use of practical engineering tools, and engineering ethics. Coverage of computer literacy may include word processing, spreadsheet, and presentation

software (MS Word, Excel, PowerPoint), graphical applications software (CAD or solid modeling), scientific programming, and mathematical or laboratory software applications.

MET 151 Machine Tools (3) A study of basic theory and laboratory experiences for lathes, milling, drilling, grinding, bench work, and shaping operations. Study of cutting feeds and speeds, surface finishes as well as machine capabilities is included. Two class hours and laboratory.

MET 152 Machine Tools (3) A continuation of MET 151. Additional theory and laboratory experiences include: milling, attachments, broaching, machine tooling, tapers, heat treating, metal finishes, and inspection. Also basic programming and operations of numerical control equipment. The basic applications of jigs and fixtures. Two class hours and laboratory. Prerequisite: MET 151 or Permission of Instructor.

MET 153 Introduction to Modern Manufacturing (3) This course compares traditional manufacturing to modern manufacturing. Elements of Kaizen, Delivery, Accelerated Lead Time Reduction, and Work Place Organization, along with their applications are studied. Pull Systems, Cellular Manufacturing, Statistical Process Control, and Value Stream Mapping are also investigated. Each is studied as to how they relate to one another and the total process of modern manufacturing.

MET 161 Engineering Drawing I (3) This course is designed to prepare students with the necessary skills to interpret and construct engineering drawings. Lectures address such topics as drawing interpretation, orthographic projection systems, dimensioning, geometric dimensioning, and tolerancing, while laboratory sessions give the students practice in drawing creation. Two class hours and three laboratory hours per week.

MET 171 Manufacturing Processes (3) This course covers the principles and procedures of various manufacturing processes used in modern industries. Material selection and machine tools required for the processes are emphasized. Two class hours and a three-hour lab per week.

MET 251 Appl Strength/Materials (4) This course is a study of basic stress-strain analysis as applied to mechanical members. Topics include stress-strain relationships, co-planar force systems, stress in trusses, deformation, shear, torsion, bending moments, centroids, moments of inertia, and deflection of beams. Three class hours and three laboratory hours per week. Prerequisite: MAT 120 or higher or POI.

MET 252 Physical Metallurgy (3) Provides a sound foundation of learning in the area of properties and microstructures of the important ferrous and nonferrous alloys. Also provides a firm foundation relative to the understanding of internal metallic structures of metals. The contents of the course include: metallic structures, the unit cell, atomic radius, planer density, effects of stress and temperature on simple metal structures, ferrous alloys (steel, superalloys, cast iron, ductile iron, malleable iron), phase diagrams, aluminum alloys, heat treatment of metals. Two class hours, three lab hours. Prerequisite: MAT 119 or higher or Permission of Instructor.

MET 254 Numerical Control Programming (3) Designed to prepare students with the necessary skills to program NC and CNC controlled machine tools. Lectures address such topics as drawing interpretation, program formats, input media, sub-routines, canned cycles, and tooling, while the laboratory sessions give the students practice in programming learned techniques. Two class hours and three laboratory hours. Prerequisite: MET 261 or Permission of Instructor; co-requisite: MET 151.

MET 261 Introduction to CAD (3) An introductory course in CAD (Computer-Aided Drafting) utilizes state-of-the-art software. Topics to include the manipulation of the basic drawing commands to construct computer-detailed, multiview drawings with printer/plotter hard copy output. Prerequisite or co-requisite: MET 161 or Permission of Instructor.

MET 270 Solid Modeling (4) A course designed to acquaint students with parametric computer-aided design software. Utilizing state-of-the-art software, students will be introduced to the manipulation of basic commands necessary to construct three-dimensional models.

MET 275 Engineering Computations (3) This course is designed to introduce students to the concepts of Engineering Computations while utilizing contemporary spreadsheet and MATLAB software. Topics include computational theory, number representation (scalars, arrays, and matrices), and programming constructs such as algorithm development and flow-charting. Root finding, matrix methods, simultaneous equations, numerical integration, and optimization will also be discussed. Prerequisite: MAT 120 or higher, or Permission of Instructor.

MET 291 CO:Cooperative Education (3) Designed to provide work experience directly related to the student's field of study. A learning contract, containing specific educational objectives related to the work experience and the student's field of study, is developed by the student and the faculty co-op coordinator. Course requirements include a minimum of 180 hours of work in the student's field of study, maintenance of a work journal to record hours worked and duties performed, and a final paper. This will allow the student to earn three credit hours. The student's performance will be evaluated by the faculty co-op coordinator on the basis of meeting the objectives in the learning contract and satisfactory evaluations by the employer.

MET 299 Engineering Computations (3) This course is designed to introduce students to the concepts of Engineering Computations while utilizing contemporary spreadsheet software and MATLAB. Topics include computational theory, number representation (scalars, arrays, and matrices), and programming constructs such as algorithm development and flow-charting. Root finding, matrix methods, simultaneous equations, numerical integration, and optimization will also be discussed. Prerequisite: MAT-143 or higher or Permission of Instructor.

Music

FOR MORE INFORMATION, CONTACT THE MUSIC DEPARTMENT IN ACADEMIC II, ROOM P202, (315) 498-2256.

MUS 066 Beginning Music Reading I (1EQ) An introductory course for Music Reading (MUS 101R). Course content includes instruction in the recognition/performance of rhythms, pitches, meters and notational systems.

MUS 067 Beginning Music Reading II (1EQ) A continuation of MUS 066 which includes instruction in the recognition/performance of rhythms, pitches and meters. Prerequisite: Permission of Instructor.

MUS 100A Convocation (1) This class is designed to provide professional concerts to help build strong professional music attitudes concerning repertoire and performance, to provide performing opportunities for soloists or groups presenting professional level concerts, and to raise the level of professional musical consciousness for many performing mediums and styles.

MUS 100B Convocation (1)

MUS 100C Convocation (1)

MUS 100D Convocation (1)

MUS 101D Diction for Singers (3) A basic study of French, German and Italian diction with practical application to singing.

MUS 101K Keyboard Harmony (1) Explores basic concepts of tonality/modality; primary triads and their inversions, modes and modal inflections; secondary triads; standard chord progressions involving these elements; and chord nomenclature.

MUS 101R Music Reading I (1) Music Reading courses (MUS 101R, 102R, 201R and 202R) are a four-semester sequenced aural skills course designed for music majors looking to transfer to four-year music schools to complete their musical education leading to the B.M., B.S. or B.A. degree in music. The course is complementary with the music department's Music Theory courses (MUS 101T, 102T, 201T and 202T) and Keyboard classes (MUS 101K, 102K, 201K and 202K), and should be taken in proper sequence with them. Topics included in MUS 101R are singing prepared melodic examples using solfeggio syllables, singing unprepared melodies (sight singing), performing rhythmic exercises and melodic and rhythmic dictation. Co-requisite: MUS 101T or POI.

MUS 101T Music Theory (3) Covers notation, scales (major, minor and chromatic), tempo designations, intervals, triads, phase structure and cadences, modes and beginning study of four-part harmony and figure bass. Ear training in all areas is included. Prerequisite: Music Theory test and Permission of Instructor.

MUS 102K Keyboard Harmony (1) A continuation of MUS 101K using various musical excerpts embodying first-semester materials. Extensive work is done in the minor mode. There is continued study of chord nomenclature, and non-harmonic tones are introduced. Prerequisite: MUS 101K.

MUS 102R Music Reading II (1) Music Reading courses (MUS 101R, 102R, 201R and 202R) are a four-semester sequenced aural skills course designed for music majors looking to transfer to four-year music schools to complete their musical education leading to the B.M., B.S. or B.A. degree in music. The course is complementary with the music department's Music Theory courses (MUS 101T, 102T, 201T and 202T) and Keyboard classes (MUS 101K, 102K, 201K and 202K), and should be taken in proper sequence with them. Topics included in MUS 102R are singing prepared melodic examples using solfeggio syllables, singing unprepared melodies (sight singing), singing triads and seventh chords, performing rhythmic exercises and melodic and rhythmic dictation. Prerequisite: MUS 101R or POI; co-requisite: MUS 102T or POI.

MUS 102T Music Theory (3) Four-part harmony and figured bass studies are continued; non-harmonic tones are included; instrumental transpositions, arrangements and performances are done; introduction to dodecaphonic technique through analysis is included. Ear training in chord quality and position, two-part melodic dictation and identification of non-harmonic tones are addressed. Prerequisite: MUS 101T or Permission of Instructor.

MUS 103 Music Appreciation I (3) An introduction to the basic elements of music. Areas explored include the symphony orchestra and other performing media. The course investigates styles and techniques of the 18th and 19th Centuries through the use of recordings and visual aids with the aim of more complete understanding and enjoyment of the art. Designed as an elective for liberal arts students not majoring in music.

MUS 104 Music Appreciation II (3) An examination of the music of today. Topics include the music of other cultures, various types of popular music, music in relation to other media (films, shows, electronics, etc.), and 20th century orchestral/wind ensemble usage. (MUS 103 not needed for MUS 104.)

MUS 105 Survey of Western Music History I (3) A survey of music in western civilization from the Gregorian chant through the baroque period. Not open to non-music majors.

MUS 106 Survey of Western Music History II (3) A continuation of MUS 105 from Classic through 20th Century. Not open to non-music majors.

MUS 107 Applied Music Instruction (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107A Drum Set Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107B Flute Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107C Oboe Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107D Clarinet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107E Bassoon Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107F Saxophone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107G Trumpet/Cornet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107H French Horn Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107J Trombone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107K Euphonium/Baritone Lessons (2) Private study for each

student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107M Tuba Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107N Piano Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107P Percussion Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107Q Electric Bass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107S Harp Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107T Guitar Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107U Voice Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107V Violin Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107W Viola Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107X Cello Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107Y Contrabass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107Z Organ Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108 Applied Music Instruction (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108A Drum Set Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108B Flute Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108C Oboe Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108D Clarinet Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108E Bassoon Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108F Saxophone Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108G Trumpet/Cornet Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108H French Horn Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108J Trombone Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108K Euphonium/Baritone Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for

private lessons.

MUS 108M Tuba Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108N Piano Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108P Percussion Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108Q Electric Bass Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108S Harp Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108T Guitar Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108U Voice Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108V Violin Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108W Viola Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108X Cello Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108Y Contrabass Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 108Z Organ Lessons (2) Major private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109 Applied Music Instruction (2) Private Study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109A Drum Set Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109B Flute Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109C Oboe Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109D Clarinet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109E Bassoon Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109F Saxophone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109G Trumpet/Cornet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109H French Horn Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109J Trombone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109K Euphonium/Baritone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109M Tuba Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band

instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109N Piano Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109P Percussion Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109Q Electric Bass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109S Harp Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109T Guitar Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109U Voice Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109V Violin Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109W Viola Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109X Cello Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109Y Contrabass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 109Z Organ Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110 Applied Music Instruction (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110A Drum Set Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110B Flute Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110C Oboe Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110D Clarinet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110E Bassoon Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110F Saxophone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110G Trumpet/Cornet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110H French Horn Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110J Trombone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110K Euphonium/Baritone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110M Tuba Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110N Piano Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110P Percussion Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110Q Electric Bass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110S Harp Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110T Guitar Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110U Voice Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110V Violin Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110W Viola Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110X Cello Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110Y Contrabass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 110Z Organ Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111A Drum Set Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111B Flute Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111C Oboe Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111D Clarinet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111E Bassoon Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111F Saxophone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111G Trumpet/Cornet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111H French Horn Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111J Trombone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111K Euphonium/Baritone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111M Tuba Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111N Piano Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111P Percussion Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department

audition and permission card required. Additional fee for private lessons.

MUS 111Q Electric Bass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111S Applied Harp (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111T Guitar Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111U Voice Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111V Violin Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111W Viola Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111X Cello Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111Y Contrabass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 111Z Organ Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112A Drum Set Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112B Flute Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112C Oboe Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112D Clarinet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112E Bassoon Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112F Saxophone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112G Trumpet/Cornet Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112H French Horn Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112J Trombone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112K Euphonium/Baritone Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112M Tuba Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112N Piano Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112P Percussion Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112Q Electric Bass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112S Applied Harp Lessons (2) Private study for each student

in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112T Guitar Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112U Voice Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112V Violin Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112W Viola Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112X Cello Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112Y Contrabass Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 112Z Organ Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 113 Applied Piano Minor (1) Non-piano majors must study piano for four semesters or until able to pass a proficiency examination.

MUS 113A Applied Piano Minor Class (1) A beginning course designed for non-music majors to teach basic technique/reading on piano in an electric piano lab.

MUS 114 Applied Piano Minor (1) Non-piano majors must study piano for four semesters or until able to pass a proficiency examination.

MUS 115 Applied Piano Minor (1) Non-piano majors must study piano for four semesters or until able to pass a proficiency examination.

MUS 116 Applied Piano Minor (1) Non-piano majors must study piano for four semesters or until able to pass a proficiency examination.

MUS 121A Drum Set Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121B Flute Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121C Oboe Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121D Clarinet Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121E Bassoon Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121F Saxophone Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121G Trumpet Repertory-Freshman (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121H French Horn Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121J Low Brass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121M Tuba Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121N Piano Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121P Percussion Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121Q Electric Bass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121T Guitar Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121U Voice Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121V Violin/Viola Repertory (1) An intensive study of the history and literature available and/or the performance methods for

each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121Y Cello/String Bass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 121Z Organ Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122A Drum Set Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122B Flute Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122C Oboe Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122D Clarinet Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122E Bassoon Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122F Saxophone Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122G Trumpet Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122H French Horn Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122J Low Brass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122M Tuba Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122N Piano Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122P Percussion Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122Q Electric Bass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122T Guitar Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122U Voice Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122V Violin/Viola Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122Y Cello/String Bass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 122Z Organ Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 141 Beginning Alexander Technique (3) Students will learn and practice the basic principles of the Alexander Technique. The class work will take course members through a variety of applications, for example: breathing, speaking, singing, playing an instrument, sitting, standing, walking, lifting, carrying, reaching, and bending. Students will learn to apply the Alexander Technique as a form of self-care while practicing and performing. Students will develop awareness of mental and physical reactions-having time to prevent unwanted tensions and to coordinate a total body response that promotes freedom and growth. The experiential work in this course will address the point of view that the performer's first instrument is conscious thinking-it is the primary factor in performing any activity. Through coursework in the Alexander Technique, students not only learn to use conscious thinking to make efficient use of the self, body and mind, but also learn to maintain a psychophysical balance that allows for the spontaneous and free expression of their creativity. For Music majors only or POI.

MUS 151B Flute Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151C String Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151D Clarinet Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-

wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151E Wind Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151F Saxophone Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151G Latin Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151H Horn Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151J Big Band Jazz (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151L Woodwind Quintet (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151P Percussion Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151R Concert Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151T Guitar Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151V OCC Singers (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151X Improvisation (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 151Y Brass Quintet (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152B Flute Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152C String Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152D Clarinet Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152E Wind Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental,

college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152F Saxophone Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152G Latin Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152H French Horn Repertory (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152J Big Band Jazz (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152L Woodwind Quintet (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152P Percussion Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152R Concert Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152S Accompanying (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152T Guitar Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152V OCC Singers (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152X Improvisation (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 152Y Brass Quintet (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 160 Introduction to Music Theory I (3) A course in basic music theory, including notation, scales, intervals, rhythmic elements, ear training, chords and modes. Designed for the non-music major and/or prospective music major, as determined by audition process. Does not fulfill Music curriculum requirements.

MUS 161 Introduction Music Theory II (3) Continues studies of scales, intervals, key signatures, ear training and chord studies. Minor scales and harmonization of melodies are introduced. Prerequisite: MUS 160 or Permission of Instructor. Not applicable to Music curriculum requirements.

MUS 162P Hand Drumming (2) Class instruction for the beginner and the hand drummer needing a refresher course in the fundamentals of hand drumming. Major emphasis given to technique and classic rhythms.

MUS 162T Guitar Class I (2) Class instruction for the beginning guitarist. Both pick and finger-style (classical) guitar are taught simultaneously. A primary goal will be to develop sight reading skills.

MUS 162U Voice Class I (2) Class instruction for the beginner and the vocalist needing a refresher course in voice fundamentals. Major emphasis given to breathing exercises and vocalization technique. Classical and folk singing in groups and individual settings.

MUS 162X The Art of Popular Singing (2) Class instruction for the vocalist, from beginning to advanced, focusing on jazz and pop performance techniques that comprise the skills of what is traditionally called popular singing. This is not a course in voice

fundamentals (MUS 162U), but rather a class-oriented setting designed to enhance the vocalist's abilities specifically in the jazz/pop idiom.

MUS 163T Guitar II (2) A continuation of techniques from 162T.

MUS 166 Introduction to Ethnic Music (3) A study of African music and its influence on other cultures, including Middle Eastern, South American, Caribbean, and North American/European music.

MUS 168 Drum Set I (1) Basic rhythmic reading skills taught in a class situation. Additional material covered includes basic hand technique, coordination exercises, chart reading. Playing time on drum set dependent on class size/background of those registered. No prerequisite, but some musical background is preferable.

MUS 182 Music As a Business (3) The purpose of this course is to study the power structure and operation of the music business from large companies to retail stores, and to understand the way money is being distributed in a multiplicity of jobs from individual artists to company presidents.

MUS 185 Piano Literature of the 18th Century (1) A study of the historical development of the piano and its literature traced through the most important works written for the harpsichord, clavichord, fortepiano, and piano in the 18th century. Will emphasize aural differentiation among the instruments and the styles of J.S. Bach, Handel, D. Scarlatti, Bach's sons, Haydn, Mozart, Clementi, and the young Beethoven. Prerequisite: MUS piano major.

MUS 186 Piano Literature of the Early 19th Century (1) A study of the historical development of piano literature traced through the most important works written between 1800 and 1850. Will emphasize aural differentiation of the styles of Schubert, Beethoven, Chopin, Schumann, Weber, Mendelssohn and the young Liszt. Prerequisite: MUS piano major.

MUS 187 Piano Literature of the Late 19th Century (1) A study of the historical development of piano literature traced through the most important works written between 1850 and 1900. Will emphasize aural differentiation of the styles of Brahms, the mature Liszt, Grieg, Franck, Albeniz, Reger, and the young Busoni. Prerequisite: MUS piano major.

MUS 188 Piano Literature of the 20th Century (1) A study of the historical development of piano literature traced through the most important works written during the 20th century. Will emphasize aural differentiation of the styles of Debussy, Ravel, Rachmaninoff, Prokofiev, Bartok, Stravinsky, Busoni, Schoenberg, Boulez, Stockhausen. Prerequisite: MUS piano major.

MUS 190 Introduction to Music Software With MIDI (3) A study of MIDI applications using hardware and software as a tool to improve musicianship. The course will utilize the new technology to enhance and reinforce basic classroom concepts. Emphasis will be placed on hands-on involvement using software programs for Music Theory, Music History, and Jazz Improvisation.

MUS 201K Keyboard Harmony (1) Explores secondary dominants, diminished seventh chords, augmented sixth chords, chord substitution, and chord nomenclature; pieces embodying these elements are studied. Prerequisite: MUS 101K, MUS 102K or Permission of Instructor.

MUS 201R Music Reading III (1) Music Reading courses (MUS 101R, 102R, 201R and 202R) are a four-semester sequenced aural skills course designed for music majors looking to transfer to four-year music schools to complete their musical education leading to the B.M., B.S. or B.A. degree in music. The course is complementary with the music department's Music Theory courses (MUS 101T, 102T, 201T and 202T) and Keyboard classes (MUS 101K, 102K, 201K and 202K), and should be taken in proper sequence with them. Topics included in MUS 201R are singing prepared melodic examples using solfeggio syllables, singing unprepared melodies (sight singing), singing triads and seventh chords, singing in the principal modes, performing rhythmic exercises and melodic and rhythmic dictation. Prerequisite: MUS 102R or POI; co-requisite: MUS 201T or POI.

MUS 201T Music Theory (3) Diatonic chords and progression are reviewed. Seventh chords are analyzed along with non-dominant seventh chords and their progressions. Altered non-harmonic tones and secondary dominants are studied along with modulation to closely related keys and harmonization of melodies. Four-part diction is introduced. Prerequisite: MUS 101T, MUS 102T or Permission of Instructor. Honors: Prerequisite: 3.5 G.P.A. or Permission of Instructor.

MUS 202K Keyboard Harmony II (1) Playing styles are discussed, more chord substitutions are introduced, playing from lead sheets and harmonizing unmarked melodies are explained, and compound and polytonal chords are defined. Prerequisite: MUS 101K, MUS 102K, MUS 201K or Permission of Instructor.

MUS 202R Music Reading IV (1) Music Reading courses (MUS 101R, 102R, 201R and 202R) are a four-semester sequenced aural skills course designed for music majors looking to transfer to four-year music schools to complete their musical education leading to the B.M., B.S. or B.A. degree in music. The course is complementary with the music department's Music Theory courses (MUS 101T, 102T, 201T and 202T) and Keyboard classes (MUS 101K, 102K, 201K and 202K), and should be taken in proper sequence with them. Topics included in MUS 202R are singing prepared melodic examples using solfeggio syllables, singing unprepared melodies (sight singing), singing triads and seventh chords, singing in the principal modes, singing octatonic and whole-tone scales, performing rhythmic exercises while conducting, and melodic and rhythmic dictation. Prerequisite: MUS 201R or POI; co-requisite: MUS 202T or POI.

MUS 202T Music Theory (3) Chromatic harmony will be reviewed through harmonic, structural and textural analysis. 18th century counterpoint, terminology and contrapuntal forms (invention, canon, fugue) and basic principles of two-part writing will be introduced through analysis. Classical sonata form will be studied and an analytical paper based on a standard classical sonata form piece will be required. The rise of non-functional harmony will be introduced along with developments in the early and mid-20th century, to include impressionism generally along with the expansion of timbral resources, modal and non-diatonic scales, upper-overtone harmony, non-tertian harmony, serialism, pandiatonicism, neoclassicism, minimalism, aleatoric principles and free atonality. Prerequisites: MUS 101T, 102T, and 201T, or Permission of Instructor.

MUS 203 Introduction to Composition (3) This is a course in beginning music composition. Aesthetic concepts and specific detailed theoretical concepts and techniques, particularly of the 20th century, will be covered as will introductory 18th century counterpart. Students must have one year of basic music theory and be able to read music to take this course. Prerequisites: MUS 102T and MUS 106 or Permission of Instructor.

MUS 211A Drum Set Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 211B Flute Lessons (2)

MUS 211C Oboe Lessons (2)
MUS 211D Clarinet Lessons (2)
MUS 211E Bassoon Lessons (2)
MUS 211F Saxophone Lessons (2)
MUS 211G Trumpet/Cornet Lessons (2)
MUS 211H French Horn Lessons (2)
MUS 211J Trombone Lessons (2)
MUS 211K Euphonium/Baritone Lessons (2)
MUS 211M Tuba Lessons (2)
MUS 211N Piano Lessons (2)
MUS 211P Percussion Lessons (2)
MUS 211Q Electric Bass Lessons (2)
MUS 211S Applied Harp (2)
MUS 211T Guitar Lessons (2)
MUS 211U Voice Lessons (2)
MUS 211V Violin Lessons (2)
MUS 211W Viola Lessons (2)
MUS 211X Cello Lessons (2)
MUS 211Y Contrabass Lessons (2)
MUS 211Z Organ Lessons (2)
MUS 212A Drum Set Lessons (2)
MUS 212B Flute Lessons (2)
MUS 212C Oboe Lessons (2)
MUS 212D Clarinet Lessons (2)
MUS 212E Bassoon Lessons (2)
MUS 212F Saxophone Lessons (2)
MUS 212G Trumpet/Cornet Lessons (2)
MUS 212H French Horn Lessons (2)
MUS 212J Trombone Lessons (2)
MUS 212K Euphonium/Baritone Lessons (2)
MUS 212M Tuba Lessons (2)
MUS 212N Piano Lessons (2)
MUS 212P Percussion Lessons (2)
MUS 212Q Electric Bass Lessons (2)
MUS 212S Applied Harp Lessons (2)
MUS 212T Guitar Lessons (2)
MUS 212U Voice Lessons (2)
MUS 212V Violin Lessons (2)
MUS 212W Viola Lessons (2)
MUS 212X Cello Lessons (2)
MUS 212Y Contrabass Lessons (2)
MUS 212Z Organ Lessons (2)
MUS 215A Drum Set Lessons (2)
MUS 215B Flute Lessons (2)
MUS 215C Oboe Lessons (2)
MUS 215D Clarinet Lessons (2)
MUS 215E Bassoon Lessons (2)
MUS 215F Saxophone Lessons (2)
MUS 215G Trumpet/Cornet Lessons (2)
MUS 215H French Horn Lessons (2)
MUS 215J Trombone Lessons (2)
MUS 215K Euphonium/Baritone Lessons (2)
MUS 215M Tuba Lessons (2)
MUS 215N Piano Lessons (2)
MUS 215P Percussion Lessons (2)
MUS 215Q Electric Bass Lessons (2)
MUS 215T Guitar Lessons (2)
MUS 215U Voice Lessons (2)
MUS 215V Violin Lessons (2)
MUS 215W Viola Lessons (2)
MUS 215X Cello Lessons (2)
MUS 215Y Contrabass Lessons (2)
MUS 215Z Organ Lessons (2)
MUS 216B Flute Lessons (2)
MUS 216C Oboe Lessons (2)
MUS 216D Clarinet Lessons (2)
MUS 216E Bassoon Lessons (2)
MUS 216F Saxophone Lessons (2)
MUS 216G Trumpet/Cornet Lessons (2)
MUS 216H French Horn Lessons (2)
MUS 216J Trombone Lessons (2)
MUS 216K Euphonium/Baritone Lessons (2)
MUS 216M Tuba Lessons (2)
MUS 216N Piano Lessons (2)
MUS 216P Percussion Lessons (2)
MUS 216Q Electric Bass Lessons (2)
MUS 216T Guitar Lessons (2)
MUS 216U Voice Lessons (2)
MUS 216V Violin Lessons (2)
MUS 216W Viola Lessons (2)
MUS 216X Cello Lessons (2)
MUS 216Y Contrabass Lessons (2)
MUS 216Z Organ Lessons (2)
MUS 217B Flute Lessons (2)
MUS 217C Oboe Lessons (2)
MUS 217D Clarinet Lessons (2)
MUS 217E Bassoon Lessons (2)
MUS 217F Saxophone Lessons (2)
MUS 217G Trumpet/Cornet Lessons (2)
MUS 217H French Horn Lessons (2)
MUS 217J Trombone Lessons (2)
MUS 217K Euphonium/Baritone Lessons (2)
MUS 217M Tuba Lessons (2)
MUS 217N Piano Lessons (2)

MUS 217P Percussion Lessons (2)

MUS 217T Guitar Lessons (2)

MUS 217U Voice Lessons (2)

MUS 217V Violin Lessons (2)

MUS 217W Viola Lessons (2)

MUS 217X Cello Lessons (2)

MUS 217Y Contrabass Lessons (2)

MUS 217Z Organ Lessons (2)

MUS 218B Flute Lessons (2)

MUS 218C Oboe Lessons (2)

MUS 218D Clarinet Lessons (2)

MUS 218E Bassoon Lessons (2)

MUS 218F Saxophone Lessons (2)

MUS 218G Trumpet/Cornet Lessons (2)

MUS 218H French Horn Lessons (2)

MUS 218J Trombone Lessons (2)

MUS 218K Euphonium/Baritone Lessons (2)

MUS 218M Tuba Lessons (2)

MUS 218N Piano Lessons (1)

MUS 218P Percussion Lessons (2)

MUS 218T Guitar Lessons (2)

MUS 218U Voice Lessons (2)

MUS 218V Violin Lessons (2)

MUS 218W Viola Lessons (2)

MUS 218X Cello Lessons (2)

MUS 218Y Contrabass Lessons (2)

MUS 218Z Organ Lessons (2)

MUS 221A Drum Set Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221B Flute Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221C Oboe Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221D Clarinet Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221E Bassoon Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221F Saxophone Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221G Trumpet Rep-Sophomore (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221H French Horn Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221J Low Brass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221M Tuba Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221N Piano Rep-Sophomore (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221P Percussion Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221Q Electric Bass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221T Guitar Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221U Voice Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221V Violin/Viola Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221Y Cello/String Bass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 221Z Organ Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222A Drum Set Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222B Flute Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222C Oboe Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four

semesters are required for the A.A.S. degree in music.

MUS 222D Clarinet Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222E Bassoon Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222F Saxophone Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222G Trumpet Repertory-Sophomore (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222H French Horn Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222J Low Brass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222M Tuba Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222N Piano Repertory-Sophomore (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222P Percussion Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222Q Electric Bass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222T Guitar Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222U Voice Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222V Violin/Viola Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222Y String Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 222Z Organ Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 223B Soph Flute Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 223D Soph Clarinet Rep (1)

MUS 223G Trumpet Rep (1)

MUS 223H Soph French Horn Rep (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 223J Soph Trombone Rep (1)

MUS 223Q Electric Bass Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 223T Soph Guitar Rep (1)

MUS 223U Soph Voice Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music.

MUS 224B Sophomore Flute Repertory (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music

MUS 224U Soph Voice Rep (1) An intensive study of the history and literature available and/or the performance methods for each of the instrumental or vocal disciplines for which the course is offered. Four semesters are required for the A.A.S. degree in music

MUS 251B Flute Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251C String Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251D Clarinet Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251E Wind Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental,

college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251F Saxophone Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251G Latin Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251H Horn Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251J Big Band Jazz (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251L Woodwind Quintet (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251P Percussion Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251R Concert Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251S Accompanying (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251T Guitar Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251V OCC Singers (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251X Improvisation (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 251Y Brass Quintet (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252B Flute Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252C String Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252D Clarinet Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252E Wind Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental,

college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252F Saxophone Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252G Latin Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252H Horn Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252J Big Band Jazz (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252L Woodwind Quintet (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252P Percussion Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252R Concert Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252S Accompanying (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252T Guitar Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252V OCC Singers (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252X Improvisation (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 252Y Brass Quintet (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 253 Perf Org Embls (1)

MUS 253B Flute Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 253E Wind Ensemble (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or Permission of Instructor; contact Music department for details.

MUS 253J Improvisation I (0.5)

MUS 253T Guitar Ensemble (0.5)

MUS 253Y Perf Org Embls (1)

MUS 254B Flute Choir (0.5) Provides suitable repertoire for study and performance for the particular ensemble. Provides the vehicles for the successful study and performance of that repertoire. Supplies sufficient performing opportunities whether departmental, college-wide or in the community. Illustrates varied teaching techniques for that particular type of ensemble. Prerequisite: Audition required or

Permission of Instructor; contact Music department for details.

MUS 254C Concert Choir (0.5)

MUS 254R Concert Choir (0.5)

Nuclear Technology

FOR MORE INFORMATION, CONTACT THE MECHANICAL AND ELECTRICAL TECHNOLOGY DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER ROOM W143, (315) 498-2697.

NET 101 Power Plant Fundamentals I for Nuclear Energy Technicians (3) This course will cover the core topics needed by electrical, mechanical, chemical, and Instrumentation and Controls technicians working in the nuclear power industry (in accordance with the Institute of Nuclear Power Operators ACAD 08-006). The student will learn basic atomic and nuclear physics, properties of reactor plant materials, radiation protection and detection, and reactor plant protection. Prerequisites: MAT 114 or higher, and NET major.

NET 102 Power Plant Fundamentals II for Nuclear Energy Technicians (4) This course builds upon the knowledge acquired in NET 101. In accordance with ACAD 08-006, the student will learn principles and concepts necessary to work safely and effectively in the nuclear energy industry. Topics include: basic reactor operations, heat transfer, steam, and fluid flow. Prerequisites: NET 101 and NET major; co-requisites: MAT 120 and NET 112.

NET 111 Mechanical Principles and Concepts (1) This course will cover the fundamentals of mechanical principles and concepts needed by electrical, mechanical, and Instrumentation and Controls technicians to meet their Associate of Applied Science (AAS) degree requirements, and to fulfill the needs of the nuclear power industry in accordance with ACAD 08-006 so that all graduates have the same basic knowledge necessary to be successful nuclear power plant workers. Mechanical principles and concepts covered include SI/English Units, Lubrication Principles, Viscosity Principles, Simple Machines, Temperature Scales, Physical Effects on Process Fluids, and Measuring of Process Fluid Parameters. Prerequisites: MAT 114 or higher, and NET major.

NET 112 Chemistry for Nuclear Technicians (3) This course will cover the fundamentals of chemistry needed by electrical, mechanical, and Instrumentation and Controls technicians to meet their Associate of Applied Science (AAS) degree requirements, and to fulfill the needs of the nuclear power industry in accordance with ACAD 08-006 so that all graduates have the same basic knowledge necessary to be successful nuclear power plant workers. A study of acids and bases, conductivity, mixtures, solutions, compounds, Periodic Table, pH, properties of gases, and states of matter are discussed. In addition, basic water chemistry control fundamentals, ion exchange theory, principles of water treatment, and applied reactor system water chemistry are covered. Prerequisites: MAT 114 or higher, and NET major.

NET 201 Power Plant Fundamentals III for Nuclear Energy Technicians (4) This course will cover the discipline-specific topics needed by maintenance personnel to meet the needs of the nuclear power industry in accordance with ACAD 08-006. Topics include system and administrative controls related to maintenance activities, reduction and analysis of radiologic exposure during system maintenance, and industrial safety measures. Prerequisites: NET 102 and NET major.

NET 202 Power Plant Fundamentals IV for Nuclear Energy Technicians (4) This course builds on the knowledge and skills learned in NET 101, 102, and 201. Students will learn about the construction and use of systems required to work safely and effectively in the nuclear power industry in accordance with ACAD 08-006. Course topics include various plant systems relating to the nuclear power industry. Prerequisites: NET 201 and NET major.

NET 240 Process Control and Communications (4) This course will cover the discipline-specific topics needed by Instrumentation and Controls personnel to meet their Associate of Applied Science (AAS) degree requirements, and fulfill the needs of the nuclear power industry in accordance with ACAD 08-006 so that all graduates have the same basic knowledge necessary to be successful nuclear power plant workers. Topics covered are specific to Instrumentation and Controls. Prerequisites: NET-201 and NET major.

Nutrition

FOR MORE INFORMATION, CONTACT THE BUSINESS ADMINISTRATION DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W324, (315) 498-2435.

NTR 102 Basic Nutrition (3) Basic principles of nutrition in regard to energy, protein, mineral, and vitamin requirements. Study of adequate diets and dietetics in relation to general health and diseases and the food requirements for all ages from prenatal to adult years. Optimum diets and diets of various national, social, and economic groups are studied.

NTR 206 Diet Therapy (3) A continuation of the study of nutrition. The student will develop an understanding of the factors which make dietary modifications necessary for the treatment of disease; the principles of calculation, preparation, and service of modified diet; and the role of the dietitian in relation to total dietary care of an individual. Prerequisite: NTR 102. Fall semesters only.

NTR 218 Nutrition/Diet Therapy (3) A study of the principles of Basic Nutrition as they relate to normal growth, development and health. The student will study how nutrient intake can impact body systems and processes. Therapeutic diets for specific disease conditions will also be covered. This course is geared towards the basic and therapeutic knowledge needs of the nursing student.

Nursing

FOR MORE INFORMATION, CONTACT THE NURSING DEPARTMENT IN FERRANTE HALL, ROOM F104, (315) 498-2360.

NUR 165 Critical Thinking and the Nursing Process (1) This course is designed to assist the students with developing critical thinking skills utilizing the nursing process. This course will progress from the simple to the complex utilizing medical nursing terminology and various nursing case studies and simulations. Time required for the completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: Nursing Majors only.

NUR 175 Introduction to Nursing Informatics (1) This course is designed to provide an introduction to informatics and technology in nursing practice. The course will trace the evolution of nursing informatics, modern practice, and future directions in the context of current healthcare issues. Concepts focus on the role of the nurse as knowledge worker in promoting safety and quality of care. Topics explored include current standards and mandates for nursing information literacy, incorporation of evidence-based practice at the bedside, and the future of telenursing, among others. Students will be afforded an opportunity to practice entering and retrieving data using electronic health record systems. This course is appropriate for any

nursing student studying in an entry-level program.

NUR 180 Nursing Process and Concepts I (1) NUR 180 introduces the concepts essential for applying Level 1 human needs theory in the clinical setting. Concepts stressed are: an effective approach to learning; the role of the nurse within the health care system; problem solving/introduction to the Nursing Process, and; introduction to human needs theory. Students will also begin to utilize and apply critical thinking skills; use of technology; therapeutic communication skills, and; cultural awareness. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study for the theory and procedure components. Demonstration of the application of these concepts in the clinical setting is a requirement of NUR 180. The final grade in NUR 180 is dependent on successful completion of all Level 1 requirements. Prerequisite: Matriculation in Nursing.

NUR 181 Activity and Rest Needs I (1) In this course students apply the nursing process in the human needs area of activity and rest. Students are introduced to the client's need of alternate periods of activity and rest. Students learn principles of body alignment/mechanics and safe patient handling. Students also learn to assess activity and rest needs and to provide for these needs by assisting clients to move safely and effectively; by performing range of motion exercises and effective positioning; by providing hygiene such as oral care, skin care, bathing, and bed making; and by implementing nursing strategies to promote sleep. Some factors of growth and development are considered. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Co-requisite: NUR 180.

NUR 182 Oxygenation Needs I (1) The student will use the nursing process in the human needs area of basic oxygenation. This course introduces students to the need for adequate oxygen supply to maintain cellular metabolism, and to the interrelationship of respiratory and cardiovascular function in maintaining oxygen supply. Students first learn to assess oxygenation status. They then can plan and implement measures learned to promote respiration/ventilation and circulation. Lastly, students learn to evaluate their effectiveness. Measures learned to assess oxygenation status include assessment of blood pressure, temperature, peripheral pulses, respiration, and oxygenation saturation. Measures learned to promote respiration/ventilation include use of aerosol medications, oxygenation administration, non-invasive ventilation aids, and breathing exercises. Measures learned to promote circulation are through proper application of antiembolic and sequential stockings, and exercise. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Co-requisite: NUR 180.

NUR 183 Safety and Security Needs I (1) In this course, students apply the nursing process in the human needs area of safety and security. Students are introduced to potential environmental and biologic threats to the well-being of the individual such as tissue injury and infection. Nursing assessments and interventions to minimize threats, provide a safe environment, and promote healing, such as medical asepsis, isolation, surgical asepsis, wound care, heat and cold therapy, and a safe process to administer medications, are included. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Co-requisite: NUR 180.

NUR 184 Nutrition and Elimination Needs I (1) This Level 1 nursing course assists students in learning basic nursing care. The first unit includes assessments and skills such as: monitoring intake and output, and client care during intravenous therapy. Readings, videos, and laboratory small groups are used to help the student learn to assess and promote their clients' fluid and electrolyte balance. In unit two, the focus switches to normal adult nutritional needs, including nasogastric tubes used for feedings and stomach decompression. Areas of special concern to nurses are highlighted, such as assessing client readiness for diet progression. Units three and four focus on basic assessments and measures to promote the hospitalized person's elimination. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Co-requisite: NUR 180.

NUR 185 Psychosocial Needs: Therapeutic Communications (1) Students apply the nursing process concepts of assessing, diagnosing, planning, intervening, and evaluating in the area of psychosocial needs. They learn open-ended data gathering and relationship development techniques that meet clients' psychosocial needs. At the same time, the students are meeting their own professional need of compiling a broad, accurate database. Further application of the nursing process in the area of psychosocial needs aids in the identification of direct and indirect expressions of feelings. Thus the student develops supportive communication skills that ensure client-centered care even when involved with difficult situations and/or difficult clients. Students explore the nature and goals of the professional relationship and learn communication techniques to use when interacting with members of the health care team. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Co-requisite: NUR 180.

NUR 191 Introduction to Nursing Process (2) This course provides an opportunity for the student to master basic nursing skills in a simulated clinical setting under the guidance of the instructor in preparation for nursing care in the hospital setting. The student will begin to utilize the steps of the nursing process (assessing, planning, implementing, and evaluating) in conjunction with these nursing skills. The student will consider cost effectiveness in utilizing lab materials, and learn to use channels of communication. The student will use appropriate terminology, apply theory in performance of skills, work in groups, and use self-evaluation. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: Matriculation in Nursing; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, NUR 180.

NUR 192 Introductory Nursing Process Clinical I (2) This course provides an opportunity for the student to begin to apply theory and skills mastered to date while familiarity with the hospital environment, equipment, and personnel is developed. The student functions in collaboration with the instructor to plan for the day of care for the hospitalized adult. The student depends on the instructor for guidance with interactions with members of the health care team and seeks assistance when appropriate. The student depends on the instructor for guidance to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the steps of the nursing process to perform basic assessments, identify problems, plan on an hourly basis, and implement and evaluate care for the day. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite:

NUR 191; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 180, 181, 182, 183, 184, and 185.

NUR 193 Extended Nursing Process Clinical I (2) This course provides an opportunity for the student to have additional experience in the hospital setting to achieve clinical proficiency at Level 1. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: NUR 192; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 180, 181, 182, 183, 184, and 185.

NUR 194 Extended Nursing Process Clinical I (2) This course provides an opportunity for the student to have additional experience in the hospital setting to achieve clinical proficiency at Level 1. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: NUR 192; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 180, 181, 182, 183, 184, and 185.

NUR 199 Elective Nursing Process Clinical I (2) This course provides opportunities for the student to have clinical experiences to work on personal objectives and/or those beyond the scope of basic preparation. These experiences will allow the student to be supervised in a clinical setting in order to gain additional experiential knowledge, enhance skills learned, and/or validate maintenance of skills. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: Permission of Instructor; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 180, 181, 182, 183, 184, and 185.

NUR 220 Nursing Process and Concepts II (1) NUR 220 introduces the concepts essential for applying Level 2 human needs theory in the clinical setting. The five phases of the nursing process are studied individually, cultural and spiritual differences are explored, and basic concepts of growth and development are studied. Students will continue to apply critical thinking skills, use of technology, therapeutic communication skills, and cultural diversity. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study for the theory and procedure components. Demonstration of the application of these concepts in the clinical setting is a requirement of NUR 220. The final grade in NUR 220 is dependent on successful completion of all Level 2 requirements. Prerequisite: NUR 180.

NUR 222 Oxygenation Needs II (1) This course builds on theory and skills learned in NUR 182. It prepares students to develop and utilize the nursing process during respiratory and circulatory physical assessment. Assessments of normal and abnormal heart and lung sounds are taught, as well as basic electrocardiogram identification. Select oxygenation crises are included for nursing assessments and interventions. Advanced respiratory and circulatory care modalities are also included. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 180; co-requisite: NUR 220.

NUR 223 Safety and Security Needs II (1) This course covers various aspects of nursing care and utilization of the nursing process related to a person's surgical experience, persons experiencing pain, and persons with cancer. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 180; co-requisite: NUR 220.

NUR 224 Nutrition and Elimination Needs II (1) This Level 2 nursing course provides information to assist students in applying the nursing process to address a client's nutrition and elimination needs. Information on defining the client's problem as well as additional skills for promoting nutrition and elimination are also included. Caring for clients with infusion pumps and insertion of indwelling urinary catheters are skills to be demonstrated. Assessing effectiveness of treatment is considered. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 180; co-requisite: NUR 220.

NUR 231 Nursing Process Clinical II (2) This course provides an opportunity for the student to apply theory and skills mastered to date. The student functions in collaboration with the instructor to plan for the day of care for hospitalized adults, recognizing diverse characteristics. The student depends on the instructor for guidance with interactions with members of the health care team and seeks assistance when appropriate. The student depends on the instructor for guidance to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments; identify problems; select nursing diagnoses; and plan, implement and evaluate care for the day. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: NUR 180; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 220, 222, and 223.

NUR 232 Nursing Process Clinical II (2) This course provides an opportunity for the student to apply theory and skills mastered to date. The student functions in collaboration with the instructor and members of the nursing team to plan for the day of care for hospitalized adults, recognizing diverse characteristics. The student collaborates with the instructor, acting as a client advocate, exercising beginning independence with interpersonal interactions, and seeking assistance from the instructor and other members of the nursing team when appropriate. The student exercises beginning independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments; identify problems; select nursing diagnoses; and plan, implement and evaluate care for the day. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: NUR 236 or NUR 231; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 220, 222, 223, and 224.

NUR 233 Extended Nursing Process Clinical II (2) This course provides an opportunity for the student to apply theory and skills mastered to date. The student functions in collaboration with the instructor and members of the nursing team to plan for the day of care for hospitalized adults, recognizing diverse characteristics. The student collaborates with the instructor, acting as a client advocate, exercising beginning independence with interpersonal interactions, and seeking assistance from the instructor and other members of the nursing team when appropriate. The student exercises beginning independence to maintain standards, develop relationships, and

assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments; identify problems; select nursing diagnoses; and plan, implement and evaluate care for the day. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Students will competently utilize the nursing process as they complete and incorporate level 2 theory for the hospitalized adult. Prerequisite: NUR 232; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance; NUR 220, 222, 223, and 224; and NUR 243 or 253.

NUR 234 Extended Nursing Process Clinical II (2) This course provides an opportunity for the student to apply theory and skills mastered to date. The student functions in collaboration with the instructor and members of the nursing team to plan for the day of care for hospitalized adults, recognizing diverse characteristics. The student collaborates with the instructor, acting as a client advocate, exercising beginning independence with interpersonal interactions, and seeking assistance from the instructor and other members of the nursing team when appropriate. The student exercises beginning independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments; identify problems; select nursing diagnoses; and plan, implement and evaluate care for the day. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Students will competently utilize the nursing process as they complete and incorporate level 2 theory for the hospitalized adult. Prerequisite: NUR 232; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance; NUR 220, 222, 223, and 224; and NUR 243 or 253.

NUR 236 Transition Course for Advanced Placement Students (2) This course provides an opportunity for the LPN student with prior nursing credits to consolidate and refine previously learned theory and skills, while emphasizing the underlying rationale and principles. Under the guidance of the instructor in a simulated clinical setting, the principles of the nursing process are applied. Opportunities are provided for the returning student to reduce the stress of re-entering school, to positively reinforce gained knowledge, and to form support groups by focusing on the skills needed for interpersonal relationships. Appropriate clinical placement will be determined at the end of this experience. Students will spend a total of 56 hours in eight laboratory sessions in introductory clinical practice activities; in addition, students will be expected to spend substantial time preparing for each session. Prerequisites: NUR major and Permission of Department, LPN license or transfer equivalent of first semester per Registered Nurse program; co-requisites: NUR 180, 185, 220, 222, and 223, completed and current health form on file, current CPR certification, malpractice insurance, and required performance skills.

NUR 237 Extended Nursing Process Clinical II (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to achieve clinical proficiency at Level 2. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: NUR 232; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, NUR 220.

NUR 238 Extended Nursing Process Clinical II (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to achieve clinical proficiency at Level 2. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: NUR 232; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, NUR 220.

NUR 239 Elective Nursing Process Clinical II (2) This course provides opportunities for the student to have clinical experiences to work on personal objectives and/or those beyond the scope of basic preparation. These experiences will allow the student to be supervised in the clinical setting in order to gain additional experiential knowledge, enhance skills learned, and/or validate maintenance of skills. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: Permission of Instructor; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance; NUR 220, 222, 223, and 224; and NUR 243 or 253.

NUR 240 Nursing Process and Concepts III (1) NUR 240 introduces the concepts essential for applying Level 3 theory in the clinical setting. The student will focus on the needs of patients and their families during the current events of hospitalization and in anticipation of future needs. Skills in documenting the nursing process via obtaining a health care history, initiating the nursing care plan or referral and completing a discharge/transfer summary are introduced. Students will apply and analyze critical thinking skills, use of technology, therapeutic communication skills and cultural diversity as they apply to the family unit. The concept of loss, most significantly the loss of health and life, is examined. Several bioethical issues surrounding dying and death are explored. Skills are included to enable the student to assist the patient and family experiencing such a loss. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study for the theory and procedure components. Demonstration of the application of these concepts in the clinical setting is a requirement of NUR 240. The final grade in NUR 240 is dependent on successful completion of all Level 3 requirements. Prerequisite: NUR 220, BIO 171 and BIO 172 for generic students.

NUR 243 Safety and Security Needs III: Pharmacology (1) In this course, students use the nursing process to safely administer medications. Students are introduced to the study of drugs, how the drugs act, and how the drugs move through the body, along with a format to organize drug information for both general classifications of medications and specific medications. Major drug classifications are covered. Drug actions, common side effects, contraindications, drug-drug interactions, and nursing implications are presented for each classification. The generic name, trade name, usual route(s), and safe dosage parameters for prototype drugs and/or commonly prescribed specific medications are highlighted. Medication errors are studied, and safe medication administration is the focus. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 180 or Permission of Instructor; co-requisite: NUR 220 or Permission of Instructor.

NUR 245 Psychiatric Client Needs I (1) In this course, students apply concepts of the nursing process and therapeutic communication with clients experiencing severe mental/emotional disorders likely to be

seen in the acute care psychiatric setting: mood disorders and thought disorders. In addition, they learn assessments and interventions related to psychiatric emergencies: threatening/assault behavior and suicide. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 220; co-requisite: NUR 240.

NUR 246 Childbearing Family Needs I (1) This course focuses on the use of the nursing process for the client/family in various phases of the childbearing process - prenatal, labor, delivery, and postpartum. The emphasis is on the normal aspects of childbearing and views the client within the context of family. The normal prenatal course will be viewed from both the maternal and fetal perspectives and includes the dynamic physiologic, psychosocial, and emotional adaptations. The family will be studied through the process of labor and delivery, and the student will learn to assess the postpartum woman and the normal newborn. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 220; co-requisite: NUR 240.

NUR 247 Childrearing Family Needs I (1) The understanding of the concepts of illness provides a base for the students to learn the skills in this course directed toward mediating the impact of illness and hospitalization on children and their families. The concepts of the nursing process are expanded to enable the student to document the planned and implemented care that will meet the needs of patients and their families throughout the course of an illness. Nursing strategies for specific physiologic alterations will be included. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 220; co-requisite: NUR 240.

NUR 248 Gerontological and Palliative Care Nursing: Needs of the Older Adult and The Terminally Ill Patient (1) This is a Level 3 nursing course divided into two components. It will provide theory to assist the student with care planning and assessment for the older adult. It will also provide information to assist students with applying the nursing process to clients who are terminally ill and to their families. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 220; co-requisite: NUR 240.

NUR 253 Safety in Med Administration: Pharmacology for Nurses (3) This course focuses on safety issues involved in administering medications in a clinical setting. It covers drug classifications and the effects of that classification on the body systems. The student will be introduced to the basics of pharmacology and how the drugs work right down to the cellular level. This detailed information will make client assessments more meaningful. Case scenarios describing actual medication errors will follow each classification studied. In addition to drug classification, medical calculations, legal aspects and safety issues will be presented. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours per credit hour in study and online activity. Prerequisite: health care experience or current Nursing student.

NUR 255 Specialty Care Clinical III:Psychiatric Nursing (2) This course provides an opportunity for the student to apply theory and skills mastered to date and to implement new theory and skills learned in the psychiatric client needs course. The student collaborates with the instructor, members of the nursing team, and the client within the context of family regarding care needs. The student exercises limited independence in collaboration with other members of the health care team to act as a client advocate. The student exercises limited independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments that include the family, to select nursing diagnoses, to plan care that incorporates principles of teaching/learning, and to implement and evaluate client- and family-centered care. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisites: NUR 220, completion of level 2 requirements, and Permission of Instructor; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 240 and 245.

NUR 256 Specialty Care Clinical III: Childbearing Family Nursing (2) This course provides an opportunity for the student to apply theory and skills mastered to date and to implement new theory and skills learned in the childbearing family needs courses. The student collaborates with the instructor, members of the nursing team, the client and the family regarding care needs. The student exercises limited independence in collaboration with other members of the health care team to act as a client advocate. The student exercises limited independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments that include the family, to select nursing diagnoses, to plan care that incorporates principles of teaching/learning, and to implement and evaluate client- and family-centered care. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisites: NUR 220, completion of level 2 requirements, and Permission of Instructor; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 240 and 246.

NUR 257 Specialty Care Clinical III: Childrearing Family Nursing (2) This course provides an opportunity for the student to apply theory and skills mastered to date and to implement new theory and skills learned in the childrearing family needs courses. The student collaborates with the instructor, members of the nursing team, the client and the family regarding care needs. The student exercises limited independence in collaboration with other members of the health care team to act as a client advocate. The student exercises limited independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments that include the family, to select nursing diagnoses, to plan care that incorporates principles of teaching/learning, and to implement and evaluate client- and family-centered care. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisites: NUR 220, completion of level 2 requirements, and Permission of Instructor; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 240 and 247.

NUR 258 Specialty Care Clinical III: Geriatric And Palliative Care Nursing (2) This course provides an opportunity for the student to apply theory and skills mastered to date and to implement new theory and skills learned in the geriatric and palliative care nursing needs

course. The student collaborates with the instructor, members of the nursing team, and the client within the context of family regarding care needs. The student exercises limited independence in collaboration with other members of the health care team to act as a client advocate. The student exercises limited independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments that include the family, to select nursing diagnoses, to plan care which incorporates principles of teaching/learning, and to implement and evaluate client- and family-centered care. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisites: NUR 220, completion of level 2 requirements, and Permission of Instructor; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 240 and 248.

NUR 259 Elective Nursing Process Clinical III (2) This course provides opportunities for the student to have clinical experiences to work on personal objectives and/or those beyond the scope of basic preparation. These experiences will allow the student to be supervised in the clinical setting in order to gain additional experiential knowledge, enhance skills learned, and/or validate maintenance of skills. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisites: NUR 220, completion of level 2 requirements, and Permission of Instructor; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 240.

NUR 260 Nursing Process and Concepts IV (1) NUR 260 introduces the concepts essential for applying Level 4 theory in the clinical setting. The course material explores the discipline of nursing, including historical perspectives; educational, ethical and legal issues; modes of health care delivery and nursing roles; application of the nursing process in the management of patient(s) care; and professional trends and issues in leadership and management. Students will analyze and synthesize critical thinking skills, communication skills, technology skills and diversity (inclusion) in the work place. Time required for completion of this course is dependent on the individual learner; however, it is expected that the student will spend at least 45 hours in study for the theory and procedure components. Demonstration of the application of these concepts in the clinical setting is a requirement of NUR 260. The final grade in NUR 260 is dependent on successful completion of all Level 4 requirements. Prerequisites: BIO 171 and BIO 172 (for advanced standing students), NUR 240.

NUR 261 Activity and Rest Needs II: Orthopedic Nursing (1) This course provides the opportunity to apply the nursing process for the client with activity and rest needs. Students will learn assessment techniques for the client with mobility impairment. Principles of nursing care are emphasized for clients undergoing orthopedic treatment modalities for injury or disease. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 240; co-requisite: NUR 260.

NUR 262 Oxygenation Needs III (1) This course builds on theory and skills learned in NUR 222 and provides the opportunity to focus on the use of the nursing process when caring for clients with acute and chronic conditions resulting from interferences with oxygenation related to the upper and lower respiratory tracts, and interferences with oxygenation related to circulation. Care of the patient with advanced respiratory and cardiac support is taught, as well as advanced electrocardiogram identification. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 240; co-requisite: NUR 260.

NUR 263 Safety and Security Needs IV: Neuro Science Nursing (1) This course provides the opportunity for the student to focus on the use of the nursing process for the commonly occurring pathological conditions of the Nervous system, the Immune system, and the special senses (vision and hearing). Emphasis will be placed on using critical thinking to apply necessary theory knowledge in assessing, planning, implementing, and evaluating care for clients with these dysfunctions. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 240; co-requisite: NUR 260.

NUR 264 Nutrition and Elimination Needs III (1) This is a Level 4 nursing course which provides theory to assist the student in body system assessment. The nursing process is applied to clients with illnesses that interfere with nutrition and/or elimination. For communicable illnesses, client needs are considered as well as those of client contacts and health care providers. The planning focus is the entire episode of illness, considering potential teaching and home health maintenance needs. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 240; co-requisite: NUR 260.

NUR 265 Psychiatric Clients Needs II (1) In this course, students apply concepts of the nursing process and therapeutic communication with clients experiencing mental/emotional disorders that may be seen in a variety of settings (acute or distributive care, psychiatric settings or medical-surgical settings), among them addiction, eating disorders, and personality disorders. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 240; co-requisite: NUR 260.

NUR 266 Childbearing Family Needs II (1) In this course, the student will study the maintenance of women's reproductive health as well as disorders of the reproductive system. Contemporary issues related to contraception, sexually transmitted diseases, infertility, abortion, and violence will be covered. The student will also focus on applying the nursing process with the high risk client/family during the puerperium. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 220; co-requisite: NUR 240.

NUR 267 Childrearing Family Needs II (1) The understanding of the concepts of growth and development provides a base for students to learn the skills, in this course, directed toward assessing and promoting health of children and their families. The concepts of the nursing process are expanded to enable the student to document the planned and implemented care that will meet the needs of clients and their families. Children's perceptions and behaviors in relation to health concepts will be included. Time required for completion of this course is dependent on the individual learner; however, it is expected that students will spend at least 45 hours in study and classroom activity. Prerequisite: NUR 220; co-requisite: NUR 240.

NUR 271 Advanced Nursing Process Clinical IV (2) This course

provides an opportunity for the student to consolidate theory and skills developed in previous levels and to implement new Level 4 theory and skills. The student functions in collaboration with members of a diverse multidisciplinary health care team, to provide care for hospitalized patients with complex needs. He/she will function interdependently to establish priorities for a group of three patients; to delegate and assist others with aspects of nursing care; and to provide for continuity of care, discharge planning, and referrals. The level 4 student also functions interdependently to maintain standards, to develop relationships, and to assume responsibility for self and others. The student applies the nursing process, considering previous illness, to develop and implement a plan of care for a group of patients, and is expected to submit two extensive Nursing Process Records. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: NUR 240; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, NUR 260, and completion of any 2 theory needs courses at level 4 (NUR 261, 262, 263, 264) and ATI Leadership proctored exam.

NUR 272 Extended Advanced Nursing Process Clinical IV (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to meet the objectives of the courses in Level 4. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: NUR 271; co-requisites: complete and current health form on file, current CPR certification, malpractice insurance, NUR 260.

NUR 273 Extended Advanced Nursing Process Clinical IV (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to meet the objectives of the courses in Level 4. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: NUR 271; co-requisites: complete and current health form on file, current CPR certification, malpractice insurance, NUR 260.

NUR 279 Elective Nursing Process Clinical IV (2) This course provides opportunities for the student to have clinical experience to work on personal objectives and/or those beyond the scope of basic preparation. These experiences will allow the student to be supervised in the clinical setting in order to gain additional experiential knowledge, enhance skills learned, and/or validate maintenance of skills. Students will spend a total of 56 hours over an eight-week time period in clinical practice activities; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: Completion of level 3 requirements, NUR 240, or Permission of Instructor; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, completion of NUR 260 theory, completion of any 2 theory needs courses at level 4 (NUR 261, 262, 263, 264), and ATI Leadership proctored exam.

NUR 286 An International Service Learning Experience for Healthcare Students (3) This elective distributive clinical course will begin on campus during the second half of the semester for orientation and will culminate in an opportunity for students to explore diverse international healthcare practices while also participating in a service-learning project. Students will travel abroad, living amongst the indigenous people to gain a deeper understanding of how culture and socioeconomic conditions affect the health and well- being of the community through cultural immersion. There will be service learning opportunities for students such as building fuel-efficient stoves, observing and participating in community health teaching, touring a local clinic / pharmacy, meeting with local traditional medicine experts and midwives, and possibly participating in home care visits within the community. Students will spend time on campus in orientation and learning theory along with clinical practice activities during this 3 credit elective distributive clinical course. Student must be matriculated in a healthcare program with priority registration given to nursing students. Prerequisite: Matriculation in a healthcare program.

NUR 291 Role Transition: Capstone Course (2) This clinical course is designed as a collaborative experience between nursing service and nursing education. It is a reality-based experience in which the student, in conjunction with a registered nurse preceptor, begins to function as a beginning staff nurse. The preceptor acts as a role model, teacher, and supervisor, and determines the pace and extent of assignments based on the student's identified learning outcomes, the experiences available, and the student's ability. The student is involved in a peer review process with the preceptor by maintaining and sharing a daily log, receiving formative feedback from which to identify learning needs and receiving summative feedback prepared by the preceptor at the conclusion of the experience. The student is expected to submit a patient case study with the application of two extensive Nursing Care Plans. Students will spend a total of 56 hours over a two-week time period on a medical-surgical hospital unit engaged in all activities with a preceptor; in addition, students will be expected to spend substantial time preparing for and following up after each clinical day. Prerequisite: Completion of NUR 271; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, NUR 260, completion of any 2 theory needs courses (NUR-261, 262, 263, 264), and ATI Leadership proctored exam.

NUR 295 Distributive Care Clinical: Psychiatric Nursing (1) This course provides an opportunity for the student to consolidate theory and skills developed in previous levels, and to implement new theory and skills learned in the psychiatric client needs courses in settings not limited to acute care. The student functions in collaboration with members of the health care team within the context of community-based settings. The student functions interdependently to maintain standards, to develop relationships, and to assume accountability. The student applies the nursing process to perform assessments, select nursing diagnoses, and develop a plan for care. The distributive psychiatric clinical will involve the students in current issues of mental health as well as illness, giving them a sense of psychiatric care needs in our community. Students will spend a total of 28 hours over the semester in clinical practice activities; in addition, students will be expected to spend substantial preparation and follow-up time. Prerequisite: NUR 240; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 260.

NUR 296 Distributive Care Clinical: Childbearing Family Nursing (1) This course provides an opportunity for the student to consolidate theory and skills developed in previous levels, and to implement new theory and skills learned in the childbearing family needs courses in settings not limited to acute care. The student functions in collaboration with members of the health care team within the context of community-based settings. The student functions interdependently to maintain standards, to develop relationships, and to assume accountability. The student applies the nursing process to perform assessments, select nursing diagnoses, and develop a plan for care.

Students will spend a total of 28 hours over the semester in clinical practice activities; in addition, students will be expected to spend substantial preparation and follow-up time. Prerequisite: NUR 240; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 260.

NUR 297 Distributive Care Clinical: Childrearing Family Nursing (1) This course provides an opportunity for the student to consolidate theory and skills developed in previous levels, and to implement new theory and skills learned in the childrearing family needs courses in settings not limited to acute care. The student functions in collaboration with members of the health care team within the context of community-based settings. The student functions interdependently to maintain standards, to develop relationships, and to assume accountability. The student applies the nursing process to perform assessments, select nursing diagnoses, and develop a plan for care. Students will spend a total of 28 hours over the semester in clinical practice activities; in addition, students will be expected to spend substantial preparation and follow-up time. Prerequisite: NUR 240; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 260.

NUR 298 Distributive Care Clinical: Geriatric and Palliative Care Nursing (1) This course provides an opportunity for the student to consolidate theory and skills developed in previous levels, and to implement new theory and skills learned in the geriatric and palliative care nursing needs courses in settings not limited to acute care. The student functions in collaboration with members of the health care team within the context of community-based settings. The student functions interdependently to maintain standards, to develop relationships, and to assume accountability. The student applies the nursing process to perform assessments, select nursing diagnoses, and develop a plan for care. Students will spend a total of 28 hours over the semester in clinical practice activities; in addition, students will be expected to spend substantial preparation and follow-up time. Prerequisite: NUR 240; co-requisites: completed and current health form on file, current CPR certification, malpractice insurance, and NUR 260.

Physical Education, Sport and Kinesiology

FOR MORE INFORMATION, CONTACT THE HEALTH, PHYSICAL EDUCATION AND RECREATION DEPARTMENT IN THE HEALTH AND PHYSICAL EDUCATION BUILDING, ROOM H202, (315) 498-2282.

PED 101 Introduction to Physical Education, Sport and Kinesiology (3) This course is an overview of the history and foundations of physical education, sport and kinesiology. The various dimensions of these fields, including motor behavior, biomechanics, exercise physiology, sport sociology, health, fitness, sport psychology, teaching and coaching, are among the topics introduced. Students will develop a philosophy of the aims and objectives of physical education as a profession while beginning the process of personal career exploration and planning.

PED 201 Fundamentals of Exercise Science (3) This course is an introduction to the nature, scope, and scientific basis of exercise and sport science. The course is aimed at developing an understanding of the physiological adaptations to acute and long term physical training. An understanding of these adaptations is crucial for the physical educator, athletic trainer, coach, fitness expert, or exercise physiologist. Emphasis is placed on bioenergetics as well as circulatory, respiratory and neuromuscular responses during rest, steady state and exhaustive physical activity. An orientation to professional activities, opportunities, and professional competencies in the field will also be addressed. Prerequisite: BIO 172.

Physical Education

FOR MORE INFORMATION, CONTACT THE HEALTH, PHYSICAL EDUCATION AND RECREATION DEPARTMENT IN THE HEALTH AND PHYSICAL EDUCATION BUILDING, ROOM H202, (315) 498-2282.

PEH 100 Lifetime Physical Wellness (1PE) This course will provide the student with an overview of wellness and physical fitness principles. Through course lectures and actual participation, the material covered will enable the student to initiate a healthy lifestyle change. Topics covered include: the four areas of physical fitness, proper nutrition for a healthy lifestyle, relaxation and stress management techniques, self-responsibility as it relates to personal health management, prevention and care of common injuries, and the use and misuse of supplements. There are no prerequisites for this course.

PEH 114 Horsemanship (1PE) This course will provide the student with a basic knowledge of proper horsemanship. Through lectures and actual riding lessons, the student will learn the proper techniques of caring for a horse, riding, etiquette, grooming, horse anatomy, and safety. The student will gain self-confidence for personal safety and riding enjoyment. In addition, the student will better understand the horse and how it functions, both mentally and physically. There is an additional fee per riding session for this class. There are no prerequisites for this course.

PEH 120C Horsemanship II (1PE) This course is a natural progression from Horsemanship I. Through lectures and actual riding lessons, the student will enhance his/her understanding of the nature of horses and proper methods of caring for horses. They will identify different breeds, colors and markings. Advanced riding, handling, and grooming skills will be taught along with more detailed instruction on the care and structure of horses. Prerequisite: PEH 114, or the equivalent of 15 hours of riding instruction.

PEH 129 Beginning Tennis (1PE) Primarily designed for those individuals who have no previous tennis experience. Areas to be covered include equipment, etiquette, rules, stroke fundamentals, and theory.

PEH 136 Aerobic Dancing for Women and Men (1PE) A fun fitness program comprised of a variety of energetic dances that incorporate muscle toning, flexibility, balance, coordination and cardiovascular fitness. Course includes well-monitored workouts, beginning with slow, easy aerobics and working up to more vigorous routines. Meets the Physical Education Activity requirement.

PEH 139 Ballroom Dancing (1PE) Designed for the student who has had little or no background in ballroom dancing. This course will stress the development of basic rhythms in four or five different dances (fox trot, waltz, cha cha, rhumba, etc.) It will teach the basic steps, patterns, and simple breaks of the dances involved. Finally, it will stress good leading and following techniques so dancing can be an interpretive experience instead of mechanical.

PEH 143 Skiing (1PE) A course designed to teach all levels of skiing, from beginner to competitive skiing, depending on the ability of the individual. It includes instruction in the mechanics of skiing, exercise, safety, and care of equipment. Additional fee required.

PEH 145 Bowling (1PE) A comprehensive course covering all the fundamental aspects of the game for the beginner through the experienced player. It includes development, values, basic skills, rules, scoring, etiquette, and equipment. Additional fee required.

PEH 151 Karate (1PE) This course is designed to teach a basic knowledge of the techniques and philosophy of Karate.

PEH 152 Tai Chi (1PE) Tai Chi is an ancient Chinese form of self-

cultivation which originated as a martial art and is now studied primarily to develop and maintain physical and psychological well-being. The Standard 24 form is a beginning-level tai chi form which helps practitioners relax, focus, and improve their balance, and imparts a feeling of well-being. There are no prerequisites for tai chi.

PEH 155 Yoga (1PE) An introduction to Yogic exercises. Course includes techniques of relaxation, breathing exercises, exercises in bending and stretching, asanas.

PEH 157 Beginning Golf (1PE) A course for the beginning golfer. Basic fundamentals of the game of golf are stressed, along with various clubs and their uses, essential rules and etiquette, and some historical background on the origin of golf. Practical play at a local golf course is included.

PEH 160 Basic Floor Pilates (1PE) This course is designed to give students an understanding of the history of pilates while providing a safe and balanced exercise program that includes training the core muscles as well as the whole body. There are no prerequisites to this course.

PEH 163 Basic Weight Training for Life (1PE) Designed to give students the necessary techniques and knowledge in the area of weight training so they will be able to pursue intelligently and safely a program of weight training that will fit each student's specific needs or desires. All areas of weight training will be covered, such as Olympic lifting, lifting for athletes, physical therapy, body building and physical fitness for enthusiasts. Use of free weights and weight machines will be implemented.

PEH 168 Beginning Volleyball (1PE) A comprehensive course applying rules to individual skills and team strategy.

Philosophy

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM M380, (315) 498-2301.

PHI 101 The Examined Life: an Introduction to Philosophy (3) This course introduces students to some of the main issues in Western philosophy. Students will be exposed to classic and contemporary writings from core areas of philosophy such as epistemology, metaphysics, philosophy of mind, philosophy of religion, social/political philosophy, and aesthetics. By critically evaluating the arguments that arise in these areas, students will develop a deeper understanding of the nature of philosophical inquiry. Emphasis will also be placed on how thinking philosophically can help us address many important contemporary issues.

PHI 102 History of Philosophy - Ancient (3) Introduces students to the problems of philosophy through the critical examination of the earliest developments of Western thought. Philosophers covered are the Presocratics, Socrates, Plato, and Aristotle.

PHI 103 Critical Thinking (3) The aim of this course is to equip students with the capacity to critically evaluate various claims, arguments, and other purported reasons for belief. The focus will not be on factual knowledge. Rather, the goal is for students to acquire a certain skill, or know-how. Students will learn to identify and construct arguments, discern whether the premises of arguments support their conclusions, and discover many common valid and invalid argument forms. Students will also learn to identify common logical fallacies in real-world examples, construct arguments for "should" conclusions (e.g., arguments with the conclusion that such-and-such should be done), and analyze analogies.

PHI 104 History of Philosophy: Early Modern (3) An introductory course in which students will critically examine the problems of philosophy which were addressed by the major philosophical movements of 17th- and 18th-Century Europe. Emphasis will be placed on issues in metaphysics and epistemology. Representative readings will be selected from among the works of Descartes, Malebranche, Leibniz, Spinoza, Bacon, Locke, Berkeley, Hume, Reid, and Kant.

PHI 105 Nineteenth Century Philosophy (3) Primarily concerned with the post-Kantian trends in the philosophy of 19th century Europe. Emphasis will be placed on the most conspicuous figures of this period including Hegel, Schopenhauer, Marx, Mill, Kierkegaard, and Nietzsche.

PHI 106 Twentieth Century Philosophy (3) The student will be introduced to the two major philosophical movements of the 20th century, Analytic Philosophy and Existentialism, through selected writings of such philosophers as Moore, Russell, Austin, Wittgenstein, Husserl, Heidegger, Sartre, and Camus.

PHI 107 Logic (3) An introductory course in symbolic logic. Students will be introduced to the basic principles of logical analysis, including argument recognition, the distinction between deductive and inductive arguments, validity, and soundness. Students will also learn how to construct truth tables and proofs in propositional logic. The fundamentals of predicate logic will also be covered.

PHI 108 Ethics (3) An introduction to basic problems about the application of the concepts of right, wrong, good and bad to persons and their actions. Topics covered may include major ethical traditions, relativism and absolutism, morality and religion, and the foundations of moral obligation.

PHI 109 Philosophy of Religion (3) An introductory course examining issues in the traditions of western religious thought, e.g., proofs of the existence of God, the problem of evil, the relationship between religious belief and moral belief, religious experience and knowledge, immortality.

PHI 110 American Philosophy (3) Devoted to the search for characteristically American contributions to philosophical investigations. The course will examine how the issues of the great tradition of philosophy, developed in Europe, in the theories of existence, knowledge, ethics, and politics, have all been addressed by writers such as Emerson, Thoreau, Pierce, James, Dewey, Margaret Fuller, and also by Native American thinkers.

PHI 120 Ethics in Engineering and Technology (3) This course is an investigation of fundamental ethical issues relating to the fields of engineering and technology, focusing on organizing principles and ethical theory to frame problems that are typically encountered in the engineering industry. Topics to be discussed include: professional responsibility and accountability; honesty and integrity in the workplace; intellectual property; conflicts of interest; environmental issues; risk, safety and product reliability; legal liability; and diversity in the workplace. Contemporary case studies will be examined and debated in the context of such traditional philosophical schools of thought as utilitarianism and Kantian ethics. Prerequisite: ENG 103 or Permission of Instructor.

PHI 130 Environmental Ethics (3) This course introduces students to moral concepts that will help them understand humanity's relationship with the natural world. The first part of the course considers the extent to which traditional moral concepts can be extended to non-human aspects of the world. Later, students will explore more non-traditional approaches to the issue, including biocentrism, ecocentrism, ecofeminism and Native American perspectives. Students will also have the opportunity to apply theoretical tools to an examination of some practical issues

surrounding the environment and sustainability, such as global climate change, overpopulation and pollution.

PHI 206 Philosophy of Law (3) This course concerns the fundamental nature of law, and the relations between law and morality. It covers natural law, imperative and rule-based theories of the nature of law, and alternative statements of the justice of law. The philosophers covered in the course will include Aristotle, Aquinas, Austen, Hart and Rawls. Prerequisite: one prior course in PHI or Permission of Instructor.

PHI 210 Philosophy of Science (3) Concerned with the nature of scientific theories and the evidence for them, as well as the ways these theories develop and change. Examples of the sorts of problems to be considered are the status of theoretical entities, the problems of induction, simplicity of theories, isomorphism of theories, and the nature of prediction. Examples of theories will be drawn from classical as well as contemporary science. Prerequisite: one prior course in PHI or Permission of Instructor.

PHI 211 Metaphysics and Epistemology (3) Concerned with fundamental questions about the nature of reality and our knowledge of it. Emphasis will be placed on acquiring the analytic tools required to examine these areas intelligently, and an attempt will be made to show how uncritical opinions in these areas affect behavior and belief. Prerequisite: one prior course in PHI or Permission of Instructor.

Photography

FOR MORE INFORMATION, CONTACT THE ART DEPARTMENT IN FERRANTE HALL, ROOM F162, (315) 498-2401.

PHO 100 Basic Photography (3) This black and white photography course is an introduction to basic digital camera techniques, aesthetics, and image editing software. Class time is a combination of lecture, demonstration, critique, and hands-on lab instruction. Regular projects, exams, and writing assignments will be given as appropriate to the discipline. Students must have a digital SLR camera.

PHO 111 Digital Photography (3) This non-major course is designed to cover the basics of digital photography. Students will be introduced to digital camera functions. Assignments will address composition, design, color theory, and the history of photography to help students work creatively with their digital cameras. Students will be introduced to image editing software for color correction, image manipulation, and digital output. Class time will include lecture, demonstration, critique and hands-on digital lab instruction. Writing and reading assignments as appropriate to this discipline are part of this course. Students may have any digital camera but a digital SLR camera is preferred.

PHO 150 Black and White Photography II (3) This course is a study of advanced black and white photographic techniques and theory. Students will work digitally to produce a portfolio of images. Students will work through a series of assignments that will increase their understanding of the photographic medium. Class time will include lecture, demonstration, critique, and hands on digital lab instruction. Writing and reading assignments as appropriate to the discipline are part of this course. Students must have a digital SLR camera. Prerequisite: PHO 100.

PHO 160 Color Photography I (3) This course will cover digital color photography including exposure, processing, printing, color theory, color management, and digital output. Aesthetics and communication will be stressed. Class time will include lecture, demonstration, aesthetic critique, and hands-on lab instruction. Writing and reading assignments as appropriate to this discipline are part of this course. Students must have a digital SLR camera. Prerequisite: PHO 100 or Permission of Department.

PHO 170 Studio Lighting and Techniques I (3) This course is designed to introduce students to the tools and practice of studio photography. Students will be introduced to medium format cameras, digital cameras, and tungsten and strobe lighting systems, as well as other lighting equipment. Class will focus on creation of black and white imagery with projects drawn from the following: advertising, portraiture, fashion, product photography, digital, architecture, and fine art. Students will develop a working knowledge of all the tools of the studio, as well as the ability to work knowledgeably in the crafting of effective lighting of all subject matter. Class time will include lecture, demonstration, critique, and hands-on digital laboratory and studio instruction. Writing and reading assignments as appropriate to this discipline are part of this course. Students must have a digital SLR camera. Prerequisite: PHO 150.

PHO 260 Color Photography II (3) This color photography course is an advanced, digital photography class. The course will build on the foundation created in PHO 160 for working with digital, color, photographic imagery. Students will create a portfolio of images. Students will work through a series of assignments that address digital camera operations, color correction, image manipulation, mastering color printing, and color management. Class time will include lecture, demonstration, critique and hands on digital lab instruction. Writing and reading assignments as appropriate to this discipline are part of this course. Students must have a digital SLR camera. Prerequisite: PHO 160.

PHO 270 Studio Lighting and Techniques II (3) This course is an advanced studio photography class. Students will focus on effective use of medium format and digital cameras, as well as the full range of lighting equipment for work in color photography. Class will address advanced studio techniques and creative problem solving using digital methods. Assignments may include projects in advertising, portraiture, fashion, product photography, architecture, and fine art. Class time will include lecture, demonstration, critique, and hands-on digital laboratory and studio instruction. Writing and reading assignments as appropriate to this discipline are part of this course. Students must have a digital SLR camera. Prerequisite: PHO 170.

PHO 271 Alternative Photographic Process (3) This course is an introduction to alternative photographic techniques and an expanded investigation of various modes of photographic presentation. Students will study techniques and photo processes ranging from the 19th century (such as cyanotype, and van dyke brown) to the most contemporary digital techniques with an eye toward adapting and combining various techniques for innovative personal expression. Students will be encouraged to move beyond the traditional presentation methods of photography and to devise presentation styles to match and augment their photographic content. Possibilities include: sequential imagery (book, video or digital), collage and montage, mixed media, wall hangings and sculptural and installation uses of photography. Class time will include lecture, demonstration, critique and hands-on, in-class projects. Writing and reading assignments as appropriate to the discipline are part of this course. Students must have an adjustable 35mm film camera and a digital SLR camera. Prerequisites: PHO 100 or Permission of Instructor.

PHO 272 Documentary Photography (3) This course allows students to investigate a range of topics and issues typical to the photojournalist. These may include legal and ethical issues, news, spot news, portrait and action photography, travel imagery, picture editing, photography and writing, digital imagery, and the extended documentary project. Class is designed to provide a solid introduction

to the work of the photojournalist. Class time will include lecture, demonstration, critique, and hands-on laboratory instruction. Writing and reading assignments as appropriate to this discipline are part of this course. Students must have a digital SLR camera. Prerequisites: PHO 150 and ART 142; recommended: PHO 160.

PHO 290 History of Photography (3) A survey of the history of photography, with concentration on selected major figures in photography from the nineteenth and twentieth centuries. Class activities will include instuctor's presentations, student reports, field trips, guest presentations, and discussions based upon those activities and upon assigned readings in the history of photography.

PHO 291 CO: Cooperative Education (3) The course is designed to provide work experience directly related to the student's field of study. A learning contract, containing specific educational objectives related to the work experience and the student's field of study, is developed by the student and the faculty co-op coordinator. Course requirements include a minimum of 180 hours of work in the student's field of study, maintenance of a daily log of hours worked and duties performed, and a work-related final project or paper. This will allow the student to earn 3 credit hours. The student's performance will be evaluated by the faculty co-op coordinator on the basis of the objectives in the initial learning contract and satisfactory evaluations by the employer. A letter grade will be assigned. Photography majors ONLY. Prerequisite: Approval by the Photography department.

Physics

FOR MORE INFORMATION, CONTACT THE CHEMISTRY/PHYSICAL SCIENCE DEPARTMENT IN FERRANTE HALL, ROOM F352, (315) 498-2432.

PHY 100 Everyday Physics (3) An introductory, survey course in physics for non-science majors, not open to Math/Science majors. The objective of the course is to use the basic laws of physics to explain how things work. Using basic algebra, the student will learn how physics can explain the qualitative and quantitative nature of the interworking of common everyday objects that fall in one of the four major categories: Transportation - Topics related to the physics of riding a bicycle, sailing a boat, flying objects/animals, and the working of an automobile. Athletic Endeavors - Topics such as figure skating, playing ping pong, high jumping, and throwing a curve ball will be explained. The Arts - Topics related to the interworking of various musical instruments, mixing of color pigments, and the spinning of clay are a few of the items within the arts that will be examined. Human Body - The physics of the human body including vision, hearing, the heart as a pump, and other aspects will be explained. Prerequisite: MAT 087 or higher.

PHY 101 Technical Physics I (4) A course in general physics which emphasizes applications of basic principles. It covers fundamentals in mechanics, heat, and wave behavior. Three class hours and two laboratory hours. Co-requisite: MAT 101 or equivalent. Not open to Math/Science students.

PHY 103 General Physics I (4) The first semester of a two-semester, basic, non-calculus General Physics course emphasizing fundamental concepts and principles with a problem-solving approach. Topics covered include Kinematics and Dynamics, Newton's Laws, Work and Energy, Momentum, Rotational Motion, Heat and Thermodynamics. A two-hour recitation session allows the opportunity to work on techniques of problem solving. Two class hours, two recitation hours and two laboratory hours. Prerequisite: MAT 114 or higher. Only four (4) credits in either PHY 103 or PHY 105 may be used toward degree requirements.

PHY 103R General Physics I Recitation (1EQ) Optional recitation section for PHY 103. Provides an opportunity for students to apply the basic laws of mechanics and to develop problem-solving skills. Structured as small group activities; requires completion of worksheets weekly.

PHY 104 General Physics II (4) The continuation of PHY 103. Topics covered include Vibrations and Wave motion, Physical and Geometrical Optics, Electricity and Magnetism, simple AC and DC Circuits and Modern Physics. Two class hours, two recitation hours, and two laboratory hours. Prerequisite: PHY 103 or equivalent.

PHY 105 Physics I-Mechanics (4) The first course of a calculus-level sequence in general physics, primarily for engineering students or for students majoring in the physical sciences. Kinematics and dynamics of a particle, Newton's laws of motion, work and energy, momentum, rotational motion, and gravity. Three class hours and three laboratory hours. Co-requisite: MAT 161. Only four (4) credits in either PHY 103 or PHY 105 may be used toward degree requirements.

PHY 105R Physics I Recitation (1EQ) This is an optional recitation section for students taking PHY 105. It is structured as small group activities and provides students an opportunity to develop problem-solving skills in the subject of Mechanics. Co-requisite: PHY 105.

PHY 205 Physics II - Electricity and Magnetism (4) An analytical treatment of electricity and magnetism. Electrostatics, electric current, magnetic fields, electromagnetic induction and Maxwell's equations. Three class hours and three laboratory hours. Prerequisite: PHY 105; co-requisite: MAT 162.

PHY 205R Physics II Recitation (1EQ) This is an optional recitation section for students taking PHY 205. It is structured as small group activities and provides students an opportunity to develop problem-solving skills in the subject of Electricity and Magnetism. Co-requisite: PHY 205.

PHY 206 Physics III-Thermodynamics and Waves (4) Heat transfer and thermodynamics, periodic motion, wave propagation, sound, light, and elements of modern physics. Three class hours and three laboratory hours. Prerequisite: PHY 105; prerequisite/co-requisite: MAT 162.

Political Science

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM M380, (315) 498-2301.

POS 100 American National Politics (3) This course examines American political principles, institutions, processes, and controversies. Emphasis will be placed on the historical development of institutions including Congress, the Presidency, and the Supreme Court. Students will study the theoretical foundations of the American regime and analyze the U.S. Constitution. Significant attention will be given to how successive generations of Americans have interpreted the meaning of the foundational principles of equality and liberty.

POS 102 State and Local Politics (3) This course examines the role of state and local governments in the American political system, with special emphasis on New York State's government institutions, political processes and public policies. The evolving nature of federalism and intergovernmental relations is covered as is the value of civic participation in state and local affairs.

POS 198 Introduction to Political Thought (3) This course surveys the history of political philosophy from Plato through Rawls. Students will consider fundamental political questions related to justice, liberty, equality, human nature, and power. Original philosophical texts will

be analyzed and discussed.

POS 201 Comparative Politics (3) Students will learn about six of the world's regions and particular nation-states within those regions, in comparison to one other and to the USA. Historical and geographical factors will be examined to determine their effects on the contemporary political, economic and social patterns that exist in each of the regions. Future problems and prospects for each region will also be explored.

POS 214 Contemporary Global Issues (3) An interdisciplinary course which explores contemporary global issues. It surveys themes related to social, political, economic, and cultural processes; global linkages/interdependencies; and power relations that connect individuals, communities, groups, states, and regions across the globe. It examines the values and visions emerging from regional perspectives that lead to conflict and/or cooperation in the international system. It contrasts the increasingly complex problems faced by different regions with the growing integration of the global economy. Open to all interested students. Required course for all students pursuing the International Studies Concentration. Not open to students who have taken SOC 214.

POS 215 The Politics of Native American - U.S. Relations (3) This course will cover three aspects of the relationship between Native American peoples and the U.S. government. The first includes a sample of Native American governance and law that existed prior to European settlement, its later influence on the U.S. founding, and its rebirth. The second part of the course will examine U.S. government policies toward native tribes from 1790 to the present. Treaties, acts and court decisions that reflect these policies will be analyzed. The last third of the course will include a discussion of contemporary issues and conflicts between and among various Native American tribes and the U.S. government. These contemporary topics will include: land claims, land use, gambling, poverty, religious freedom, and social and environmental policies.

POS 230 Women and Politics (3) This course will compare and contrast the role of women in politics in the US, Western Europe and a selection of countries from the less-developed world. The suffrage movement and ERA movements will be examined for their successes and failures and compared to similar political movements in the west. Women as political actors will be studied: as voters; as party members; as interest group members; as legislators; and as executives in the U.S., Europe and the developing world. The effect that women in office have on policy-making will be evaluated in different regions. A brief survey of how certain public policies affect women will be covered, as will U.N. efforts in the area of international women's rights.

POS 260 New York State Environmental Regulation (3) This course surveys environmental regulatory management in New York state. Included are historical efforts, present procedures, and some developing trends. The primary focus of the course is on programs of the New York State Department of Environmental Conservation. In addition to NYS DEC programs, the course will examine agencies' regulatory jurisdictions at the federal, state, and local levels. Various local approvals will also be considered. The emphasis will be on the inter-relationship of programs, as well as the specific details of the NYS DEC programs themselves.

POS 280 Internship in Politics and Government (3) The course provides students the opportunity to apply their knowledge of politics and government in a practical setting. Internships are available in various public offices in the executive/bureaucratic, legislative, or judicial branches of government at the national, state and local levels. Internships with major political parties may also be available. Students arrange their placement with the help of the Cooperative Education Office and a faculty coordinator. Course requirements include a minimum of 120 hours of work, maintenance of a weekly journal, attendance at four on-campus seminars, occasional readings, and an experience-based essay. Two on-site evaluations will also be made by the faculty coordinator. Letter grade will be awarded. No credit given for past work experience. Prerequisite: Permission of Instructor.

POS 290 Senate and Assembly Internship (9) Senate and Assembly internships are available on a competitive basis for outstanding sophomores. Applicants are screened by a selection committee in Albany after approval by the Campus Liaison Officer. The program begins in early January with a week-long orientation to the operation of the state government, with particular reference to the workings of the Legislature. Interns then receive full-time intern assignments for 30+ hours per week in an office of a NYS Assembly or Senate member. Office tasks involve constituent work, research on specific legislation, research on the legislative process, representation of the office at campaign and legislative events, and office administration. On-site supervisors are either members of the Legislature (Senate or Assembly), or members of their staff. A work plan and a learning contract are developed between the intern and supervisor, and intern performance is evaluated regularly. A stipend is available for housing in Albany. Prerequisite: POS 100 or 102, or Permission of Instructor; co-requisite: POS 291. Spring semesters only.

POS 291 Senate and Assembly Research and Seminar (6) Senate and Assembly internships are available on a competitive basis for outstanding sophomores. Applicants are screened by a selection committee in Albany after approval by the Campus Liaison Officer. The program begins in early January with a week-long orientation to the operation of state government. After placement in a NYS Senate or Assembly office, interns participate in weekly seminars exploring how politics influences policy in the NYS legislative process. Critical issues that challenge NYS will be used as models for understanding the complexities of the policy-making process. The various actors involved in policy-making, in particular, the legislators, the governor, state agencies, citizens, lobbyists, and the media, are analyzed. Interns receive academic guidance and support from the permanent program staff, the professors in residence, and from legislative staff. This guidance allows students to maximize their understanding of the practical application of the theoretical concepts introduced in the seminar. A stipend is available for housing in Albany. Prerequisite: POS 100 or 102, or Permission of Instructor; co-requisite: POS 290. Spring semesters only.

Physical Education, Sport and Leisure

FOR MORE INFORMATION, CONTACT THE HEALTH, PHYSICAL EDUCATION AND RECREATION DEPARTMENT IN THE HEALTH AND PHYSICAL EDUCATION BUILDING, ROOM H202, (315) 498-2282.

PSL 210 Team Sports: Teaching and Officiating (2PE) This course is an in-depth study of individual skills, rules, and strategy in each of the following sports: soccer, basketball, volleyball, and softball. This course gives students hands-on experience teaching their peers sport-specific skills and drills along with practice at officiating in each sport. There is a dress code for this course. Prerequisite: PSL major or Permission of Instructor.

PSL 215 Diversity and Inclusion in Activity Programming (3) This course prepares students for activity programming in a variety of environments with diverse populations. Students will examine the historical and philosophical basis for the provision of leisure services for individuals with disabilities. Diversity programming considers recognition and respect for differences in race, ethnicity, class, gender, and sexual orientation. The characteristics and abilities of people with

disabilities will be analyzed and experienced through community involvement.

Psychology

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM M380, (315) 498-2301.

PSY 103 General Psychology (3) General Psychology is designed to give the student an introduction to the concepts required for the study of perception, conditioning, learning, intelligence, motivations, emotions, and personality. The interaction of heredity and environment is also stressed. This course is a prerequisite to all other psychology courses. Prerequisite: English and Reading placement at college level.

PSY 204 Child Psychology (3) An introduction to the scientific study of the developing child. The age span covered ranges from the prenatal period up to puberty. Topics include age relevant studies of motor, cognitive, linguistic, social and personality growth. Prerequisite: PSY 103.

PSY 205 Social Psychology (3) An introduction to the area of human social interaction from the perspective of how man affects and are affected by social phenomena. Social factors in the development of personality and motivation, attitudes and attitude change, interpersonal and group processes, and the application of social psychology to contemporary issues will be emphasized. Students will be expected to critically evaluate the explanatory models used to describe, explain, and predict social behavior. Prerequisite: PSY 103.

PSY 206 Human Growth and Development (3) Human growth and psychological development of the individual from infancy through senescence. Attention is given to the patterns of change that occur during each of the life stages, considering physiological, psychological, genetic and cultural forces affecting human development. Prerequisite: PSY 103.

PSY 207 Adolescent Psychology (3) All of the important aspects of the lives of adolescents are studied from a theoretical and research viewpoint. Topics discussed include the following: development of the self-concept, sexual maturation, morality, mental growth, vocational choices, love and affection, anger, fear, parents, peer relationships, home and family, marriage, the drug culture, etc. Prerequisite: PSY 103.

PSY 210 Abnormal Psychology (3) Deals with the important aspects of "abnormal psychology", both from a descriptive as well as a theoretical viewpoint. In addition to noting the various symptoms and characteristics of psychological disorders, an emphasis will be placed on explaining the possible causes of such disorders and their possible methods of treatment. Prerequisite: PSY 103.

PSY 212 Psychology of Women (3) A study of the psychology of women from an historical and contemporary perspective. The main focus of the course is on the current revision and expansion of research on sex roles (sex differences and similarities). Such topics as, for example, sex-role stereotypes, the issue of fear of success in women (and men), and androgyny as an alternative to masculinity or femininity are considered in light of the relevant literature. Prerequisite: PSY 103.

PSY 214 Educational Psychology (3) An investigation into the ways in which psychological knowledge can be applied to the processes of bringing about changes in behavior, i.e., teaching and learning. The educational implications of psychological theory and research will be applied to such areas as the processes involved in learning, remembering, thinking, solving problems, motivation, and creativity. In considering these areas the focus will be on understanding learning, and the differentiation among learners and learning environments, so that appropriate strategies may be created to enable students to better define themselves as learners. Prerequisite: PSY 103.

PSY 215 Mind and Body: Physiological Psychology (3) An introduction to the interrelationships between mind and body, exploring the physiological correlates of behavior as well as psychosomatic illness. Students will explore and critically evaluate the theories and research in physiology and their implications. Prerequisite: PSY 103.

PSY 216 Psychology and Law: Forensic Psychology (3) An exploration of the issues and dilemmas created by the interaction between psychology and the law. Current psychological research and theory will be applied to evaluating the uses and abuses of the insanity defense; understanding, predicting and regulating violent behavior; the role of the psychologist as expert witness in civil and criminal cases; the application of psychological research to jury selection, trial techniques and the evaluation of evidence. Prerequisite: PSY 103.

PSY 218 Psychology of Disabilities (3) This course will address issues faced by individuals with physical disabilities, whether congenital, hereditary or traumatic in nature. Included is a discussion of the Americans with Disabilities Act, 1990, and its effects on the self-image of the disabled. The course will include definitions of disabilities, cultural attitudes about the disabled, and reactions of family members to the disabilities. Information about support services will also be given. Prerequisite: PSY 103.

PSY 219 Positive Psychology (3) Positive Psychology explores the scientific study of ordinary human strengths and virtues. We will examine human behavior that is effective, valuable and contributes positively to human development. We will study how humans live lives of dignity and purpose and will include such topics as subjective well-being; peak performance; wellness; interventions for enhanced well-being; religion and spirituality; and work, community and well-being. This course takes a holistic and general systems theory perspective. Prerequisite: PSY 103.

PSY 220 Cognitive Psychology (3) This course is an introduction to the study of cognitive processes. Covered topics include attention, perception, memory, problem solving, concept formation, decision-making and language. Students will critically analyze the research in cognitive psychology and relate the course content to real-world applications. Prerequisite: PSY 103.

Physical Therapist Assistant

FOR MORE INFORMATION, CONTACT THE PHYSICAL THERAPIST ASSISTANT DEPARTMENT IN FERRANTE HALL, ROOM F267, (315) 498-2458.

PTA 101 Introduction to Rehabilitation (3) The American Physical Therapy Association and the history of the profession of physical therapy (PT) are explored. The student is introduced to procedures used in PT, settings where PT is practiced, and the physical therapist assistant's role as part of the rehabilitation team. Ethical and legal considerations in physical therapy are also introduced. Communication skills are developed, including effective interpersonal communication, oral and written reports and medical terminology. Vital signs, infection control techniques and various emergency procedures pertinent to the practice of PT will be learned. The student is required to become CPR certified for the healthcare professional on an independent basis. Prerequisite: Acceptance into the PTA program or Permission of Instructor. Co-requisites: PTA 102, 102L, and 103, or Permission of Instructor. Fall semesters only.

PTA 102 Physical Therapy Procedures I (2) The theory and practice of physical therapy procedures are begun, including patient positioning and handling techniques, skin care, heat, cold, hydro-therapy treatments and massage. Ambulation with assistive devices, transfers, activities of daily living skills and wheelchair prescription and use are taught. The theory, effects, contraindications and safety precautions of these treatments are learned. Prerequisite: Acceptance into the PTA program or Permission of Instructor; co-requisites: PTA 101, 102L, and 103, or Permission of Instructor. Fall semesters only.

PTA 102L Physical Therapy Procedures I Lab (2) Skills of PTA 102 are practiced. Students will master entry level skills on patient positioning and handling techniques; heat, cold, and hydro-therapy treatments; and massage. Students will become proficient with ambulation using assistive devices and patient transfer techniques. Activities of daily living skills, use of adaptive equipment, and wheelchair prescription and use will also be learned. Prerequisite: Acceptance into the PTA program or Permission of Instructor; co-requisites: PTA 101, 102, and 103, or Permission of Instructor. Fall semesters only.

PTA 103 Clinical Training I (1) An introduction to the physical therapy department of a clinical facility. The lecture component includes an introduction to the Geriatric setting. Assignments are designed to allow students to observe, assist and acquire skills in application of all procedures studied in PTA 101 and 102. Prerequisite: Acceptance into the PTA program or Permission of Instructor; co-requisites: PTA 101, 102, and 102L, or Permission of Instructor. Fall semesters only.

PTA 104 Physical Therapy Procedures II (2) Presents the principles, theory, effects and contraindications of forms of electrotherapy, deep heat modalities, ultraviolet and traction. Mechanisms of injury and the healing process are taught. Theory and principles of passive range of motion and therapeutic exercise are introduced. Theory of peripheral joint mobilization and stretching is discussed. Basic assessment and treatment of musculo-skeletal injuries are introduced and discussed. Prerequisites: PTA 101, 102, 102L, and 103, or Permission of Instructor; co-requisites: PTA 104L, 105, and 106, or Permission of Instructor. Spring semesters only.

PTA 104L Physical Therapy Procedures II Lab (3) Students master entry level skills of application of various forms of electrotherapy, deep heat modalities, ultraviolet and traction. Students become proficient in selecting and executing passive range of motion and therapeutic exercises. Students are familiarized with the practical application of joint mobilization and stretching of the limbs. Prerequisites: PTA 101, 102, 102L, and 103, or Permission of Instructor; co-requisites: PTA 104, 105, and 106, or Permission of Instructor. Spring semesters only.

PTA 105 Functional Anatomy I (3) Application of principles of anatomy in the study of human motion. Emphasizes the positioning and procedures for muscle testing and goniometry of the lower extremities, and describes the physiology of muscle contraction. The origins, insertions, actions, innervation and palpations of various muscles of the lower extremities will be learned, in addition to landmarks of the skeletal system. Normal and abnormal posture and gait are studied. A laboratory component is required. 2 classroom hours and 2 laboratory hours per week. Prerequisites: PTA 101, 102, 102L, 103 and 107 or Permission of Instructor. Co-requisites: PTA 104, 104L and 106 or Permission of Instructor. Spring semesters only.

PTA 106 Clinical Training II (2) In the clinical setting, the student applies newly acquired concepts and skills from PTA 104 and 105 and refines skills learned in PTA 102 and PTA 102L. Prerequisites: PTA 101, 102, 102L, and 103 or Permission of Instructor; co-requisites: PTA 104, 104L, and 105 or Permission of Instructor. Spring semesters only.

PTA 107 Physics for the Physical Therapist Assistant (2) An introductory course to cover topics in physics specifically related to the physical therapist assistant curriculum concepts. Topics that are covered include energy, mechanics, forces, simple machines, conservation laws, properties of liquids, temperature & heat and electromagnetic principles. Fall semesters only. Prerequisites: Acceptance into the PTA program or Permission of Instructor. Co-requisites: PTA 101, 102, 102L, and 103.

PTA 201 Physical Therapy Procedures III (4) This course applies interventions used in PTA 102 and PTA 104, and applies them to specific age groups and pathologies. It studies the pathology, signs, symptoms, psycho-social factors and P.T. management of disabilities related to pediatric and developmental disabilities, strokes, spinal cord injury, fractures, osteoporosis and amputation. It teaches the PTA student how to train patients in the use of an orthosis or prosthesis. Fall semesters only. A laboratory component is required. 3 classroom hours and 2 laboratory hours per week. Prerequisites: PTA 104, 104L, 105, 106 and 107, or Permission of Instructor. Co-requisites: PTA 207 or Permission of Instructor.

PTA 203 Physical Therapy Procedures IV (3) Study of additional disabilities that may require PT interventions as in PTA 201. These include the pathology, signs, symptoms, psychosocial factors and physical therapy management of burns, neuromuscular diseases, traumatic head injuries, diabetes, cancer, cardiopulmonary disease, visual and auditory impairments, and obstetrics. Prerequisites: PTA 201 and 207, or Permission of Instructor. Co-requisites: PTA 204 and PTA 208, or Permission of Instructor. Spring semesters only.

PTA 204 Seminar (3) This course explores the topic of death and dying, including the bereavement process, support systems for the grieving person and ethical, legal and cultural implications for the PTA. Multicultural Diversity and its impact on healthcare delivery is explored. Topics of research, quality assurance, risk management, ergonomics, complementary alternative medicine, work hardening and functional capacity evaluations are presented. Domestic violence and sexual harassment and their implication to the PTA are discussed. Additional pathology topics including the obesity epidemic, rheumatology, hemophilia, GI, and endocrine systems, along with multiple system disorders are covered. Evaluative procedures such as diagnostic imaging, lab values, arterial blood gas interpretation, and pharmacology and their implications to PTAs are introduced. Prerequisites: PTA 201 and 207, or Permission of Instructor. Co-requisites: PTA 203 and 208 or Permission of Instructor. Spring semester only.

PTA 205 Advanced Clinical Training I (3) Under direct supervision of a registered physical therapist, the student will be able to synthesize acquired concepts and skills from the previous levels of clinical and didactic training. Prerequisites: PTA 201, 201L, 207, and 207L; PTA majors only. Usually offered during summer sessions only. This three credit course will no longer be offered after Winter 2017. In it's place will be a four credit PTA 205 course.

PTA 206 Advanced Clinical Training II (4) Under direct supervision of a registered physical therapist or physical therapist assistant, the student will be able to synthesize acquired concepts and skills from the previous levels of clinical and didactic training. The clinical experience follows the completion of all required physical therapy courses. Prerequisite: PTA 203, 204, 205 and 208 or Permission of Instructor; PTA majors only. Summer sessions only.

PTA 206 Advanced Clinical Training II (3) Under direct supervision

of a registered physical therapist, the student will be able to synthesize acquired concepts and skills from the previous levels of clinical and didactic training. The clinical experience follows the completion of all required physical therapy courses. Prerequisites: PTA 203, 204, 205, and 208 or Permission of Instructor; PTA majors only. This three credit course will no longer be offered after Fall 2015. In it's place will be a four credit PTA 206 course.

PTA 207 Functional Anatomy II (3) A continuation of PTA 105, this course includes body landmarks, origins, insertions, actions, and innervation of the upper extremity, head, neck and trunk, ascending and descending nerves, cranial nerves and autonomic nervous system. Goniometry and muscle testing, and palpation of individual muscles will be learned on the upper extremity and trunk. Course consists of 2 classroom hours and 1 laboratory hour. Fall semesters only. Prerequisites: PTA 104, 104L, 105, 106 and 107. Co-requisites: PTA 201 or Permission of Instructor.

PTA 208 Seminar II: Strategies for Success (2) This course synthesizes knowledge gained from each course taken within the PTA curriculum to better prepare the graduate for entry level career positions. The student will learn how to organize and review the vast amounts of material that have been presented to them in the PTA curriculum. The student will undergo a collegial-level review process, log formative feedback and self-reflect to identify learning needs and individual weaknesses regarding content of PTA courses and the NPTE-PTA exam. This course is geared towards preparing the student to successfully complete the National Physical Therapist Assistant Exam (NPTE) and navigate various forms and fees required for certification in New York State. Spring semester only. Prerequisites: PTA 201 and 207, or Permission of Instructor. Co-requisites: PTA 203 and 204.

Reading and Study Skills

FOR MORE INFORMATION, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNEY HALL, ROOM M310, (315) 498-2313/2266.

RDG 087 Intermediate Reading Skills (3EQ) Designed to meet the needs of students who wish to strengthen their reading and study skills. Emphasis will be placed on vocabulary building; structural analysis; spelling improvement; such comprehension skills as paraphrasing and summarizing; and improving the study skills of time management, organizational techniques and listening. Prerequisite: RDG 079 or on the basis of Placement Test Score.

RDG 087L Intermediate Reading Skills - Lab (1EQ)

RDG 093 Reading Preparation for College (3EQ) This course is designed to meet the needs of students who should strengthen their reading and study skills to the level necessary to effectively and efficiently manage the demands of college courses. Emphasis will be placed on textbook reading and comprehension, and will include managing technical vocabulary, focused text marking, and content processing to maximize retention of text. The course includes analysis of articles to identify an author's message, supporting points and evidence. Critical reading strategies are included. Students will also analyze issues and challenges that can create barriers to success in college. Prerequisite: RDG 087 or Placement Test; co-requisite: RDG 093L.

RDG 093L Reading Preparation for College - Lab (1EQ)

RDG 118 College Reading and Vocabulary for ESOL Students (3) This course is designed specifically for ESOL students for the purpose of improving reading comprehension and developing learning strategies and vocabulary, all at the college level. The reading component will focus on comprehension and expanding study strategies. The vocabulary component will focus on developing knowledge of Greek and Latin roots and affixes, identifying context clues, and practicing reinforcement strategies, as well as expanding college-level vocabulary in general. Prerequisite: LOEP placement test. For ESOL students only.

RDG 140 Vocabulary and Learning Strategies for Health Sciences (3) Designed specifically for health science majors for the purpose of developing learning strategies and vocabulary in the science content areas. The learning strategies component will focus on improving note-taking in science classes, reading science textbooks, active strategies for integrating class materials for test preparation, and test-taking strategies for lecture and lab exams. The vocabulary component will focus on developing knowledge of Greek and Latin roots and affixes, as well as building science knowledge and vocabulary from current health readings. Prerequisite: Placement Test/RDG 093.

RDG 141 Vocabulary Building and Critical Reading For the Health Sciences (3) This course is designed primarily for health science students and is a continuation of RDG 140, Vocabulary and Learning Strategies for the Health Sciences. Approximately one third of the course will be devoted to the development of critical reading strategies that will maximize the health science student's efficiency and effectiveness in reading and understanding demanding texts in the health science fields. Approximately one third will be devoted to the development of advanced learning strategies as they apply to science courses. Approximately one third will deal with developing and using the specialized vocabulary of the health sciences. Prerequisite: RDG 140.

RDG 153 College Learning Strategies (3) This course is designed to help students become more efficient learners through practice of higher level thinking skills. Emphasis is on taking complete, accurate notes; effective use of class notes in study; reading and marking text assignments; strategies for taking essay and objective exams; studying beyond the literal level; and techniques for dealing with technical terms and unknown vocabulary. Prerequisite: Placement Test/RDG 093.

Recreation Leadership

FOR MORE INFORMATION, CONTACT THE HEALTH, PHYSICAL EDUCATION AND RECREATION DEPARTMENT IN THE HEALTH AND PHYSICAL EDUCATION BUILDING, ROOM H202, (315) 498-2282.

REC 102 Activity Planning I (3) This course provides students with opportunities to develop, lead, organize, and evaluate games and activities for elementary- to middle school-aged participants. Behavior management strategies are emphasized as they apply to the developmental stages of the population being served. Students are required to compose lesson plans with outcome objectives and develop safety plans based on risk assessment. On- and off-campus experiences in activity leadership are required. Prerequisite: REC majors, EXR majors, or Permission of Instructor.

Respiratory Care

FOR MORE INFORMATION, CONTACT THE RESPIRATORY CARE DEPARTMENT IN FERRANTE HALL, ROOM F267, (315) 498-2458.

RET 102 Mechanics of Disease (3) Introductory pathology, including medical terminology, general principles of disease, and overview of common diseases encountered in the hospitalized patient. Basic symptoms of disease and patient monitoring. Introduction to

universal precautions in preventing spread of disease. Prerequisite: RET matriculation or Permission of Department. Spring semesters only.

RET 234 Respiratory Disease (3) Etiology, pathophysiology, clinical and laboratory presentation, and usual treatment of respiratory disorders in adults, children, and newborns. Prerequisite: RET 102. Fall semesters only.

Science – Physical Science

FOR MORE INFORMATION, CONTACT THE CHEMISTRY/PHYSICAL SCIENCE DEPARTMENT IN FERRANTE HALL, ROOM F352, (315) 498-2432.

SCI 100 Meteorology (3) This is an introductory meteorology course designed to conceptually explore the principles and processes of weather. Students will study the fundamental principles of atmospheric structure and composition, radiation and energy as they relate to the Earth-Atmosphere system, air temperature, atmospheric moisture, and air pressure. The course investigates processes that cause fog, clouds, and precipitation. Students are provided with a detailed study of wind and pressure systems around the world, as well as middle latitude and tropical weather phenomena such as air masses, cyclones, tornadoes and hurricanes. Satisfies the science elective requirement of the Math/Science curriculum and also satisfies the science requirement of those curricula which require science. Three class hours or equivalent per week.

SCI 100L Meteorology Lab (1) This optional lab course is designed to increase the students' understanding of meteorology and dynamic characteristics of the atmosphere covered in SCI 100 Meteorology, by challenging them with conceptual and mathematical analyses and interpretation exercises. It should be taken concurrently with SCI 100 or in a subsequent semester upon successful completion of that lecture course. It is intended for those who want a deeper understanding of meteorology and/or those students who have a laboratory science requirement to satisfy. One two-hour laboratory session per week. Prerequisite: MAT 087 or higher; prerequisite/co-requisite: SCI 100.

SCI 103 Introductory Astronomy (3) The Universe: the solar system, stars, galaxies, and cosmology are examined in the light of continuing discoveries of modern astronomy in the space age. Satisfies the science elective requirement of the Math/Science curriculum and also satisfies the science requirement of those curricula which require science. Three class hours or equivalent per week.

SCI 103L Astronomy Lab (1) Laboratory exercises emphasizing practical astronomy. Intended for those who wish to deepen their understanding of astronomy and/or those who have a laboratory science requirement to satisfy. One three-hour session per week. Prerequisite: MAT 079 or higher; prerequisite/co-requisite: SCI 103.

SCI 104 Astronomy II: Introduction to Planetary Science (3) Introduction to Planetary Science is an interdisciplinary algebra-based course that calls upon most of the physical sciences (Astronomy, Chemistry, Geology, Environmental Science, Meteorology, and Physics) in an attempt to understand the nature of our solar system. The goal of this course is to familiarize the science major and non-science major alike with the field of planetary science, and to introduce the history of space exploration to the interested student. This course presents the objects within our solar system and addresses the character of other solar systems within our galaxy. Prerequisite: MAT 087 or 088, and one of the following: SCI 103, SCI 111, GEO 151, GEO 105, GEO 106, or Permission of Instructor.

SCI 104L Introduction to Planetary Science Lab (1) This laboratory course provides practical hands-on experience in a variety of disciplines involved in planetary science. The laboratory exercises in this laboratory course will include, but are not limited to: modeling of the formation and evolution of planetary systems, calculation of planetary motion and other small body objects in the solar system, determining the relative ages of features on planetary surfaces, determining conditions on other planetary bodies in the solar system, and determining the conditions and evaluating the possible habitability of exo-planetary systems. This course is intended for those who wish a deeper understanding of the field of Planetary Science and/or have a laboratory science requirement to satisfy. This laboratory science course satisfies the science elective requirement of the Math/Science Curriculum and also satisfies the science requirement for those curricula that require science. It is one three-hour session per week. Prerequisite/co-requisite: SCI-104, MAT 087 or higher or Permission of instructor.

SCI 111 Introduction to Physics and Chemistry (4) This course is an introductory survey course in physics and chemistry for non-science majors. Topics covered include: scientific method, motion, energy, momentum, heat, light, electricity, sound, atomic structure, the periodic table, chemical compounds, chemical bonds, chemical reactions, properties of water, acids, bases, and salts. Three class hours and two laboratory hours. Not open to Math/Science majors. Prerequisite: Elementary algebra.

SCI 112 Introduction to Biology - Geology (4) This is an introductory course in geology and biology for students with only a high school background in these two areas, and who do not intend to pursue a science curriculum. This course is designed for education majors with an emphasis in elementary education. Topics to be covered include: the scientific method, basic chemistry of geology and biology, the rock cycle and basic elements of rock types, biochemical cycles, hydrologic cycle, aspects of evolution, aspects of historical geology, and a survey of basic aspects of life. Prerequisites: SCI 111; EDA or EDC majors only.

Surgical Technology

FOR MORE INFORMATION, CONTACT THE SURGICAL TECHNOLOGY DEPARTMENT IN FERRANTE HALL, ROOM F267, (315) 498-2458.

SGT 101 Introduction to Surgical Technology (3) An introduction to the field of surgical technology. Includes the study of medical legal aspects, ethical conduct, hospital policies, and preparations for the care of the surgical patient. Also includes clinical orientation sessions in the operating room setting at various hospitals in the community. Prerequisite: SGT major; co-requisites: SGT 102, 103, and 103L.

SGT 102 Surgical Pharmacology (1) Studies dosage equivalents and terminology, proper procedures for handling intra-operative drugs, principles of drug usage, and the principles and effects of anesthesia administration. Prerequisite: SGT major; co-requisites: SGT 101, 103, and 103L.

SGT 103 Principles of Surgical Technology (3) An introduction to surgical services and aseptic techniques. Topics will include: instrumentation, suture types and technique, scrubbing and preparing the sterile field, types of instruments, and uses of other operating room equipment. Prerequisite: SGT major; co-requisites: SGT 101, 102, and 103L.

SGT 103L Principles of Surgical Technology Lab (2) A lab to complement SGT 103 Principles of Surgical Technology. The student will be introduced to the techniques and equipment that are an integral part of his/her training as a Surgical Technologist. Prerequisite: SGT major; co-requisites: SGT 101, 102, and 103.

SGT 105 Clinical Practice I (5) Clinical application of basic surgical technology procedures. Includes the preparation of equipment and the practice of passing instruments and sutures during actual surgical procedures. Prerequisites: SGT 101, 102, 103, and 103L, and BIO 171.

SGT 111 Surgical Procedures (5) A course detailing surgical procedures and the part the surgical technologist plays. Common surgical procedures are explained for each major body system. The student learns how to assist the physician during each specific procedure. Prerequisites: SGT 101, 102, 103, and 103L, and BIO 171.

SGT 115 Clinical Practice II (6) A continuation of SGT 105. More advanced application of clinical procedures in the operating room. Prerequisites: SGT 105 and 111, and BIO 172.

Sport and Leisure Management

FOR MORE INFORMATION, CONTACT THE HEALTH, PHYSICAL EDUCATION AND RECREATION DEPARTMENT IN THE HEALTH AND PHYSICAL EDUCATION BUILDING, ROOM H202, (315) 498-2282.

SLM 111 Introduction to the Recreation, Sport, And Leisure Industry (3) This course is an in-depth study of the Sport and Leisure Industry as a viable career field. It will consider the scope and development of sport and leisure in relation to people's needs and desires; examine the vast arena of providers that constitute sport and leisure services; inventory current mainstream areas of sport, recreation, and leisure activity; and examine the core principles important to leadership and management within these leisure services.

SLM 114 Leadership in Leisure Services (3) This course is designed to cover the foundational elements of leadership and how they apply to the dynamics of group interaction within a variety of settings in the leisure service industry. Experiential activities will be used to demonstrate group dynamics and assist students in analyzing leisure behaviors and participant motivations. Students will construct a personal mission statement and leadership philosophy. Participation in two off-campus weekend leadership experiences is required. Students will pay an additional fee to cover expenses for these experiences.

SLM 116 Event Programming and Management (3) Participants in this course will gain an understanding of the responsibilities event managers have when planning and executing events. Specific focal topics for discussion and classroom activities include the elements which make events distinctive, such as venue, decoration, food selection, and entertainment; event safety; and event financing. Required competencies will be emphasized through classroom study, event creation and participation, and other practical applications.

SLM 220 Field Experience: Sport and Leisure Management (1) Students will participate in the operations of an organization within the Sport and Leisure Industry. The students are required to work for their chosen agency for 40 hours. During this time, students will be involved in all facets of the agency including, but not limited to, event programming, facility maintenance, security, customer relations, financing, program analysis, and/or assisting the organization in an area of need specified by the agency. Weekly seminars will be held. Prerequisites: SLM-111, 114, 116, and BUS-121, or Permission of Instructor.

Sociology

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM M380, (315) 498-2301.

SOC 103 Introductory Sociology (3) This course is an introduction to the broad range of topics encompassed in the "science of society". Students will be exposed to key sociological theories, as well as major sociological concepts such as culture, social structure, socialization, deviance, social institutions, and social inequalities such as social class, race/ethnicity, and gender. Examples will be drawn from various cultures within the United States and will also be drawn from other contemporary societies. Prerequisite: English and Reading placement at college level, or Permission of Instructor.

SOC 183 Popular Culture (3) This course is an analysis of popular culture. It will examine the role of popular culture in society. It will further examine how the nature of popular culture is shaped by mass media organizations and how popular culture, in turn, shapes the mass media, our perceptions of ourselves, and society. The course will explore various mediums of popular culture: print media, radio, television, films, advertising, and/or popular music. The student will use critical analysis to explore these mediums. No prerequisite.

SOC 203 Sociology of Gender Roles (3) A sociological analysis of male and female sex roles in contemporary American society. The development of sex roles within the individual and within the society will be explored. This course discusses the impact sex roles have on the lives of men and women in the areas of socialization, education, work, marriage, families, and human relationships. Sexual prejudices and sexual discrimination will be explored, including their impact on both the individual and society. The ramifications of changes in sex-role definitions for both the individual and society will also be discussed. Prerequisite: SOC 103 or Permission of Instructor.

SOC 204 Social Problems (3) A study of selected social problems which could include poverty, race relations, violence, drug addiction, delinquency, crime, urbanization, or others. Emphasis is on understanding the basic sociological concepts and theories as applied to modern social problems. Prerequisite: SOC 103 or Permission of Instructor.

SOC 207 Sociology of Deviance (3) Just as "beauty is in the eye of the beholder," so deviance depends on the viewpoint of the observer. This course is designed to give the student a general perspective on the "other side" of human behavior by providing examples of particular theories about deviant behavior and examples of research on deviance. Its emphasis is on certain patterns of deviant behavior such as juvenile delinquency, crime, homosexuality, prostitution, suicide, alcoholism, drug addiction and "mental illness". Prerequisite: SOC 103 or Permission of Instructor.

SOC 209 Death and Dying (3) An interdisciplinary investigation of death and dying, emphasizing the sociological perspective. Dying and death are studied as social processes, focusing on the effect these processes have on the lives of individuals and on society. The course will investigate social roles and occupations related to death and dying, death rituals, how concepts of death affect the lives of individuals and of society, and the problem areas related to death and dying. The particular emphasis will be on death as a social phenomenon, shaping and being shaped by society.

SOC 211 Race and Ethnicity (3) The course provides macro-sociological and micro-sociological theories for understanding the social contexts of racial/ethnic relations in contemporary societies. The course will also examine prejudice, discrimination, ethnocentrism, racism, segregation, ethnoviolence, and the social factors that influence the participation of racial/ethnic minority groups in American institutions. While the course will focus on American society, it will not preclude comparison with other contemporary multi-racial/ethnic societies.

SOC 213 International Development and Change (3) Recent

sociological analysis has examined the world as a global system characterized by its own political and economic structure, and a system of stratification different from the nation-states that divide the globe. This course seeks to introduce students to the nature of this system and discusses several issues that affect it. It also examines the belief systems that have traditionally shaped our ideas about international relationships and foreign peoples, as well as historical events that created global interdependence and inequality. Topics covered include values and ideologies shaping American perceptions of the global system, historical background of the global system, global stratification and inequalities, and value choices for building a new global system.

SOC 214 Contemporary Global Issues (3) An interdisciplinary course which explores contemporary global issues. It surveys themes related to social, political, economic, and cultural processes; global linkages/interdependencies; and power relations that connect individuals, communities, groups, states, and regions across the globe. It examines the values and visions emerging from regional perspectives that lead to conflict and/or cooperation in the international system. It contrasts the increasingly complex problems faced by different regions with the growing integration of the global economy. Open to all interested students. Required course for all students pursuing the International Studies Concentration. Not open to students who have taken POS 214.

SOC 215 Sports in Society (3) The course will explore the structural and cultural relationship of sport to society, paying particular attention to the issues of race, ethnicity, gender, social class, age, economics, and politics as they relate to sport. How sport parallels other social institutions such as the media, family, and schools (particularly college athletics) will be explored. An all-encompassing objective will be to examine how sport is a microcosm of society. By looking at sport we can also look at and learn about society.

SOC 230 Environmental Sociology (3) Environmental sociology examines the interrelationships between society and the natural environment. This course is designed to provide an overview of environmental problems, to examine the underlying social causes and consequences of environmental change, and to critically evaluate these using the dominant theories in the field. Broadly, this course will consider the impacts of population, consumption, production, and development on the environment. In addition, it will consider the cultural understanding of environmental concern, environmental domination and risk. Finally, the course will consider how to apply the ideas of environmental sociology to develop solutions to social and environmental problems.

Spanish

FOR MORE INFORMATION OR ASSISTANCE WITH PLACEMENT INTO APPROPRIATE COURSE-LEVEL, CONTACT THE MODERN LANGUAGES DEPARTMENT IN MAWHINNEY HALL, ROOM M308, (315) 498-2305.

SPA 101 Elementary Spanish I (3) This learner-centered course is designed for students with little or no previous knowledge of Spanish. Students acquire basic grammatical and lexical skills that will enable them to communicate in routine social or professional situations within an authentic cultural context. Upon successful completion of SPA 101, students may enroll in SPA 102. This course also fulfills the Global Awareness requirement at Onondaga.

SPA 102 Elementary Spanish II (3) This course is a sequel to Elementary Spanish I. It builds upon the basic grammatical, linguistic, communicative and cultural concepts learned in SPA 101. Upon successful completion of SPA 102, students may enroll in SPA 201. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: SPA 101, or Permission of Instructor.

SPA 165 Spanish for Advanced Beginners (3) This course is designed for students with some experience in Spanish who feel they need a comprehensive review of the basic grammatical, linguistic and communicative structures covered in elementary-level courses prior to taking an intermediate level course. Upon successful completion of SPA 165, students may enroll in SPA 201. This course also fulfills the Global Awareness requirement at Onondaga. Students may not receive credit for both SPA 102 and SPA 165. Prerequisite: three years of high school Spanish, or equivalent.

SPA 201 Intermediate Spanish I (3) This dynamic course draws upon previously acquired knowledge, while introducing students to more complex grammatical and lexical structures to further develop communicative proficiency and cultural knowledge. The course is conducted mostly in Spanish. Upon successful completion of SPA 201, students may enroll in SPA 202. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: SPA 102, or SPA 165, or three-four years of high school Spanish, or Permission of Instructor.

SPA 202 Intermediate Spanish II (3) This course is a sequel to Intermediate Spanish I. It expands upon complex grammatical and lexical structures. It is conducted entirely in Spanish and provides a solid foundation for advanced study. Upon completion of SPA 202, students may enroll in any intermediate-high level course. Students who successfully complete the SPA 202 level have fulfilled their language requirement for the A.A. in Humanities and Teacher Prep programs. The three additional credits may be taken either as a language course or as a general elective. This course also fulfills the Global Awareness requirement at Onondaga. Prerequisite: SPA 201, or five years of high school Spanish, or Permission of Instructor.

SPA 204 Spanish Literature: An Introduction (3) At an intermediate-high level, this course will introduce students to literary concepts and literature from around the Spanish-speaking world. Intensive work in conversation and composition. Solid preparation in grammar recommended. Class conducted entirely in Spanish. Prerequisite: SPA 202 or equivalent.

SPA 220 Spanish Communication Through Cinema (3) This course will focus on the linguistic and cultural diversity of the Spanish-speaking world as represented in the cinema. It includes intensive work in conversation and composition. Solid preparation in grammar is recommended. This class is conducted entirely in Spanish. Students who successfully complete the SPA 220 level will have fulfilled their language requirement for the A.A. in Liberal Arts and Sciences: Adolescence Education, Childhood Education, or Humanities and Social Sciences. The three additional credits may be taken in a Humanities elective instead of in a language course. This course fulfills the Global Awareness requirement at Onondaga and meets the SUNY General Education requirement for foreign language. Prerequisite: SPA 202 or equivalent, or Permission of Instructor.

Sustainability

FOR MORE INFORMATION, CONTACT THE INTERDISCIPLINARY STUDIES DESPARTMENT IN WHITNEY HALL, ROOM W233, (315) 498-2326.

SUS 101 Introduction to Sustainability (3) This course introduces students to a wide variety of Earth Systems concepts and provides sufficient background knowledge so that students can interpret and intelligently discuss sustainability issues. Students will explore how today's human societies can endure in the face of global change, ecosystem degradation, and resource limitations. Key knowledge areas

of sustainability theory and practice include permaculture, population, ecosystems, global change, energy, agriculture, water, environmental economics and policy, ethics, and cultural history.

Telecommunications

FOR MORE INFORMATION, CONTACT THE ELECTRICAL TECHNOLOGY DEPARTMENT IN THE WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W131, (315) 498-2451.

TEL 241 Telecommunications I (4) This course is designed to train students in the organization, architecture, set-up, maintenance, hardware, and software aspects of local area networks. Topics include: introduction to networks, types and characteristics of different network architectures and network topologies, intra- and inter-network devices, network operating systems, peer-to-peer and client/server environments, LAN set-up and maintenance, network printing, and internal Web servers. A hands-on approach will be taken, with team projects throughout. Prerequisites: ELT 131 and CMT 180; co-requisite: ELT 153.

TEL 242 Telecommunications II (4) This course will cover the basics of Voice over Internet Protocol (VoIP) systems. Topics include: an overview of TCP/IP networks with a focus on VoIP; an introduction to VoIP; Quality of Service (QoS); VoIP system components; VoIP protocols and VoIP protocol analysis, VoIP architecture and VoIP codecs. A hands-on approach will be taken, with team projects throughout.

TEL 243 Telecommunications III (4) This course covers the organization, architecture, set-up, hardware, and software aspects of networked video delivery systems. Topics include: video transport, compression, packet transport, multicasting, content ownership and security, transport security, IPTV-IP video to the home, video file transfer, VPN's and home-office video links. A hands-on approach will be taken, with team projects throughout. Prerequisite: TEL 242.

TEL 244 Telecommunications IV (4) A survey of current and emerging technologies in Telecommunications will be presented. Lectures, interactive learning, demonstrations, and hands-on work will be employed. Prerequisite: TEL 243.

Women's Studies

FOR MORE INFORMATION, CONTACT THE INTERDISCIPLINARY STUDIES DESPARTMENT IN WHITNEY HALL, ROOM W233, (315) 498-2326.

WMS 101 Introduction to Women's Studies (3) Women's Studies employs an interdisciplinary set of tools for analyzing women's experiences. This introductory course focuses on the ways that sex and gender manifest themselves in social, cultural, historical, and political contexts. Readings and discussion are designed to position race, class, sexuality, and other aspects of identity in relation to gender. Typically, this course will concentrate on the experiences of women in the United States; however, at times this scope will be broadened.

Onondaga Community College Administration

Agatha Awuah D, Ph.D.
Vice President - Institutional Planning, Assessment and Research

- Michigan State University - Doctor of Philosophy
- Michigan State University - Master of Science
- Queens University-Canada - Master of Arts
- University of Ghana - Bachelor of Arts

Michael Borsz
Athletic Director

- The Catholic University of America - Master of Arts Education
- Hobart College - Bachelor of Arts Sociology

Elaine M. Buza
Assistant Director - Human Resources

- Empire State College - Bachelor of Science

Kathleen E. Crabill Ed.D
President - President's Office

- University at Albany - Doctor of Education
- University at Albany - Master of Science
- Skidmore College - Bachelor of Arts

Kathleen A. D'Aprix
Assistant Vice President - Learning Center

- SUNY Geneseo - Master of Science / Education
- SUNY Geneseo - Bachelor of Science / Education

James E. DiCosimo
Assistant Vice President - Financial Services

- Syracuse University - Bachelor of Science

Cathleen Dotterer
Director, Residence Life

- University of Montevallo - Master of Education Counseling and Guidance in Higher Education
- University of Montevallo - Bachelor of Science Psychology

John S. Drapikowski
Assistant Director - Campus Safety & Security

- Marcellus Central Schools - High School Diploma - Regents

Jeanine Eckenrode
Director of Academic Advising and Counseling

- Nazareth College - Master of Science Art Therapy
- Pace University - Bachelor of Arts Psychology
- Onondaga Community College - Associate of Arts Liberal Arts

Sarah, J.S. Gaffney
Vice President - Financial Services

- Clarkson University - Master of Business Administration
- SUNY Oneonta - Bachelor of Science in Business
- SUNY Canton - Associate in Applied Science

John J. Geer
Assistant Director - Human Resources

- Columbia College - Bachelor of Science

Tracey Green
Registrar

- Columbia College - Bachelor of Arts Psychology
- Onondaga Community College - Associate in Applied Science Business Administration

Rebecca (Lourdes) R. Hann
Associate Vice President - College Affiliated Enterprises

- Syracuse University - Master of Arts
- Brigham Young University - Bachelor of Arts

Julie A. Hart
Secretary, Board of Trustees - President's Office

- St. John Fisher College - Bachelor of Arts

Rebecca A. Hoda-Kearse
Associate Vice President - Student Engagement & Learning Support

- Hunter College of the City University of New York - Master of Science in Education
- Houghton College - Bachelor of Arts

Linda S. Kelley
Assistant to the Senior Vice President - College Affiliated Enterprises

- SUNY Geneseo - Bachelor of Science

Douglas A. Kinney
Vice President - Campus Safety & Security

- Eastern Kentucky University - Bachelor of Science
- Cayuga Community College - Associate in Applied Science

Amy D. Kremenek
Vice President - Human Resources & External Relations

- Syracuse University - Master of Public Administration
- Syracuse University - Bachelor of Science

Mark R. Manning
Chief Financial Officer - Financial Services

- Bentley University - Master of Business Administration
- Bentley University - Bachelor of Science

Michael, P. McMullen
Assistant Vice President - Management Services

- Le Moyne College - Bachelor of Science
- SUNY Morrisville - Associate of Applied Science

Mike Metzgar
Associate Vice President – Economic and Workforce Development

- Harvard Graduate School of Education - Master of Education
- Lehigh University - Bachelor of Arts Computer Science

Kevin Moore
General Counsel

- Syracuse University College of Law - Juris Doctor
- New York University - Ph.D. Composers and Performers
- Manhattan School of Music - Master of Music Piano
- SUNY Potsdam - Bachelor of Music Music Performance

David, W. Murphy,
Senior Vice President - College Affiliated Enterprises

- Syracuse University - Master of Business Administration
- SUNY Stony Brook - Bachelor of Arts

Dennis J. Nicholson,
Associate Vice President - Enrollment Management

- SUNY College at Buffalo - Master of Science
- Nazareth College - Bachelors of Science

Carol A. Obernesser,
Assistant Vice President - Financial Services

- SUNY IT (now SUNY Polytechnic Institute) - Bachelor of Science

John F. Paddock,
Vice President - Facilities & Support Services

- SUNY Binghamton - Bachelor of Science

Shannon M. Patrie,
Associate Vice President - Enrollment Management

- Keuka College - Master of Science
- SUNY Oswego - Bachelor of Arts

Terry M. Pudney,
Vice President - Enrollment Management

- Elmira College - Master of Science in Education
- Le Moyne College - Bachelor of Arts

Enid G. Reiley,
Assistant Director - Human Resources

- Chapman University - Master of Science
- SUNY Stonybrook – Bachelor of Science / Psychology

Nicole, T. Schlater,
Associate Vice President - Grants

- Syracuse University - Bachelor of Arts

Bridget K. Scholl,
Associate Vice President, Human Resources

- The George Washington University - Master of Business Administration
- University of Michigan - Bachelor of Arts

Theresa M. Scipione,
Coordinator - Human Resources

- Keuka College - Bachelor of Science
- Onondaga Community College - Associate of Applied Science

Kathleen R.Z. Sheridan,
Coordinator - Human Resources

- SUNY Oswego - Bachelor of Science

Wendy E. Tarby,
Associate Vice President - Institutional Planning, Assessment and Research

- Syracuse University - Master of Library Science
- SUNY Oswego - Bachelor of Arts

Susan J. Tormey,
Associate Vice President - Advancement Communications

- SUNY Binghamton - Bachelor of Arts

Seth A. Tucker,
Vice President - College Affiliated Enterprises

- Syracuse University - Master of Arts
- Presbyterian College - Bachelor of Arts

Anastasia L. Urtz, J.D.
Vice President - College Affiliated Enterprises

- The University of Michigan Law School - Juris Doctor
- The American University - Bachelor of Arts

Venturini, Kelly A.
Director - Development

- SUNY Geneseo - Bachelor of Arts

Andrea R. Venuti
Chief Information Officer - Information Technology

- Syracuse University - Master of Public Administration
- The Catholic University of America - Bachelor of Arts

Julie A. White, Ph.D.
Vice President - Student Engagement

- University of Rochester - Doctor of Philosophy
- Xavier University - Master of Education
- Miami University - Bachelor of Science in Education

Steven C. Wiley,
Assistant to the Vice President - Information Technology

- Clarkson University - Bachelor of Science

Eunice D. Williams,
Vice President - Diversity Services

- Syracuse University - Master of Science
- SUNY Buffalo - Bachelor of Arts

Melanie S. Woodward,
Coordinator - Human Resources

- Syracuse University - Bachelor of Science