Academic Departments, Programs of Study and Course Listings G-N
Geography

DEPARTMENT

SCHOOL
Arts and Sciences

FACULTY
David L. Miller (Chair), Scott Anderson, Elizabeth A. Fraser, Ibipo Johnston-Anumonwo, Robert Pierce

PROGRAMS OFFERED
Bachelor of Arts in Geography
Bachelor of Science in Geography
Bachelor of Arts in Adolescence Education: Social Studies and Geography (7-12)
Bachelor of Science in Geographic Information Systems

MAJORS OFFERED
Geography
Adolescence Education: Social Studies and Geography (7-12)

CONCENTRATIONS OFFERED
Geographic Information Systems, Tourism Development

MINORS OFFERED
Geography
Tourism Development

DESCRIPTION
Students who major in geography may choose a program leading to the award of a bachelor of arts or bachelor of science. The bachelor of arts program includes a 13-hour foreign language requirement. The bachelor of science program incorporates a 13-hour sequence in computer techniques, environmental science, or demographics and business geographics in lieu of the foreign language requirement for the bachelor of arts.

SPECIAL FEATURES
• High-tech training in a friendly, supportive environment
• ESRI (Environmental Systems Research Institute) authorized learning center with 25 GIS workstations – learn advanced applications including network and 3D modeling applications
• Global Positioning System (GPS) – master field survey techniques using the lab GPS base station and handheld units.
• Internships – numerous opportunities with local, state and federal agencies and study abroad options at locations such as the Australia Zoo
• Student-faculty research opportunities

Requirements
1. Degree Requirements listed on pages 36-41 of this catalog apply to the following majors.

2. Liberal Arts Requirements:
   B.A. – 90 credit hours
   B.S. – 75 credit hours

Major in Geography [GRY]
The bachelor of arts program prepares students for graduate school, international studies, international commerce and tourism development-related activities.

CAREER POTENTIAL
• Census Bureau data analyst
• Military intelligence officer
• International commerce
• Tourism development planner

A. Required Courses: 19 credit hours
   GRY 110: Physical Geography
   GRY 120: Cultural Geography
   GRY 125: Human Geography and Global Development
   GRY 324: Cartography and Geographic Information
   GRY 400: Geographical Analysis
   GRY 440: Seminar in Geography

B. Elective Courses in Geography: 15 credit hours
C. Other: 43-56 credit hours
   (which may include a minor of 15 to 21 credit hours)
D. Proficiency in a modern foreign language through the intermediate level: 0-13 credit hours

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Geography with a concentration in Tourism Development [GRY/TOUR]
The tourism development concentration and the accompanying minor focus on the planning, development and marketing of tourism at regional and community levels, and the development and preservation of cultural and environmental characteristics as tourism resources.

CAREER POTENTIAL
• Travel industry planner
• Local or state tourism agency staff
• Transportation industry consultant

A. Required Courses: 13 credit hours
   GRY 110: Physical Geography
   GRY 120: Cultural Geography
   GRY 125: Human Geography and Global Development
   GRY 400: Geographical Analysis
   GRY 440: Seminar in Geography

B. Core in Tourism Development: 9 credit hours
   GRY 215: Geography of Travel and Tourism
   GRY/REC 315: Ecotourism
   GRY/REC 415: Tourism Planning and Development

C. Selected from the following courses: 6 credit hours
   GRY 251: Cities of the World
   GRY 480: United States
   GRY 482: Central America and the Caribbean
   GRY 484: Europe
   GRY 485: Africa, South of the Sahara
   GRY 486: Monsoon Asia
   ECO 312: Economic Development in Latin America
   ECO 313: Economic Development in Asia
D. Selected from the following courses: 6 credit hours
   REC 344: Commercial Recreation Management
   REC 402: Management of Recreation Resources
   ANT 315: Development Anthropology
   ECO 311: Economic Development
   GRY 324: Cartography and Geographic Information or
   GRY 327: Computer Mapping or
   GRY 328: Geographic Information Systems
   GRY 499: Internship
E. Other: 43-56 credit hours
   (which may include a minor of 15 to 21 credit hours)
F. Proficiency in a modern foreign language through the
   intermediate level: 0-13 credit hours

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Geographic Information Systems
[GRY/GIS]

The applied geography courses place a strong emphasis upon
computer literacy and spatial analysis skills in preparing students
for careers in site assessment, marketing and demographic analysis.

The department's Geographic Information Systems (GIS)
computer lab features state-of-the-art hardware and software.

CAREER POTENTIAL
• Environmental GIS specialist
• Law enforcement analyst
• Land use planner
• Transportation planner
• Marketing and business
• Emergency response
• Geographic information systems consultant

A. Core in Geography: 19 credit hours
   GRY 110: Physical Geography
   GRY 120: Cultural Geography
   GRY 125: Human Geography and Global Development
   GRY 324: Cartography and Geographic Information
   GRY 400: Geographical Analysis
   GRY 440: Seminar in Geography

B. Core in Geographic Information Technology: 15 credit hours
   GRY 327: Computer Mapping
   GRY 328: Geographic Information Systems
   GRY 330: Advanced GIS Techniques
   Advanced GRY course in consultation with advisor

C. Introductory Computer Applications (CAP) course
   and/or advanced CAP courses in consultation with advisor: 3 credit hours

D. Completion of one of the following concentrations:

   Computer Techniques [GIS_CTEC]
   MCS 186: Introductory Programming
   CAP 200: Fortran Programming or
   MCS 287: Intermediate Programming
   And at least three hours selected from:
   CAP 201: C Programming
   CAP 202: Basic Programming
   CAP 350: Data Base Management Systems
   CAP 250: Computer Practicum
   MCS 388: Advanced Programming and Data Structures

   Demographics and Business Geographics [GIS_DBG]
   Six hours from one of the combinations listed below:
   • ECO 221: Economic Statistics and MGT 253: Principles of
     Marketing or ECO 421: Econometrics
   • MGT 201 (ECO 221): Statistical Methods and three hours of
     MGT courses in consultation with advisor
   • POL 312: Methods of Political Analysis and POL 412:
     Policy Analysis and Evaluation Research
   
   And at least three additional hours selected from the following:
   CAP 230: Introduction to SPSS
   CAP 231: Introduction to Database Management
   CAP 233: Computerized Information Retrieval
   CAP 235: Presentation Graphics
   CAP 350: Database Management and/or other advanced
   CAP courses in consultation with advisor

   Environmental Science [GIS_ENVS]
   EST 100: Introduction to Environmental Studies
   ENS 486: Seminar in Environmental Science
   
   And at least six hours selected from:
   BIO 307: Field Natural History
   BIO 315: Marine Biology
   BIO 405: Conservation of Natural Resources
   BIO 412: General Ecology
   ECO 335: Resource and Environmental Economics
   GLY 261: Physical Geology
   GLY 292: Land Use and Planning
   GLY 310: Wetlands Analysis
   GLY 367: Geomorphology
   GLY 371: Meteorology
   GLY 397: Physical Oceanography
   GLY 510: Hydrogeology
   GLY 430: Field Hydrology
   HLH 390: Environmental Health and Ecology
   HLH 391: Epidemiology and Biostatistics
   POL 242: Environmental Policy
   POL 308: Environmental Law

E. Foreign language: 0-7 credit hours

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 45-54

Dual major in Adolescence Education: Social Studies and Geography (7-12) [SSA and GRY]  

Note: This program is currently undergoing curricular change. Check with the department for updates.

This program allows students who major in geography to qualify for certification to teach adolescence education in social studies (grades 7-12). It combines a major in geography with a professional semester that consists of professional preparation and student teaching.

CAREER POTENTIAL
• Junior high and high school teacher

A. Requirements for the geography major (see above)

B. Professional Preparation: 44-68 credit hours
   (Including additional social science courses)
   HLH 199: Critical School Health Issues
   PSY 101: General Psychology I
   PSY 232: Adolescent Psychology or
   PSY 332: Educational Psychology
   ECO 105: Political Economy and Social Thought
Minor in Geography with an emphasis in Tourism Development [TOUR]

Students who elect the tourism development minor in geography focus on the planning, development, and marketing of tourism at community and regional levels and the development and preservation of cultural and environmental characteristics as tourism resources.

CAREER POTENTIAL
- Tourism planning and marketing
- Transportation coordination

A. Required Courses: 9 credit hours
- GRY/REC 315: Ecotourism
- GRY 215: Geography of Travel and Tourism
- GRY/REC 415: Tourism Planning and Development

B. Electives selected from the following courses: 9-10 credit hours
At least three hours must be from each of the following groups:

1) Regional Courses
   - GRY 251: Cities of the World
   - GRY 482: Central America and the Caribbean
   - GRY 480: United States
   - GRY 484: Geography of Europe
   - GRY 485: Africa, South of the Sahara
   - GRY 486: M onsoon Asia

2) Planning and Development Courses
   - ECO 312: Economic Development of Latin America
   - ECO 313: Economic Development of Asia
   - REC 344: Commercial Recreation Management
   - REC 402: Management of Recreation Resources
   - ECO 311: Economic Development
   - ANT 315: Development Anthropology
   - GRY 327: Computer Mapping or
   - GRY 328: Geographic Information Systems

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18

Example of the bachelor's degree in Geographic Information Systems and a minor in Computer Applications over four years

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<tr>
<th>First Year</th>
<th>Second Year</th>
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<td>CPN 100 or 102</td>
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GEOGRAPHY

COURSE DESCRIPTIONS

Note: GRY 110, 120 or 125 meet the prerequisite of "introductory geography."

GRY 110: Physical Geography
(C) Patterns of physical elements of landscape and atmosphere, their interrelations, how they differ from place to place. (3 cr. hr.)

GRY 120: Cultural Geography
(A) Comparative study of cultures in their geographic setting and their response to modern world interdependence and problems of food, population, development. (3 cr. hr.)

GRY 125: Human Geography and Global Development
(A) A spatial study of race, class and gender relations in the context of contrasting cultures, and the role the relations play in global development — social, political and economic. (3 cr. hr.)

GRY 129, 229, 329, 429, 529: Special Topics in Geography
Selected topics. May be taken more than once as substitute changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

GRY 150: Modules in Geography
(O) Five-week mini-courses focusing on regions, nations or major tourism resources in countries around the world. (3 cr. hr.)

GRY 215: Geography of Travel and Tourism
(C) The spatial analysis of international travel and tourism. The use of such geographical techniques as mapping and quantitative analysis to describe and predict the origins and destinations of the world's tourists. The study of physical and cultural landscapes as major tourism resources in countries around the world. (3 cr. hr.)

GRY 221: Social Geography
(B) Geographical analysis of social groups, institutions in United States. Emphasis upon spatial qualities of cultural and social assimilation process experienced by racial and ethnic minorities. (3 cr. hr.)

GRY 240: Economic Geography
(F) Spatial analysis of production, transportation, market destination of commodities. Introduction to the use of computer-assisted location-analysis techniques. (3 cr. hr.)

GRY 250: Urban Geography
(B) Factors in establishment, growth of urban places; analysis of function, internal patterns, hinterland interrelationships; urban land use, problems of clustered settlements. (3 cr. hr.)

GRY 251: Cities of the World
(C) Geographical analysis of patterns in world urbanization, with an emphasis upon non-U.S. cities. Examination of the internal and external character of the world's major cities with a focus on urban areas as tourism resources and their role in the regional development of tourism. (3 cr. hr.)

GRY 260: Geography and Film
(O) Select problems in cultural geography as exhibited through film. May be repeated with different subtitle: Social Geography of England, Comparative Cultural Geographies — India and Brazil, Race Issues in Southern Africa. Also listed as AAS 260, CIN 260. (3 cr. hr.)

GRY 270: Geopolitics
(C) Geographical foundations of international political phenomena: geographic factors in development and orientation of states and power blocs. (3 cr. hr.)

GRY 301: Science, Human Affairs and the Environment
(S) Examination of origins, evolution and significance of Greenhouse Theory of climate change. Investigation of other theories advanced to account for climate shifts. Evaluation of evidence suggesting a climatic warming of unprecedented magnitude is under way and that anthropogenic increase in greenhouse gases is responsible. (3 cr. hr.)

GRY 315: Ecotourism
(S-C) A global and local analysis of the physical environment as a tourism development resource. An examination of such natural systems as the rain forest, ocean and desert as tourism resources and the environmental impact of tourism on the viability of these niches. Regional and local studies of the environment as a basis for tourism development will be drawn from Amazonia, East Africa, Central America, the Caribbean and North America. Also listed as REC 315. (3 cr. hr.)

GRY 324: Cartography and Geographic Information
(F) Principles and methods of spatial data collection, processing, analysis and display. Introduction to cartography, Geographic Information Systems, and Global Positioning Systems. (3 cr. hr.)

GRY 326: Computer Graphics
(S-C) Introduction to computer graphics. Development, use of original, commercial programming to produce two and three-dimensional images on the department's graphics terminal, plotter and line printer. Emphasis upon skills used in cartography, business and the sciences. Prerequisite: MCS 186 or CAP 200. (3 cr. hr.)

GRY 327: Computer Mapping
(F) Introduction to desktop computer mapping. Practical experience in using computer mapping techniques to create thematic maps that graphically display data. Database organization, manipulation and analysis for efficient production of publication quality maps for communicating spatial information. Three lectures and/or demonstrations, one two-hour laboratory. Prerequisites: CAP 100. Also listed as CAP 327. (4 cr. hr.)

GRY 328: Geographic Information Systems
(S) Desktop computer-based Geographic Information System (GIS) Applications. Practical experience using GIS software to learn geographic data management, thematic mapping, basic map and database querying, as well as map creation and report writing. Three lectures and/or demonstrations, one two-hour lab. Prerequisite: CAP 100. Also listed as CAP 328. (4 cr. hr.)

GRY 330: Advanced GIS Techniques
(S-C) Planning, execution and delivery of a GIS-based project, which demonstrates mastery of tools of GIS in a substantive application tailored to field of interest. Also listed as CAP 330. Prerequisites: GRY/CAP 327 or GRY/CAP 328. (4 cr. hr.)
GRY 370: Will the World Provide? A Research Experience for Students (F-C) This course provides a science, technology, and society (STS) research experience for students. Through class, group, and individual projects, students develop and pursue a research question, investigate resources, and reach a set of comprehensive conclusions on one of the following global resource topics: air, water, minerals, agriculture, energy, forestry, fisheries, and wildlife. (3 cr. hr.)

GRY 400: Geographical Analysis (F) Application of quantitative techniques to solution of geographical problems. Included are the study of point pattern analysis, geographical sampling, areal association and ecological analysis. Three lectures, one two-hour laboratory. (4 cr. hr.) ■

GRY 415: Tourism Planning And Development (F-C) The spatial analysis of tourism as a component of economic development. A regional comparison of the marketing of tourism resources in the developed and less developed countries of the world. Examination of the resources necessary for the development of tourism and an analysis of the economic and environmental impact on a location as a result of marketing those resources. Also listed as REC 415. (3 cr. hr.) ■

GRY 425: Geography in the Classroom (S-C) Application of geography's principles, themes and learning outcomes to the classroom setting. Study and application of national and New York State learning standards in geography to the K-12 classroom. Illustration of successful teaching models and evaluation instruments in geography and global studies. (3 cr. hr.) ■

GRY 440: Seminar in Geography (S) Approaches, techniques of geographic analysis. (3 cr. hr.) ■

GRY 470: Resource Geography (C) Analysis of relationship of resources (human and natural) to man, human evaluations of geographic space and environmental quality, management of environmental quality in context of a contemporary world. (3 cr. hr.) ■

GRY 480: United States (O) Human, natural resources. (3 cr. hr.) ■

GRY 481: Geography of New York State (O) Human, natural resources. (3 cr. hr.) ■

GRY 482: Central America and the Caribbean (O) Regional description and analysis of the human and physical landscape of the countries of Central America and the Caribbean. Geographical analysis of the region's politics, culture and economy with a particular focus on the role of tourism in the development of its economy. (3 cr. hr.) ■

GRY 484: Geography of Europe (C) Regional study: major problems of physical, cultural landscape of Europe. Industry, commerce, agriculture. (3 cr. hr.) ■

GRY 485: Africa, South of the Sahara (C) Cultural, political factors and relationship to past and present population patterns. (3 cr. hr.) ■

GRY 486: Monsoon Asia (S-C) Topical, regional analysis of cultural, physical landscapes of Japan and India. (3 cr. hr.) ■

GRY 495: Independent Study in Geography (O) Independent research in selected geographic problems. Prerequisite: Consent of instructor. (3 or 4 cr. hr.)

GRY 499: Internship in Applied Geography (O) Internship with a local government agency or business. Supervised application of statistical, cartographic and locational skills. Prerequisites: GRY 400, 440; consent of department. S, U grades assigned. (3 cr. hr.)

GRY 500: Geographical Analysis (F) Application of quantitative techniques to solution of geographical problems. Included are the study of point pattern analysis, geographical sampling, areal association and ecological analysis. Three lectures, one two-hour laboratory. (4 cr. hr.) ■

Related Education Courses

AED 400: Student Teaching (F) Full-time supervised social studies teaching in public schools for ten weeks (6 cr. hr.)

SSS 300: Introduction to Secondary Social Studies (A) This course introduces students to unit and lesson planning, focuses on the history of American education as it relates to social studies, familiarizes students with the social studies learning standards, and makes comparisons between middle school and high school teaching. Includes 100-hour field experience. (3 cr. hr.)

SSS 301: Pre-Practice Teaching Seminar (F) Full-time supervised social studies teaching in public schools for ten weeks (6 cr. hr.)

SSS 303: Post-Practice Teaching Seminar (F) Problem approach drawing upon experience of students in practice teaching. Designed to focus on contemporary educational issues, beginning the job search and application process, teaching and learning at the middle school level, and exploring the history and philosophy of teaching. S, U grades assigned. (1 cr. hr.)
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Undergraduate Catalog

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SCHOOL
Arts and Sciences

FACULTY
Christopher Cirmo, (Chair), David Barclay, Robert Darling, Gayle Gleason, Christopher M. Roberts

PROGRAMS OFFERED
Bachelor of Arts in Geology
Bachelor of Science in Geology
Bachelor of Science in Adolescence Education: Earth Science (7-12)

MAJORS OFFERED
Geology
Adolescence Education: Earth Science (7-12)

CONCENTRATIONS OFFERED
Environmental Science
Water Resources

MINORS OFFERED
Geology

DESCRIPTION
Students who major in geology may earn a bachelor of arts or a bachelor of science. They may complete a program of traditional geology courses, choose to concentrate in environmental science, or combine courses in the major leading to qualification for initial certification as secondary school teachers of earth science. Depending on the major or concentration, our geology graduates choose to either begin master's level graduate studies or find employment as geologists, hydrogeologists or earth science teachers in grades 7-12.

SPECIAL FEATURES
• Opportunities for research
• Geology Club
• Internships
• Fossil, mineral, and rock collections
• Field trips
• Brauer Field Station
• Hoxie Gorge Field Station
• Field and analytical instrumentation

Requirements
1. Degree Requirements listed on pages 36-41 of this catalog apply to the following majors.
2. Liberal Arts Requirements: B.A. – 90 credit hours; B.S. – 75 credit hours

Major in Geology [GLY]
Our liberal arts major in geology provides a solid foundation in the geological sciences. The program is designed to meet the current market demands for professional geologists as well as requirements of graduate programs in geology.

CAREER POTENTIAL
• Private consulting
• Research or academic scientist
• Mining and petroleum exploration
• State and federal agencies

A. Required Courses in Geology: 33-36 credit hours
GLY 261: Physical Geology
GLY 262: Historical Geology or
GLY 570: Tectonics and Evolution
GLY 301: Descriptive and Optical Mineralogy
GLY 302: Petrology
GLY 363: Invertebrate Paleontology
GLY 367: Geomorphology
GLY 410: Hydrogeology
GLY 469: Structural Geology
GLY 471: Stratigraphy
GLY 476: Geologic Field Methods or
GLY 481: Field Geology

B. Elective Courses in Geology: 0-3 credit hours from the following:
GLY 281: Data Analysis in Natural Sciences
GLY 292: Land Use and Planning
GLY 310: Wetlands Analysis
GLY 371: Meteorology
GLY 396: Aqueous Geochemistry
GLY 397: Physical Oceanography
GLY 400: Supplemental Field Studies
GLY 576: Glacial Geology

C. Courses in Related Areas: 28-29 credit hours
One year of calculus
CHE 221: General Chemistry I
CHE 222: General Chemistry II
One year sequence in biology or physics
CAP 100: Introduction to Computer Applications
GRY 328: Geographic Information Systems

D. Electives: 19-33 credit hours.
GE-8 requirements are satisfied by courses in the major.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
Major in Geology with a concentration in Environmental Science [GLY/ENVS]
The major in geology with a concentration in environmental science provides a broad-based program of study designed to meet the professional and graduate school demands of environmental geoscientists.

CAREER POTENTIAL
• Environmental geoscientist
• Hydrogeologist
• Consulting geoscientist

A. Required Courses for all environmental science concentrators: 48-50 credit hours.
   BIO 110-111: Principles of Biology I and II * or
   BIO 201-202: Biological Sciences I and II
   BIO 412: General Ecology
   CHE 221-222: General Chemistry I and II
   ENS 486: Seminar in Environmental Science
   ENS 487: Environmental Science Internship
   GLY 261: Physical Geology
   GLY 367: Geomorphology
   GLY 410: Hydrogeology
   MAT 121-122: Calculus A and B **
   PHY 105: Elementary Mechanics and Heat and
   PHY 106: Elementary Electricity, Light and Sound or
   PHY 201-202: Principles of Physics I and II
   * Biology majors take BIO 201-202.
   ** Physics majors take MAT 125-126.

B. Related Areas: Two courses from the following: 6 credit hours
   Two courses from the same department are not permitted.
   May also fulfill General Education requirements.
   ECO 105: Political Economy and Social Thought
   ECO 110: Principles of Macroeconomics
   GRY 120: Cultural Geography
   GRY 221: Social Geography
   POL 100: Introduction to American Government and Politics
   SOC 150: Introduction to Sociology

C. Additional Requirements for Geology Majors: 17 credit hours
   GLY 262: Historical Geology
   or
   GLY 570: Tectonics and Evolution
   GLY 301: Descriptive and Optical Mineralogy
   GLY 302: Petrology
   GLY 371: Meteorology
   GLY 476: Geologic Field Methods

D. Elective Courses in Geology: 7 credit hours from the following:
   GLY 281: Data Analysis in Natural Science
   GLY 292: Land Use and Planning
   GLY 310: Wetlands Analysis
   GLY 363: Invertebrate Paleontology
   GLY 396: Aqueous Geochemistry
   GLY 397: Physical Oceanography*

One from the following:
   GLY 397: Oceanography*
   BIO 512: Oceanography*
   ECO 335: Resource and Environmental Economics
   ECO 110: Principles of Macroeconomics
   POL 242: Environmental Policy
   POL 308: Environmental Law
   EST 100: Introduction to Environmental Studies
   POL 100: Introduction to American Government and Politics
   GRY 125: Human Geography and Global Development

   POL 100 satisfies GE 1; GRY 125 satisfies GE 3; EST 100 or
   POL 242 satisfy GE 7; courses in GLY major satisfy GE 8
   * Cannot be used as elective in GLY major.

Major in Geology with a concentration in Water Resources [GLY/WRES]
Students majoring in geology with a concentration in water resources are well grounded in the basics of geoscience with additional expertise in water-related sciences and policy. The program is designed for students interested in hydrogeology, watershed management and government positions in water quality and quantity.

CAREER POTENTIAL
• Water resource specialist
• Water quality specialist
• Watershed manager
• Hydrogeologist

A. Geology major [GLY] requirements listed on previous page:
   64-65 credit hours.

B. Additional courses for water resources concentrators:
   21-22 credit hours.
   ENS 310: Wetlands Analysis
   GRY 327: Computer Mapping
   GLY 430: Field Hydrology *
   GLY 396: Aqueous Geochemistry *
   One from the following:
   GLY 397: Oceanography *
   BIO 512: Oceanography *
   ECO 335: Resource and Environmental Economics
   One of the following:
   POL 242: Environmental Policy
   POL 308: Environmental Law
   EST 100: Introduction to Environmental Studies
   ECO 110: Principles of Macroeconomics
   POL 242: Environmental Policy
   POL 308: Environmental Law
   GRY 125: Human Geography and Global Development
   POL 100 satisfies GE 1; GRY 125 satisfies GE 3; EST 100 or
   POL 242 satisfy GE 7; courses in GLY major satisfy GE 8
   * Cannot be used as elective in GLY major.

Major in Adolescence Education: Earth Science (7-12) [AES]
This major leads to New York State certification to teach earth science in grades 7-12.

CAREER POTENTIAL
• Earth science teacher (7-12)
• Naturalist/interpreter
• Science curriculum specialist
• Educational administrator

A. Required Courses in Geology: 30 credit hours
   GLY 261: Physical Geology
   GLY 262: Historical Geology
   GLY 570: Tectonics and Evolution
   GLY 301: Descriptive and Optical Mineralogy
   GLY 302: Petrology
   GLY 371: Meteorology
   GLY 400: Supplemental Field Studies
   GLY 469: Structural Geology
   GLY 471: Stratigraphy
   GLY 576: Glacial Geology

E. Additional hours in mathematics or science outside the major: 6 credit hours

F. Electives: 0-13 credit hours.

GE-8 requirements are satisfied by courses in the major.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
B. Courses in Related Science/Math Areas: 29 credit hours
   MAT 121: Calculus A or
   GLY 281: Data Analysis in Natural Science or
   MAT 201: Statistical Methods*
   BIO 110: Principles of Biology I
   BIO 111: Principles of Biology II
   CHE 221: General Chemistry I
   CHE 222: General Chemistry II
   PHY 105: Elementary Mechanics and Heat
   PHY 106: Elementary Electricity, Light and Sound
   PHY 150: Astronomy

*Also listed as COM 230, PSY 201, ECO 221.

C. Professional Preparation: 24 credit hours
   PSY 101: General Psychology I
   PSY 232: Adolescent Psychology
   H LH 199: Critical School Health Issues
   AED 391: Introduction to Adolescence Education
   AED 442: Methods I: Teaching the Sciences in the Middle and Secondary Schools
   AED 443: Methods II: Teaching the Sciences in the Middle and Secondary Schools
   AED 444: Laboratory Practicum
   EDU 449: Literacy in the Middle and Secondary School
   SHH 300: Normal Language Development or
   PSY 350: Psychology of Language

D. Admission to Program
   Completion of 45 credit hours with minimum grade point average of 2.5 overall, and 2.5 in each of the areas A, B and C listed above.

E. Eligibility for Student Teaching:
   To be eligible for AED 445: Student Teaching: Adolescence Education - Science, a minimum overall grade point average of 2.5 is required. Additionally, a 2.5 grade point average is required in each of the areas A, B, and C listed above. A minimum of 24 credit hours in area A and 24 credit hours in area B are required. PSY 101, 232; AED 391, 442, 443, and 445; BIO 110, 111; CHE 221; GLY 261, 262 or 570, 301, 302, 363, 367; PHY 105, 150; and MAT 121 or 201 or GLY 281 must be completed before the student teaching experience. Additionally, each teacher candidate will be required to submit a professional portfolio.

F. Student teaching requirement: 14 credit hours.
   AED 445: Student Teaching: Adolescence Education - Science

G. Additional requirements: 27-34 credit hours
   Composition and General Education Courses: 27 credit hours
   Foreign Language Courses: 0-7 credit hours

H. Other requirements
   Specific information regarding other requirements (state exams, workshops, fingerprinting, foreign language) are listed on pages 42-43 of this catalog.

GE-8 requirements are satisfied by courses in the major.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124 - 131
COURSE DESCRIPTIONS

GLY 118: Laboratory in Earth Science
(A) Identification and classification of common geologic materials, use, compilation, and interpretation of topographic and weather maps, demonstrations, computations, and problem solving. Two-hour session weekly. Fulfills education program laboratory requirement. Prerequisites: Concurrent or following a non-laboratory introductory earth science/geology course. (1 cr. hr.)

GLY 129, 229, 329, 429, 529: Special Topics in Geology
Selected topics. M may be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

GLY 160: Geology and the Human Environment
(A) Integrated study of physical resources, processes of land, ocean, atmosphere, in terms of man-environment relationship. Three one-hour lectures and/or demonstrations. Not open to geography majors or those having GLY 171 or 261. (3 cr. hr.)

GLY 171: Earth Science
(A) Basic concepts and principles of geology, meteorology, and oceanography. Three lectures and one two-hour laboratory per week. Not open to geography, mathematics, or science majors or to students with credit for GLY 160 or 261. (4 cr. hr.)

GLY 172: Earth History
(A) Evolution of the earth based on geologic evidence with special emphasis on the rock record of New York State. Not open to students with credit for GLY 262 or GLY 570, or majors in geography, mathematics or science. Prerequisite: GLY 171. (3 cr. hr.)

GLY 261: Physical Geology
(A) Principles of physical geology. Earth materials, intracrustal forces and products, agents of gradation and their physiographic expression. Laboratory study includes minerals, rocks, topographic and geologic maps, simple geologic structures. Three lectures, one three-hour laboratory, field trips. Primarily for science, math and geography majors. Not open to students with credit for GLY 160 or 171. (4 cr. hr.)

GLY 262: Historical Geology
(S) Historical geology; evolution of North America interpreted from stratigraphic record; evolution of life. Laboratory study of sedimentary facies, invertebrate fossils, evolution of tectonic provinces. Two lectures, one three-hour laboratory, field trips. Prerequisite: GLY 261. (3 cr. hr.)

GLY 281: Data Analysis in Natural Science
(F) Analysis and interpretation of geologic and biologic data using modern quantitative techniques with discipline-specific applications. Basis methodologies and interpretation of descriptive, comparative, and classificatory statistics. Topics include sampling, probability, univariate, and bivariate analysis. Two one-hour lectures, one two-hour laboratory. Not open to students with credit for MAT/PSY 201, ECO 221 or COM 230. (3 cr. hr.)

GLY 292: Land Use and Planning
(F) Land as a natural resource; emphasis on geologic aspects that determine natural potentialities, restrictive conditions of land use. Three lecture hours; field trips. Also listed as ENS 292. (3 cr. hr.)

GLY 301: Descriptive and Optical Mineralogy
(F) Principles of physical and optical crystallography and crystal chemistry; descriptive mineralogy; identification of minerals using physical, chemical, and optical methods. Three lecture hours and a three-hour laboratory; required all-day field trip. Prerequisite: GLY 261, CHE 221. GLY 301 and CHE 221 may be taken concurrently. (4 cr. hr.)

GLY 302: Petrology
(S) Petrogenesis of igneous, metamorphic and sedimentary rocks; description, classification, and interpretation based on hand specimens and thin-sections. Three lecture hours and a three-hour laboratory; required all-day field trip. Prerequisite: GLY 301. (4 cr. hr.)

GLY 310: Wetlands Analysis
(F) Investigation of the hydrology, biogeochemistry, soils, classification, delineation, and functional assessment of freshwater wetlands. Two lecture hours, one three-hour laboratory. Prerequisite: Completion of GE-8 and junior status. Also listed as ENS 310. (3 cr. hr.)

GLY 363: Invertebrate Paleontology
(S) Important invertebrates in fossil record. Laboratory study of morphology, identification and preparation procedures. Two lectures, one three-hour laboratory, required field trip. Prerequisite: GLY 261. (3 cr. hr.)

GLY 367: Geomorphology
(F) Processes of glaciers, rivers, mass wasting, wind and weathering, and their resulting landforms. Methods of geomorphic analysis and the evolution of landscapes. Two lectures, one three-hour laboratory, field trips. Prerequisite: GLY 261. (3 cr. hr.)

GLY 371: Meteorology
(S) Atmosphere, its phenomena; elements of weather; application to weather forecasting. Two lectures, one three-hour laboratory. Prerequisite: Six hours of mathematics or science. (3 cr. hr.)

GLY 396: Aqueous Geochemistry
(S) Detection, analysis, distribution, significance of chemical elements in soils, rocks, water, organic matter. Two one-hour lectures, one three-hour laboratory. Prerequisites: GLY 301 and CHE 221, 222. (3 cr. hr.)

GLY 397: Physical Oceanography
(S) Physical features of the ocean; origin of ocean basins; waves; currents and tides; shoreline processes; ocean sediments; effect on world climates and environmental problems. Three lecture hours per week. Prerequisites: Six hours of math or science. (3 cr. hr.)

GLY 400: Supplemental Field Studies
(A) Extended field study or field trips designed to complement classroom instruction. May be repeated as subtitle changes. Prerequisite: Consent of department. H, S, U grades are assigned. (1-3 cr. hr.)

GLY 410: Hydrogeology
(F) Examination of the source, distribution, movement and disturbance of surface, vadose zone and groundwater in a geologic and environmental context. Includes aquifer testing, watershed hydrology and some advanced groundwater and water quality modeling. Field trips to well fields, treatment facilities, and a local watershed. Two lectures and one laboratory/field trip session. Prerequisite: GLY 261. (3 cr. hr.)
GEOLOGY

Gly 430: Field Hydrology
(M) Methods used in the characterization of the quantity, quality and flow characteristics of surface, vadose zone and groundwater. Field projects with local streams, wetlands and aquifers, and field trips to active research sites in the Catskill and Adirondack region. Prerequisite: GLY 261 and junior status, or permission of instructor. (2-3 cr. hr.)

Gly 469: Structural Geology
(S) Deformation of rocks and the resulting structures, including stress and strain, faults, folds, and rock fabrics. Two lectures, one three-hour laboratory. One required field trip. Prerequisite: GLY 301. (3 cr. hr.)

Gly 471: Stratigraphy
(F) Principles of correlation, nomenclature, facies interpretation, classification of sedimentary rock units. Laboratory methods of facies and correlation analysis. Two lectures, one three-hour laboratory, required weekend field trip. Prerequisites: GLY 262 and GLY 302. (3 cr. hr.)

Gly 476: Geologic Field Methods
(M) Instruments and methods of basic geologic fieldwork: measurement and description of stratigraphic sections; use of survey instrumentation and GPS; elementary bedrock mapping. Compilation of stratigraphic sections, geologic maps and structure sections. Taught at Brauer Field Station beginning late May. Can be taken as a three-week course for three credit hours or as a four-week course for four credit hours. Prerequisite: GLY 302. (3-4 cr. hr.)

Gly 481: Field Geology
(M) Intensive study of field methods and techniques; reconnaissance and detailed areal geology mapping; preparation of geologic maps and sections. Offered summers at the Brauer Field Station. Prerequisites: GLY 302; GLY 469; junior standing. (5-6 cr. hr.)

Gly 487: Internship in Applied Geology
(A) A project-oriented internship with a government agency, industry, or other private or public enterprise, supervised application of geologic skills and knowledge. Prerequisites: Senior-year status; consent of department. (3-12 cr. hr.)

Gly 494: Geology Laboratory Experience
(A) Service as assistant in laboratory sections of a geology course. Includes meetings with course instructor, advanced preparation for lab meetings, weekly attendance in the laboratory section while serving as instructional assistant in laboratory activities. May be taken twice for credit. Can not be applied to any state industry, or other private or public enterprise, supervised application of geologic skills and knowledge. Prerequisites: Senior-year status; consent of department. (3-12 cr. hr.)

Gly 499: Independent Investigations
(A) Limited to qualified seniors. Prerequisite: Consent of chair. May be taken twice for credit. H, S, U grades are assigned. (1-3 cr. hr.)

Gly 550: Geology of New York State
(M) Geologic history of New York State as interpreted from the rock record. Special emphasis on: Paleozoic stratigraphy and depositional environments; metamorphism, magmatism and deformation of the Adirondack and Hudson Highlands; Grenville, Taconic, Acadian, and Alleghanian orogenic events; Pleistocene continental glaciation. Seven and a half lecture hours per week; four weeks. One all-day Saturday field trip required. Prerequisite: GLY 261 or equivalent. (3 cr. hr.)

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS

Gly 563: Advanced Studies in Paleontology
(O) Examination of paleontological theory through reading scientific papers and study of fossil specimens. Subtitles may include: Mass extinctions, paleoecology, biostratigraphy. One three-hour lecture and/or discussion, M ay be repeated as subtitle changes. Prerequisite: GLY 363. (3 cr. hr.)

Gly 567: Advanced Geomorphology
(O) Current, classical problems in geomorphology using qualitative, quantitative approaches. Two lectures, one three-hour laboratory, field trips. Prerequisite: GLY 367. (3 cr. hr.)

Gly 570: Tectonics and Evolution
(F) Examination of the theory of plate tectonics, including critique of refereed scientific papers. An integration of various subjects within the discipline of geology to understand the physical evolution of the earth's surface and its biologic implications. One three-hour lecture and/or discussion. Prerequisite: Twelve hours of geology. (3 cr. hr.)

Gly 573: History of Geology
(O) Development, evolution of major concepts in geological sciences. Read peer-reviewed scientific articles; class presentation, research paper. Three lectures per week. Prerequisite: GLY 261. (3 cr. hr.)

Gly 576: Glacial Geology
(C) Glacial processes, landforms and deposits; Quaternary chronologies and dating methods; analysis and interpretation of glacial sediments and sequences. Emphasis on glaciation of New York State. One two-hour lecture, one two-hour laboratory, field trips. Prerequisite: GLY 261. (3 cr. hr.)

Gly 579: Paleoclimate
(C) History and causes of natural climate change. Emphasis on events and environments of the last two million years. Includes analytical methods used to reconstruct paleoclimate. One three-hour lecture. Prerequisites: GLY 261 and 12 hours of geology, biology, chemistry and/or physics at 300 level or above. (3 cr. hr.)

Gly 581: Advanced Field Geology
(M) Field investigations involving detailed geologic mapping and analysis of specific area(s) by an individual or small group; written report. Offered summers at the Brauer Field Station. Prerequisite: GLY 469. (3-8 cr. hr.)

Gly 595: Geophysical Methods
(0) Principles and instrumentation of geophysical methods used to collect and interpret data from the Earth's interior. Two lectures, one three-hour laboratory. Prerequisites: GLY 261 and either PH Y 105 and PH Y 106, or PH Y 201 and PH Y 202. Also listed as PH Y 595. (3 cr. hr.)

Related Education Courses

Aed 391: Introduction to Adolescence Education
(A) Students will develop a coherent and comprehensive personal educational philosophy; analyze the role of education and teachers in society; demonstrate an understanding of teacher certification standards and requirements; evaluate teaching, lesson planning and implementation and cooperative skills; and develop a portfolio. The course includes 25 hours of field observation/teaching experience. (3 cr. hr.)
AED 442: Methods I: Teaching the Sciences in the Middle and Secondary Schools
(F) This course begins with an examination of the history and foundations of education, with an emphasis on the history of science education. It then examines disciplinary models and strategies for classroom management. Students will develop tools for measurement and evaluation of performance and achievement for students with diverse abilities and interests. Students will participate in short and long-range lesson planning and curriculum development. Federal and state laws, policies and procedures for dealing with students with disabilities will be examined. Strategies for collaborating with administrators, faculty/staff, parents/guardians, and community members will be discussed. Includes 25 hours of field experience in middle and secondary schools. Prerequisites: PSY 232 and AED 391. (3 cr. hr.)

AED 443: Methods II: Teaching the Sciences in the Middle and Secondary Schools
(F) Introduction to aspects of teaching laboratory-based science to a diverse population of students through the development of a course syllabus, a comprehensive plan for laboratory safety, and lesson plans aligned with state and national learning standards and state science core curriculum guides. Twenty-five hours of field experience in middle and secondary schools. Prerequisite: AED 442. Corequisite: AED 444. (3 cr. hr.)

AED 444: Laboratory Practicum
(F) Opportunity to work with an experienced teacher in the planning, preparation, and implementation of laboratory exercises in an introductory, college-level lab course through one-on-one and small group activities. Fulfills 25 hours of field experience requirement. Corequisite: AED 443. (1 cr. hr.)

AED 445: Student Teaching: Adolescence Education — Science
(A) Full-time supervised student teaching in two public school placements: one, eight-week placement at the seventh or eighth grade level and one, eight-week placement at the ninth, tenth, eleventh, or twelfth grade level. A discipline-specific student teaching seminar is held on campus once during the semester. Prerequisites: PSY 232; AED 443; and AED 444. See major department for eligibility criteria. S, U grades are assigned. (14 cr. hr.)

EDU 449: Literacy in the Middle and Secondary School
(F) Methods, materials and assessment for fostering literacy at the middle and secondary levels. (3 cr. hr.)
Requirements
1. Degree Requirements listed on pages 36-41 of this catalog apply to the following majors.

2. Liberal Arts Requirements: 60 credit hours

Health Science Program
Health Department Requirements: 13 credit hours
- BIO 301: Human Anatomy and Physiology I
- BIO 302: Human Anatomy and Physiology II
- BIO 303: Microbiology and Human Disease
- COM 210: Fundamentals of Public Speaking

Health Education Program
Health Department Requirements: 13 credit hours
- BIO 301: Human Anatomy and Physiology I
- BIO 302: Human Anatomy and Physiology II
- BIO 303: Microbiology and Human Disease
- COM 210: Fundamentals of Public Speaking
- CAP 100: Introduction to Computer Applications

Major in Health Science [HSC]
The degree program has been designed for students interested in preparing for health careers in community/public health settings. Students participate in a full semester internship experience. A number of concentrations are available to help meet specific career interests of students.

Career Potential
- Environmental health specialist
- Health administrator
- Community health educator
- Health Communication
- College health promotion specialist
- Wellness health promotion specialist

A. Required Courses: 18 credit hours
- HLH 203: Community Health
- HLH 360: Health Care Administration and Planning
- HLH 390: Environmental Health and Ecology
- HLH 391: Epidemiology and Biostatistics
- HLH 492: Chronic and Communicable Diseases
- HLH 494: Needs Assessment, Program Planning and Evaluation in Health Education

B. Fieldwork: 16 credit hours
(overall 2.5 grade point average required)
- HLH 499: Fieldwork in Health

C. Health Electives: 15 credit hours
Students select courses based on professional interests and the following are typical electives in this program:
- HLH 111: International Health and Culture
- HLH 163: The HIV Epidemic
- HLH 201: Health Problems of the Underserved
- HLH 210: Wellness and Health Promotion
- HLH 232: Nutrition
- HLH 301: Stress Management
- HLH 302: Human Sexuality Education
- HLH 314: Mental and Emotional Health
- HLH 367: Drug Problems: Intervention and Prevention
- HLH 393: Introduction to Occupational Safety and Health
- HLH 493: Community Health Education

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Health Science with a concentration in Allied Health [HSC/ALLH]
The concentration is designed to provide background needed to pursue post-baccalaureate study in various allied health fields. In conjunction with the health science major, it provides students with the prerequisite course work needed for programs in such areas as nursing, physical therapy and occupational therapy. The combination of the concentration and the major gives students course work needed for advanced study and the preparation required for a wide variety of community/public health positions.

Career Potential
- Community health practitioner
- Nursing (provides prerequisites for advanced programs)
- Physical therapy (provides prerequisites for advanced programs)
- Occupational therapy (provides prerequisites for advanced programs)
- Other clinical careers

Required Courses
Select All: 8 credit hours
- BIO 201: Biological Sciences I
- BIO 202: Biological Sciences II

Select Two: 6 or 8 credit hours
- CHE 121: Elementary Chemistry I
- CHE 122: Elementary Chemistry II or
- CHE 221: General Chemistry I
- CHE 222: General Chemistry II

Select Two: 8 credit hours
- PHY 105: Elementary Mechanics and Heat
- PHY 106: Elementary Electricity, Light, and Sound or
- PHY 201: Principles of Physics I
- PHY 202: Principles of Physics II

Select One or Two: 3 or 6 credit hours
- MAT 201: Statistics or
- MAT 125: Calculus I or
- MAT 125: Calculus I and MAT 126: Calculus II

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Health Science with a concentration in College Health Promotion and Prevention Services [HSC/CHPP]
The concentration is intended to provide health students with the background and skills needed to function on college campuses as health promotion and prevention specialists. These individuals typically work in a variety of health education areas including sexuality, alcohol, tobacco and other drugs, nutrition, HIV/AIDS, stress management, and health promotion. Responsibilities often involve conducting campus-wide activities, developing peer education programs, and working with college offices in promoting the health of students.

Colleges across the country have been establishing campus programs and services which have as their central focus the reduction of health threatening behaviors and the promotion of student health. The focus of this concentration is to prepare individuals with the background and skills needed to work in this rapidly growing field.
Major in Health Science with a concentration in Environmental Health [HSC/ENVH]

The concentration is designed for students interested in seeking careers as environmental health specialists or public health sanitarians. Such professionals apply the principles of the natural and social sciences to the detection, evaluation, control and management of those factors in the environment which influence health. These professionals typically work in governmental agencies or industry.

**CAREER POTENTIAL**
- Public health sanitarian with a county health department
- Specialist with governmental agencies such as Occupational Safety and Health Administration and Environmental Protection Agency
- Environmental specialist with businesses and corporations
- Emergency management and response specialist

**A. Required Courses:** 28 credit hours

Select All: 14 credit hours
- HLH 113: Sex, Drugs and the College Student
- HLH 210: Wellness and Health Promotion
- HLH 302: Human Sexuality Education
- HLH 314: Mental Health and Counseling
- HLH 367: Drug Problems: Intervention and Prevention
- HLH 394: Health Related Behavior: Formation and Change
- HLH 493: Community Health Education
- EDU 426: Methods and Materials of Health Education: Level II

Select Two: 6 credit hours
- HLH 392: Environmental Pollutants and Toxicology
- HLH 393: Introduction to Occupational Safety and Health
- POL 242: Environmental Policy

Select Two: 8 credit hours
- PHY 201: Principles of Physics I
- PHY 202: Principles of Physics II
- PHY 105: Elementary Mechanics, Heat, and Matter
- PHY 106: Elementary Electricity, Light, and Sound

**B. Internship:** 6 credit hour minimum

Students must fulfill an internship requirement through one of the following alternatives:
1. Complete a two-semester internship experience with six credits in the Student Development Center's health education program. Preferably this would result in a fall and spring experience of three credits each semester (typically health education majors).
2. Complete at least a quarter of field experience of eight credits in a college health promotion/prevention program (typically health science majors).

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION:** 124
Major in Health Science with a concentration in Health Care Administration and Planning [HSC/ADMN]

The concentration introduces students to some of the fundamental concepts essential to careers involving health program planning and health services administration. The courses are designed to provide students with entry level skills and prerequisite background to graduate studies in health services and management, planning and research.

CAREER POTENTIAL

• Administrator in a private community health agency
• Administrator in a voluntary health agency
• Department administrator in a health facility
• Program manager in a community health agency

A. Required Courses: 30-31 credit hours
   Select All: 18 credit hours
   MGT 254: Principles of Accounting I
   MGT 255: Principles of Accounting II
   ECO 111: Principles of Microeconomics
   MGT 250: Principles of Management
   HLH 201: Health Problems of the Underserved
   SOC 371: Sociology of Medicine
   Select One: 3 credit hours
   MCS 186: Introductory Programming
   or
   CAP 100: Introduction to Computer Applications
   Select One: 3 credit hours
   MGT 253: Principles of Marketing
   or
   ECO 352: Finance
   Select Both: 6 credit hours
   POL 240: Introduction to Public Administration and Public Policy
   POL 326: State and Local Government

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Health Science with a concentration in Wellness Health Promotion [HSC/WELL]

This concentration is intended to prepare health education specialists to work in a variety of private, public and worksite settings related to health promotion. Responsibilities include assessing client needs, designing health promotion programs, implementing/coordinating programs and evaluation of outcomes.

CAREER POTENTIAL

• Wellness specialist in a business or corporation
• Wellness manager in a private health promotion center
• College or school-site wellness coordinator
• Wellness coordinator in a community agency

A. Required courses: 27 credit hours
   Select All: 21 credit hours
   HLH 120: Responding to Emergencies
   HLH 210: Wellness and Health Promotion
   HLH 232: Nutrition
   HLH 301: Stress Management
   HLH 394: Health Related Behavior: Formation and Change
   HLH 406: Wellness/Fitness Practicum
   HLH 493: Community Health Education
   HLH 314: Mental Health and Counseling
   HLH 490: Wellness/Health Practicum
   Select: 3 credit hours
   EXS 397: Exercise Physiology I
   Select: 3 credit hours
   MGT 250: Principles of Management

B. Fieldwork (HLH 499) — Must be in an approved wellness facility

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
Major in Health Education [HEC]

The degree program focuses on school health education and the preparation of health education specialists to work within school settings. Students complete a full semester of student teaching. Students can also elect a concentration in wellness health promotion, college health promotion and prevention services, or health communication.

**Career Potential**

- High school health educator
- Junior high school health educator
- Prevention specialist in school district or community
- District health education coordinator

**A. Required Courses: 64 credit hours**

**Professional Education:** 12 credit hours

- EDU 326: Methods and Materials of Health Education: Level I
- EDU 426: Methods and Materials of Health Education: Level II
- PSY 331: Psychology of Exceptional Children

**Health:** 30 credit hours

- HLH 203: Community Health
- HLH 210: Wellness and Health Promotion
- HLH 220: Safety Education and Emergency Response
- HLH 232: Nutrition
- HLH 302: Human Sexuality Education
- HLH 314: Mental Health and Counseling
- HLH 345: Parenting Education
- HLH 367: Drug Problems: Intervention and Prevention
- HLH 492: Chronic and Communicable Diseases
- HLH 494: Needs Assessment, Program Planning and Evaluation in Health Education

**Student Teaching and Field Experiences:** 16 credit hours

- EDU 497: Field Experience in Health Education
- EDU 498: Health Education Seminar
- EDU 499: Student Teaching in Health Education

**B. Health electives: 6 credit hours**

The following are typical health electives selected by health education majors:

- HLH 111: International Health and Culture
- HLH 137: Child and Adolescent Sexual Abuse
- HLH 163: The HIV Epidemic
- HLH 201: Health Problems of the Underserved
- HLH 265: Health and the Child
- HLH 301: Stress Management
- HLH 309: Child Abuse
- HLH 394: Health Related Behavior: Formation and Change
- HLH 493: Community Health Education
- HLH 513: Death, Bereavement and Suicide
- HLH 530: Family Life Education and the Classroom Teacher

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 128**

Major in Health Education with a concentration in Health Communication [HEC/HCOM]

This concentration links the areas of communication and health. It is designed to prepare students to work in careers that use communication approaches to inform and influence personal and community actions that enhance health and promote the quality of life.

**Career Potential**

- Health communication specialist with government agencies, health organizations, businesses
- Health reporter
- Consultant to public, private organizations

**Required courses: 23 credit hours**

- Select All: 13 credit hours
  - HLH 394: Health Related Behavior: Formation and Change
  - COM 100: Human Communication
  - COM 450: Health Communication
  - ENG 303: Technical Writing
  - CAP 236: Desktop Publishing

- Select One: 3 credit hours
  - COM 451: Environmental Communication or
  - COM 452: Risk Communication

- Select One: 1 credit hour
  - COM 390: Participation in Student Newspaper
  - COM 393: Participation in Television
  - COM 394: Participation in Radio

- Select Two: 6 credit hours
  - COM 201: Writing for Radio and Television
  - COM 202: News Writing and Reporting
  - COM 301: Mass Media and Society
  - COM 302: Intercultural Communication
  - COM 303: International Communication
  - COM 320: Organizational Communication
  - COM 410: Communication in Social Change
  - COM 441: Persuasion

One eight-week internship must be completed in an approved agency or program with a health communication focus. Health education majors will need to register for an eight-week internship (HLH 499) in addition to their student teaching requirement.

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 128**
Major in Health Education with a concentration in Wellness Health Promotion [HEC/WELL]

The concentration is intended to prepare health education specialists to work in a variety of private, public and worksite settings related to health promotion. Responsibilities include assessing client needs, designing health promotion programs, implementing/coordinate programs and evaluation of outcomes.

CAREER POTENTIAL

• Wellness specialist in a business or corporation
• Wellness manager in a private health promotion center
• School-site or college wellness coordinator
• Wellness coordinator in a community agency

A. Required courses: 27 credit hours
   HLH 120: Responding to Emergencies
   HLH 210: Wellness and Health Promotion
   HLH 232: Nutrition
   HLH 301: Stress Management
   HLH 314: Mental Health and Counseling
   HLH 394: Health Related Behavior: Formation and Change
   HLH 405: Wellness/Fitness Practicum
   HLH 493: Community Health Education
   PED 397: Exercise Physiology I
   MGT 250: Principles of Management

B. Fieldwork (HLH 499) — Must be in an approved wellness facility

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 128

Major in Health Education with a concentration in College Health Promotion and Prevention Services [HEC/CHPP]

The concentration is intended to provide health students with the background and skills needed to function on college campuses as health promotion and prevention specialists.

These individuals typically work in a variety of health education areas including sexuality, alcohol, tobacco and other drugs, nutrition, HIV/AIDS, stress management, and health promotion. Responsibilities often involve conducting campus-wide activities, developing peer education programs, and working with college offices in promoting the health of students.

Colleges across the county have been establishing campus programs and services which have as their central focus the reduction of health threatening behaviors and the promotion of student health. The focus of this concentration is to prepare individuals with the background and skills needed to work in this rapidly growing field.

CAREER POTENTIAL

• College health promotion specialist
• College prevention specialist
• College health educator

A. Required Courses: 21 credit hours
   HLH 113: Sex, Drugs and the College Student
   HLH 210: Wellness and Health Promotion
   HLH 302: Human Sexuality Education
   HLH 314: Mental Health and Counseling
   HLH 367: Drug Problems: Intervention and Prevention
   HLH 394: Health Related Behavior: Formation and Change
   HLH 493: Community Health Education or EDU 426: Methods and Materials of Health Education: Level II
   EDU 426: Methods and Materials of Health Education: Level II

B. Internship: 6 credit hour minimum

Students must fulfill an internship requirement through one of the following alternatives:

1. Complete a two-semester internship experience with six credits in the Student Development Center's health education program. Preferably this would result in a fall and spring experience of three credits each semester (typically health education majors).

2. Complete at least a quarter of field experience of eight credits in a college health promotion/prevention program (typically health science majors).

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 128

Example of the B.S. in Health Education over four years

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<tr>
<th>First Year</th>
<th>Second Year</th>
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<tbody>
<tr>
<td>Fall</td>
<td>Fall</td>
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<tr>
<td>CPN 100 or 102</td>
<td>BIO 301</td>
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<td>BIO 110 (GE 8)</td>
<td>COM 210</td>
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<td>GE course</td>
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<td>GE course</td>
<td>HLH 203</td>
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<th>Spring</th>
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<tr>
<td>CPN 101 or 103</td>
<td>BIO 302</td>
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<td>BIO 111 (GE 8)</td>
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Note: All-college requirements (such as liberal arts requirements) and total hours toward graduation have to be carefully monitored as part of the free elective and department elective selection process. Because the credit hours for individual courses vary from .5 credits to four credits, completing each elective course noted above will not guarantee that the student will also meet all of the degree requirements.
COURSE DESCRIPTIONS

HLH 110: Personal and Community Health
(A) An examination of health issues and problems related to individuals and communities. Included is an exploration of wellness/health promotion; factors which impact health such as culture, heritage and socioeconomic level; chronic and communicable disease, including HIV/AIDS; nutrition, weight management and fitness; safety education, including such areas as fire and arson prevention, child abduction, abusive or dangerous environments and violence prevention/intervention; aging and death; relationships, sexuality, reproduction and birth control; stress management; health care delivery; and alcohol, tobacco and other drugs prevention/intervention. Course meets all health-related SED teacher certification requirements for non-elementary education majors other than the child abuse identification and reporting requirements. Not open to students with credit for HLH 199. (3 cr. hr.)

HLH 111: International Health and Culture
(B) The course provides a cross-cultural analysis of the current global health situation through comparison of factors which affect the well-being of peoples of the world, as well as actions which are being taken and can be taken to improve world health. A major focus of the course involves comparing and contrasting health problems and approaches to health improvement in various cultures and countries. Accepted as course for Contrasting Cultures Category GE 3. (3 cr. hr.)

HLH 113: Peer Health Advocacy: Sex, Drugs and the College Student
(B) Designed to increase students’ knowledge and positive leadership skills with regard to the topic areas of alcohol and other drugs, sexuality and decision-making as applied to the college population. The major focus of the course is on peer health advocacy and the development of leadership skills. Open to all majors, freshman and sophomores only. (3 cr. hr.)

HLH 116: Workshops in Drug Studies
(A) Special course in alcohol, drug education, and methods of teaching. Not open to students with credit for HLH 199. (1-2 cr. hr.)

HLH 120: Responding to Emergencies
(A) American Red Cross certification course which fulfills New York State Education Department coaching requirements for first aid, adult CPR and sports injury. (2 cr. hr.)

HLH 121: Introduction to Safety
(O) Modern methods of safety: traffic, home, community. (1 cr. hr.)

HLH 129, 229, 329, 429, 529: Special Topics in Health
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

HLH 137: Child and Adolescent Sexual Abuse
(O) Course will examine topic of sexual abuse in childhood and adolescence to acquaint students with etiology, prevalence, identification, referral, treatment and prevention strategies. Special emphasis will be given to roles of school administrators, counselors, and educators in confronting issue. (1 cr. hr.)

HLH 150: Rational-Emotive Education
(O) Introduction to principles, practice of an intrapersonal conflict resolution method. Class activities demonstrate applicability of method to a wide range of situations (academic, social, etc.). H, S, U grades assigned (1 cr. hr.)

HLH 163: The HIV Epidemic
(A) Overview of the HIV epidemic and examination of factors which perpetuate it. Strategies for intervention and prevention included. Accepted as a course for General Education Category 2: Prejudice and Discrimination. (3 cr. hr.)

HLH 199: Critical School Health Issues
(A) This course examines selected critical health issues of students and the role of schools and teachers in addressing such issues and promoting student health. Included in the course is an examination of student health status; impact of such factors as culture, heritage and socioeconomic level on health and learning; youth risk behaviors; personal health issues related to such areas as nutrition, fitness, and emotional health; safety education, including such areas as fire and arson prevention, child abduction, abusive or dangerous environments and violence prevention/intervention; alcohol, tobacco and other drugs prevention/intervention; and skills needed to protect and promote health as related to each of the course content areas. Course meets all health-related SED teacher certification requirements for non-elementary education majors other than the child abuse identification and reporting requirements. Not open to students with credit for HLH 110 or HLH 116. (2 cr. hr.)

HLH 200: Health Issues
(O) Current controversial health issues. Not open to health majors. H, S, U grades assigned. (3 cr. hr.)

HLH 201: Health Problems of the Underserved
(A) Examination of health problems experienced disproportionately by people lacking access to economic, political and other resources. Accepted as a course for General Education Category 2: Prejudice and Discrimination. (3 cr. hr.)

HLH 203: Community Health
(A) Health problems facing people collectively in contemporary society. Health majors only. (3 cr. hr.)

HLH 210: Wellness and Health Promotion
(A, M) Overview of concept of wellness. Emphasis is on development of a wellness lifestyle with focus on self-responsibility, environmental sensitivity, nutrition, physical fitness and stress management. (3 cr. hr.)

HLH 220: Safety Education and Emergency Response
(A) Course combines safety education with background and skills required for American Red Cross “Responding to Emergencies” certification. The safety content relates to safety issues in schools and communities as well as specific concerns related to children and adolescents. Included is material on fire and arson prevention, child abduction, abusive or dangerous environments and violence prevention/intervention. Course also fulfills State Education Department coaching requirements (sports injury module) for first aid, adult CPR and sports injury. Not open to students with credit for HLH 120 or HLH 327. (3 cr. hr.)

HLH 232: Nutrition
(A) Selection of foods, health products, services as basis for healthful living; health, nutritional needs at various ages; research findings, their application. Health majors only. (3 cr. hr.)
HLH 255: Consumer Health
(B) Analysis of consumer health issues and practices, health products and services, quackery and consumer protection. (Health majors only.) (2 cr. hr.) ■

HLH 265: Health and the Child
(A) This course will provide the non-health major (and specifically early childhood, childhood education and special education majors) with the basic skills and knowledge necessary to work in the area of health education at the preschool and elementary school level. Included in the course is an exploration of student health status; theories, models and approaches relevant to health education; state and national health education standards; effective health education practice; an examination of health content areas and particularly nutrition, fitness, emotional health, safety education (including fire and arson prevention, child abduction, abusive and dangerous environments and violence prevention/intervention), and alcohol, tobacco and other drugs prevention/intervention; and skills needed to protect and promote health as related to each of the course content areas. Course meets all health-related SED teacher certification requirements other than the child abuse identification and reporting requirements. (3 cr. hr.) ■

HLH 299: Statistical Concepts and Applications for Health Sciences
(O) This course is designed to introduce undergraduate health education/science majors to basic descriptive and inferential statistics that are used in health-related research. Principles of quantitative research will be presented and data management and analysis skills will be taught using the Statistical Package for the Social Sciences (SPSS). Not open to students with credit for MAT/PSY 201, ECO 221, COM 230 or GLY 281. Meets SUNY Cortland GE requirements. Prerequisite: HLH 203. (3 cr. hr.)

HLH 301: Stress Management
(A, M) Concept of stress with emphasis on techniques for managing stress effectively. Nature of stress, its impact on health and well-being. Methods of relaxation, stress reduction explored from personal and programmatic perspective. Experiences in self-assessment of stress areas provided. (3 cr. hr.)

HLH 302: Human Sexuality Education
(A) Human sexuality examined from perspective of personal development, human behavior, social issues, health implications. Role of education as related to development of healthy sexuality and specific sexuality issues explored. (3 cr. hr.) ■

HLH 309: Child Abuse
(B) Study of child maltreatment (neglect, physical, sexual and emotional abuse). Identification and reporting of abuse and neglect. Fulfills New York State Education Department child abuse recognition and reporting requirement for persons in teacher certification programs. (3 cr. hr.) ■

HLH 313: Mental and Emotional Health
(A) Mental health of individuals. Factors underlying maximum effective personality development, adjustment. (3 cr. hr.) ■

HLH 314: Mental Health and Counseling
(A) Mental health of individuals; counseling techniques used to help individuals understand and face health concerns of a physical, emotional, social nature. Health majors only. (3 cr. hr.)

HLH 323: Foods and Nutrition
(A) Basic course: food selection as nutritional basis for healthful living. Nutritional needs at various age levels; recent research findings; application. Not open to students with credit for HLH 232. (3 cr. hr.)

HLH 325: Instructor's First Aid
(O) American Red Cross instructor's first aid; methods, materials in teaching of standard and advanced first aid courses. Prerequisite: American National Red Cross Responding to Emergencies or Advanced Certification. (1 cr. hr.)

HLH 327: Advanced First Aid and Safety
(O) Methods of accident prevention and safety education with American Red Cross certification in Emergency Response and CPR for the Professional Rescuer. (Health majors only) (4 cr. hr.)

HLH 345: Parenting Education
(B) Study of parenting from the perspective of its recent history, current status, the movement toward educating for parenthood and the development of healthy children. The content includes responsible parenthood, maternal and child health, growth and development of children, raising healthy children, parenting skills and education for parenting. (3 cr. hr.) ■

HLH 357: Nutrition and Sport Performance
(S) Examination of how nutrition impacts exercise and athletic performance through relationship among nutrition, physical activity and health promotion. Analysis of current diet trends and the influence of ergogenic aids. Prerequisites: BIO 301, 302. Also listed as EXS 357. (3 cr. hr.)

HLH 360: Health Care Administration and Planning
(A) Analysis of factors affecting delivery of health care; study of administrative and planning procedures. Health majors only. (3 cr. hr.) ■

HLH 367: Drug Problems: Intervention and Prevention
(A) Review of literature on health consequences of consumption of drug substances. Formulation, implementation of comprehensive educational programs designed to reduce drug misuse and abuse. (Health majors only.) (3 cr. hr.)

HLH 390: Environmental Health and Ecology
(A) Public health activities within scope of “environmental health.” Health majors only. Prerequisite: Completion of the natural science requirements in the General Education program or consent of the department. (3 cr. hr.)

HLH 391: Epidemiology and Biostatistics
(A) Epidemiological method, statistical techniques used in study of etiology, distribution and control of disease. Health majors only. Meets SUNY Cortland GE requirements. (3 cr. hr.)

HLH 392: Environmental Pollutants and Toxicology
(B) Study of health problems associated with toxic substances in the environment. Classification of contaminants, their behavior in the ecosystem, bioconcentration, risk assessment and management techniques will be covered. (3 cr. hr.)

HLH 393: Introduction to Occupational Safety and Health
(B) This survey course is designed to acquaint the student with fundamental principles of occupational safety and health hazard recognition, evaluation, and control in the workplace. Government regulations including OSHA, NIOSH, PESH, and health-related labor-management issues will be discussed. (3 cr. hr.)

HLH 394: Health-Related Behavior: Formation and Change
(A) Analysis of factors affecting adoption of health care; study of administrative and planning procedures. Health majors only. (3 cr. hr.)

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
HLH 405: Tutorial in Health
(A) Study of one or more health-related issues as determined appropriate by the tutor. For junior, senior health majors. (1-3 cr. hr.)

HLH 406: Wellness/Fitness Practicum
(A) Practical experience for students concentrating in wellness and health promotion. Provides experience on-campus facilities and programs designed to promote well-being. Prerequisites: H LH 120, 210 and PED 397 or EXS 397. (1 cr. hr.)

HLH 430: CPR — Basic Life Support
(O) Designed to teach beginning fundamentals of basic life-support cardiopulmonary resuscitation and to enable the student to be certified as a basic life-support instructor in CPR. Classroom teaching of skills included. (1 cr. hr.)

HLH 460: Health Care Policy Issues
(C) The course emphasizes controversial issues in health care policy formulation and development. It identifies the various participants in health care policy development, their sometimes opposing views, and their role and the government’s role in addressing health care policy issues. Prerequisite: H LH 360. (3 cr. hr.)

HLH 461: Health Care Finance
(C) An analysis of health care financing in the U.S. The course investigates payment mechanisms, cost containment efforts, and the trends in third-party payments over time. The course will explore such concepts as risk sharing, cost-shifting, capitation, capital investments, strategic financial planning in a changing health care environment. Prerequisites: H LH 360 and ECO 111 or M GT 254, 255. (3 cr. hr.)

HLH 492: Chronic and Communicable Diseases
(A) Contemporary concepts of causation and control of chronic and communicable disease. Disease patterns analyzed in both individual, community environment. Causative factors, methods of intervention stressed. Health majors only. (3 cr. hr.)

HLH 493: Community Health Education
(B) Study of unique function of community health educator in health care delivery system. Techniques used for educational intervention in community health settings stressed. Prerequisite: H LH 203. Health majors only. (3 cr. hr.)

HLH 494: Needs Assessment, Program Planning and Evaluation in Health Education
(A) Techniques for assessing health needs and problems; strategies for program planning and implementation; criteria and procedures for program evaluation. Health majors only. (3 cr. hr.)

HLH 499: Fieldwork in Health
(A, M) One quarter; may involve residence in any part of New York State, the United States or a foreign country at student’s expense. Prerequisites: H LH 203, 360, 390, 391, 492, 494 and eight hours of H LH electives; cumulative grade point average of at least 2.5; consent of department. H, S, U grades assigned. (6 cr. hr.)

HLH 505: Health and the Media
(B) The course provides an overview and examination of the manner in which health-related topics are covered in different media. Major areas of review are the impact of media portrayals on health-related behavior and the use of media in health education/promotion programs (3 cr. hr.)

HLH 509: Drug Education for Teachers
(B) In-depth investigation into all aspects of drug scene for those who will have primary responsibility for drug education. (3 cr. hr.)

HLH 510: ProSeminar in Health Foundations
(A) An examination and update of current health content, and pedagogical principles and strategies commonly addressed by school and community health education professionals. Included are such topics as: safety education, including fire/arsenal prevention, child abduction, abusive or dangerous environments and violence prevention/intervention; wellness and health promotion; factors which impact health, such as culture and socioeconomic level; chronic and communicable disease; weight management and fitness; aging and death; stress management; health care delivery; alcohol, tobacco and other drug prevention/intervention. This course meets all health-related SED requirements except for child abuse reporting and identification, and is linked to the topical areas outlined in the National Health Education Standards and the New York State Standards for Health, Physical Education, and Family and Consumer Science. (3 cr. hr.)

HLH 511: Global Health Problems
(B) Conditions, problems in major geographical areas. Programs of international organizations. (3 cr. hr.)

HLH 512: Emotions and Human Behavior
(O) Study of basic content, concepts of humanistic behavior. Emphasis upon investigation, clarification and application of current practices intended to improve emotional health and interpersonal behavior. (3 cr. hr.)

HLH 513: Death, Bereavement and Suicide
(B) Significance of death, with special emphasis on role of health educator in dealing with problems of death, suicide, bereavement. (3 cr. hr.)

HLH 514: Workshop in Health Sciences
(O) Workshops in specific health areas with consultants, lecturers from community organizations. Student may register for more than one workshop for two semester hours each. (2 cr. hr.)

HLH 530: Family Life Education and the Classroom Teacher
(B) This course is designed to provide the classroom teacher with the basic skills and overall knowledge necessary to teach in the area of family life, character, sexuality, and parenting education. An examination of teacher preparation, content, curricula, resources and teaching methodology will form the focus of the course. Will meet the SED requirements for child development, parenting education, sexual abuse prevention, and child abduction. (3 cr. hr.)

HLH 535: The Family in Health and Disease
(O) This course will examine the role of the family as a determinant of health and illness behavior of its members throughout the life span. The family’s role in health promotion, disease prevention, disease detection, treatment and rehabilitation will be studied. Family involvement in and social support for health behavior change programs will also be addressed. (3 cr. hr.)

HLH 540: Moral Problems in Medicine
(O) Discussion of ethical and moral considerations in selected areas of health and medicine. Case studies and readings primarily from medical literature. Prerequisite: Three hours of philosophy or health administration. Also listed as PHL 540. (3 cr. hr.)

HLH 542: Health Implications of Family Violence
(O) Will examine health issues related to family violence. Etiological factors related to child abuse and neglect, spousal/partner abuse and elderly abuse will be included. Preventive and interventive community health models and violence-related legislation will be examined. Prerequisite: Child abuse certification course; or consent of instructor. (3 cr. hr.)
HLH 544: Alternative Medicine
(0) This is an introductory course in alternative, or complementary, medical systems. Traditional Chinese medicine, Ayurvedic philosophies and practices, and Mayan medicine will be examined. Historical analysis of the homeopathic and naturopathic medical movements will also be included. (3 cr. hr.)

HLH 550: Women's Health
(0) Wide range of topics regarding women's health addressed from personal, institutional and sociocultural perspective. Examination of health problems unique to women, review of some of the political aspects of women's health care, assessment of research needed in the area of women's health included. (3 cr. hr.)

HLH 555: Health and Aging
(0) Examination of the aging process with focus on important health issues, problems, concerns. Areas addressed include nutrition, fitness, emotional health, sexuality and health policy. (3 cr. hr.)

HLH 557: Seminar in Health Sciences
(0) Studies in depth in specific areas with varied resource people. (3 cr. hr.)

HLH 560: Health and Public Policy
(B) Political aspects of health care delivery in United States; examination of forces affecting development of health policy at various governmental levels. Prerequisite: Course in community health or in American government/politics. (3 cr. hr.)

HLH 565: Elementary School Health
(0) Daily observation of pupils, unit development: coordination, integration of teaching and administrative aspects of school health. (3 cr. hr.)

HLH 573: Safety Problems and Programs
(0) Study of accidents, causes and means of prevention. Includes planning for numerous safety programs (home, school, occupational, recreation) with educational, administrative, legal considerations. (3 cr. hr.)

HLH 590: Public Health and the Environment
(B) Explores public health impact of environmental hazards and current issues related to the environment. Important concepts in environmental epidemiology will be presented. Morbidity and mortality associated with environmental pollution will be presented. Morbidity and mortality associated with environmental pollution will be presented. Morbidity and mortality associated with environmental pollution will be presented. Morbidity and mortality associated with environmental pollution will be presented. Morbidity and mortality associated with environmental pollution will be presented. Morbidity and mortality associated with environmental pollution will be presented. Morbidity and mortality associated with environmental pollution will be presented. Morbidity and mortality associated with environmental pollution will be presented. Morbidity and mortality associated with environmental pollution will be presented. (3 cr. hr.)

HLH 591: Health, Illness and Sick-role Behaviors
(0) Factors influencing asymptomatic protective behaviors, reactions to disease symptoms, responses to treatment recommendations. (3 cr. hr.)

HLH 592: Current Issues in Community Health
(O) The course is designed to give students an overview of community health issues and practices. Students will explore current health issues, their implications for health promotion and health education practice, and potential resolutions. Current health education and health promotion planning philosophies, models and practices will be discussed. (3 cr. hr.)

HLH 599: Public Health Statistics
(B) Application of statistical methods to public health and health education problems; in-depth review of significant types of public health data, including demographic, mortality, morbidity analysis. (3 cr. hr.)

Related Education Courses
EDU 326: Methods and Materials of Health Education: Level I
(B) A study of the history and philosophy of health education will be conducted along with an examination of the current trends and movements in health and in education. Theories and principles underlying the practice of health education will be examined along with in-depth examination of national and state health education curricula. School health education observations included. Required of health education majors. Health education majors only. (3 cr. hr.)

EDU 426: Methods and Materials of Health Education: Level II
(B) The course is designed to provide the preservice school health educator with the basic skills necessary to work in the area of school health education. An examination of school health content, curricula, resources and teaching methodology will form the focus of the course. School health education observations included. Health education majors only. (3 cr. hr.)

EDU 497: Field Experience in Health Education
(B) Seminar-based course to prepare the health education student for the student teaching experience. Twenty-four hours of observations in school health education classes included. S, U grades assigned. Required of health education students. Prerequisite: Junior-level status or permission of department. (1 cr. hr.)

EDU 498: Health Education Seminar
(A) Two-week supervised seminar-based field experience involving observations and lesson planning in health education. An overall grade point average of 2.5 for course work at Cortland and consent of department required. Must be taken in conjunction with EDU 499: Student Teaching in Health Education. Prerequisites: EDU 326, 426, 497, PSY 331, HLH 203, 210, 220, 232, 302, 314, 345, 367, 492 and 494. (1 cr. hr.)

EDU 499: Student Teaching in Health Education
(A) Upon successful completion of the one credit seminar session the student moves into the college-supervised student teaching experience of 14 weeks. S, U grades assigned. Required of health education students. Prerequisites: EDU 326, 426, 497, PSY 331, HLH 203, 210, 220, 232, 302, 314, 345, 367, 492 and 494. Grade point average of 2.5, and permission of the department. (7 cr. hr.)

EDU 575: Teaching Health Education
(B) The goal of this course is to prepare the advanced preservice school health educator with the competencies to teach school health education. An examination of school health content, state and national curricula and standards, teaching resources and pedagogy will form the focus of the course. School health observations included. Health majors only. (3 cr. hr.)
Dual major in Adolescence Education: Social Studies and History (7-12) [SSA and HIS]

Note: This program is currently undergoing curricular change. Check with the department for updates.

This program allows students who major in history to qualify for certification to teach adolescence education in social studies (grades 7-12). It combines a major in history with a professional semester that consists of professional preparation and student teaching.

CAREER POTENTIAL
- Teaching secondary social studies
- Professional schools such as law or social work
- Public history (archival or museum work)
- Business

A. Required Courses: 33 credit hours
   - HIS 100: The World to 1500
   - HIS 101: The World since 1500
   - HIS 110: Western Civilization to 1715
   - HIS 111: Western Civilization since 1715
   - HIS 200: The United States to 1877
   - HIS 201: The United States since 1877
   - HIS 490: Seminar (3 cr. hr.)

B. Three additional credit hours at the 300 level or above

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
C. Professional Semester: 18 credit hours
   SSS 301: Pre-Practice Teaching Seminar
   AED 400: Student Teaching
   SSS 303: Post-Practice Teaching Seminar

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124-127

Minor in History [HIS]

A. Required Courses: 6 credit hours
   HIS 100: The World to 1500 and
   HIS 101: The World since 1500 or
   HIS 110: Western Civilization to 1715 and
   HIS 111: Western Civilization since 1715 or
   HIS 200: The United States to 1877 and
   HIS 201: The United States since 1877

B. Additional History Courses: 12 credit hours in history, including at least 6 credit hours at the 300 level or above

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18

Example of the B.A. in History over four years

First Year
Fall
HIS 110 or 100 (GE 5)  
HIS 200 (GE 1)  
CPN 100 or 102  
Foreign language  
GE other than 1 or 5  
COR 101

Spring
HIS 111 or 101  
HIS 201  
CPN 101 or 103  
Foreign language  
GE other than 1 or 5

Second Year
Fall
GE course  
Foreign language  
Upper level history or elective

Spring
GE course  
Foreign language  
Upper level history or elective

Third Year
Fall
Quantitative Skills  
GE course  
Upper level history  
Upper level history or elective  
Elective

Spring
Upper level history  
Upper level history  
Elective  
Elective  
Elective

Fourth Year
Fall
HIS 490 or upper level history  
Elective  
Elective  
Elective

Spring
HIS 490 or upper level history  
Elective  
Elective  
Elective

Note: History majors must take at least six hours of upper-level history courses (300 level or above) in each of the following areas: United States, Europe, non-Western. Students must also complete at least three hours of Writing-Intensive (WI) course work in addition to HIS 490.

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, = LAS

History

COURSE DESCRIPTIONS

HIS 100: The World to 1500
(A) History of humankind from emergence of Homo sapiens, earliest forms of civilization to 16th century. Emphasis on broad lines of development and interaction among world civilizations. (3 cr. hr.)

HIS 101: The World since 1500
(A) Political, social, economic, cultural history of peoples of world from 16th century to present. Emphasis on broad lines of development and interaction among world civilizations. (3 cr. hr.)

HIS 110: Western Civilization to 1715
(A) Origins and development of Western civilization from ancient Greece to early 18th century; how Western civilization was shaped. (3 cr. hr.)

HIS 111: Western Civilization since 1715
(A) From about 1715 to present. Major political, social, economic, religious, intellectual developments from Enlightenment to atomic age. (3 cr. hr.)

HIS 129, 229, 329, 429, 529: Special Topics in History
Selected topics. May be taken more than once as subtitle changes. Prerequisite: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

HIS 150: World in the Twentieth Century
(A) Introduction to the study of history by examining the ideological, political, economic, and social forces that have shaped the modern world. It will draw widely from modern world history to illustrate the types of questions, problems and methods historians encounter in their work. (3 cr. hr.)

HIS 200: The United States to 1877
(A) Development of American institutions, ideals from discovery of new world to close of Reconstruction period. (3 cr. hr.)

HIS 201: The United States since 1877
(A) Significant cultural, economic, political, social forces and problems in America from Civil War to present. (3 cr. hr.)

HIS 225: Introduction to Africa
(O) Introduction to African continent and people; broad outlines of history from earliest humans to present. Also listed as AAS 225. (3 cr. hr.)

HIS 300: Colonial America, 1450-1750
(F-C) The American colonial era, from pre-Columbian societies to 1750 — origins of colonization, European-Indian interaction, African-American cultures, relations with the Atlantic world. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 302: Revolutionary America, 1750-1789
(S-C) Origins and consequences of the American Revolution, with emphasis on social and political changes that accompanied independence. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 303: The American Republic, 1789-1840
(C) Development of American society, with emphasis on democratic culture, transformations in the home and market place, and territorial expansion. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 304: The American Republic, 1840-1877
(S) United States development, 1840-1877: Manifest Destiny, sectional development and conflict, Civil War and Reconstruction. Prerequisite: HIS 200 or 201. (3 cr. hr.)
HIS 306: The United States: 1877-1920
(C) United States development, 1877-1920; Rise of Industrialism, urban society, agricultural conflict, progressive period and World War I. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 307: The United States 1920-Present
(C) United States development, 1920-Present. Twenties, Depression, World War II, Cold War, New World Order. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 309: New York State
(O) New York State society and politics, with emphasis on ethnic interaction, conflict, and accommodation between 1600 and 1900. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 312: African-American History to 1865
(F) Black America from African origins to end of Civil War. Prerequisite: HIS 200 or 201 or AAS 100. Also listed as AAS 334. (3 cr. hr.)

HIS 313: African-American History Since 1865
(S) Black America from Reconstruction period to present. Prerequisite: HIS 200 or AAS 100. Also listed as AAS 336. (3 cr. hr.)

HIS 315: History of the American West
(B) The discovery, conquest, and settlement of the American West from 1500-1892. The primary focus will be on the trans-Mississippi west from approximately 1800-1892. Attention will be given to the history and image-building of individuals and groups who played a role in the West. (3 cr. hr.)

HIS 317: Women in the United States
(S-C) Survey of history of women in United States from colonial period to present. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 318: The History of Women in Modern Europe
(C) Survey of women’s lives in Europe from the 18th century to the present. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 321: Africa, Human Origins to 1800
(F) Origins, groupings of peoples of Africa; political, social, economic evolution to 1800; Africans contacts with ancient world, trans-Saharan and Indian Ocean trades, growth of states and empires, spread of Islam. Prerequisite: HIS 100, 101, 110, 111, 150, AAS 100, IST 200, or IST 210. Also listed as AAS 321. (3 cr. hr.)

HIS 322: Modern Africa, 1800-Present
(S) Traditional African and European influences, imperialism and colonial rule; independence; problems of independent Africa. Prerequisite: HIS 100, 101, 110, 111, 150, AAS 100, IST 200, or IST 210. Also listed as AAS 322. (3 cr. hr.)

HIS 325: Colonial Latin America
(B) Survey of Latin America through an examination of the Pre-Columbian civilizations, the European conquests and subsequent empires, the resulting ramifications and social structure, and the socioeconomic structure that formed the foundations of Modern Latin America. Prerequisite: HIS 100, 101, 110, 111, 150, 200, 201, AAS 100, IST 200, or IST 210. (3 cr. hr.)

HIS 326: Modern Latin America
(B) Survey of Latin America from 1821 to the present, including an examination of the political, social, and economic developments in the region and the major foreign impact that helped shape the region as it is today. Prerequisite: HIS 100, 101, 110, 111, 150, 200, 201, AAS 100, IST 200, or IST 210. (3 cr. hr.)

HIS 333: Russia, 850-1894
(B) Russian history and civilization; the major political, social, and economic developments from the ninth century until the late 1800s. (3 cr. hr.)

HIS 334: Russia Since 1894
(B) Russian history and civilization; the major political, social, and economic developments from 1894 to the present. Prerequisite: HIS 100, 101, 110, 111, 150, IST 200, or 210. (3 cr. hr.)

HIS 342: Ancient Greece
(F-C) Greece from the Bronze Age to Alexander the Great. Prerequisite: Completion of General Education requirement in History. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 343: Roman History
(C) From founding of Rome to establishment of Christian Empire, emphasizing constitutional developments of republic and early empire, change to autocracy. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 344: Medieval Europe: 300-1050
(F-C) Roman Empire, Christian Church, Byzantine Empire, Islamic empires, barbarian kingdoms of West and western feudal kingdoms, to 11th century. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 345: Medieval Europe: 1050-1300
(S-C) Flowering of medieval civilization in 12th, 13th centuries; its gradual disintegration in 14th century. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 346: Renaissance and Reformation
(C) European civilization from Renaissance to 1648. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 347: Modern Europe: The French Revolution to World War I
(O) Major political, social, intellectual forces: 1789 to World War I. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 348: Europe Since 1914
(B) Domestic, political, economic history of major European countries from start of World War I. Prerequisite: HIS 100, 101, 110, 111, IST 200, or 210. (3 cr. hr.)

HIS 351: History and Film
(O) Use of films as historical sources and/or statements of historical work. May be repeated with different subtitle: Twentieth Century England, Twentieth Century France, Twentieth Century Germany, The U.S. in the Thirties, The Medieval World Reconstructed, Russian History and Film. Prerequisite: HIS 100, 101, 110, 111, 150, 200 or 201. Also listed as CIN 251. (3 cr. hr.)

HIS 361: Jews in the Ancient World
(O) Intellectual and political history of the Jewish people to the compilation of the Talmud in the third century. Prerequisite: HIS 100, 101, 110, 111, 150 or 200. Also listed as JST 140. (3 cr. hr.)

HIS 362: Jews in the Middle Ages
(O) History of Jewish people from third century to Enlightenment. Prerequisite: HIS 100, 101, 110, 111, 150, or JST 140. Also listed as JST 362. (3 cr. hr.)

HIS 363: Jews in the Modern World, 1789-1948
(C) European Jewry from Enlightenment to establishment of Israel as state. Topics include Emancipation and Assimilation, Eastern European and Russian Jews to World War I, Immigration to America, Modern Israel, Anti-Semitism and Holocaust. Prerequisite: HIS 100, 101, 110, 111, 150, 200, 201, or JST 140. Also listed as JST 363. (3 cr. hr.)

HIS 383: Chinese Civilization
(C) Survey of Chinese history from the earliest times to the mid-19th century. Special attention is given to political and economic developments, changing social structure and social relations.
cultural and intellectual traditions, and interactions with other nations of the world. Prerequisite: HIS 100, 101, 110, 111, 150, AST 200, IST 200, or IST 210. (3 cr. hr.)

HIS 384: Modern China
(B) Chinese history since the mid-19th century. Emphasis on Western imperialism and the rise of nationalism and communism; the interplay between politics, society, and ideas in shaping reforms and revolutions. Prerequisite: HIS 100, 101, 110, 111, 150, AST 200, IST 200, or IST 210. (3 cr. hr.)

HIS 385: History of Japan
(C) Survey of Japanese history from the earliest times to the present with an emphasis on political and economic developments, changing social conditions, cultural and religious traditions, and foreign relations. Prerequisite: HIS 100, 101, 110, 111, 150, AST 200, IST 200, or IST 210. (3 cr. hr.)

HIS 386: Modern Pacific Asia
(C) Survey of East and Southeast Asia since the 19th century. Topics include colonialism and nationalism; military clashes and economic conflicts; rapid developments and resulting social problems; the persistence of diverse cultural traditions; and America's past experience in Asia. Prerequisite: HIS 100, 101, 110, 111, 150, AST 200, IST 200, or IST 210. (3 cr. hr.)

HIS 401: U.S. Foreign Relations since 1914
(B) Growing American involvement in modern world politics. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 421: U.S. Labor and Working-Class History
(C) History of U.S. workers from the beginning of U.S. industrialization to the present. Focus will be on major social, economic, political, and cultural changes in working-class life during this period and on the ways in which workers created and reacted to these changes. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 424: The McCarthy Era, 1945-1960
(F-C) Economic, social, political aspects of McCarthyism, with emphasis on the major investigations. Prerequisite: HIS 200 or 201. (3 cr. hr.)

HIS 428: The Civil Rights Movement in America
(O) Origins, ideologies, activities, and results of movement to obtain civil and political rights for African Americans, 1945-1975. Prerequisite: HIS 200, 201, or AAS 100 or permission of instructor. Also listed as AAS 428. (3 cr. hr.)

HIS 430: The Vietnam War
(O) Analysis of background of American involvement in Vietnam; examination of tactics and strategy employed in the war; impact of the war on American society. Prerequisite: HIS 200, 201. (3 cr. hr.)

HIS 431: South Africa
(O) Historical background to apartheid and contemporary racial conflict in South Africa, Zimbabwe, and Namibia. Prerequisite: HIS 101, 111, 150, AAS 100, IST 200, or 210. Also listed as AAS 390. (3 cr. hr.)

HIS 435: East Asian-American Relations
(O) The history of economic, political, cultural and diplomatic relations between East Asia and the United States since the 19th century. Prerequisite: HIS 100, 101, 150, 200, or 201. (3 cr. hr.)

HIS 440: Britain to 1688
(O) Cultural, social, political, and economic development in the British Isles from Roman times to the Glorious Revolution with special emphasis on constitutional issues and changes. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 441: Britain Since 1688
(C) Political development, economic trends, social issues, and cultural factors will be emphasized in a survey of modern Britain beginning at the Glorious Revolution. Anglo-Irish relations and modern British feminism will also be explored. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 442: Tudor-Stuart England, 1485-1714
(C) Political, social, and economic developments under the Tudors followed by the dissolution of royal government under the Stuarts culminating in the first modern political revolution. (3 cr. hr.)

HIS 443: Ireland since 1660
(B) British presence in Ireland, the Act of Union, the O'Connell and Parnell nationalist movements, independence, civil war, conflict in Ulster. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 444: France, 1715-1799: The Old Regime and French Revolution
(O) Old Regime politics, society and culture. Origins and phases of the French Revolution. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 445: France 1800-1945
(O) Political, social, cultural, economic life of France from Napoleon through WWII. Stress on modernization and its associated tensions. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 447: Germany since 1815
(C) From 1815 to present. Unification problem; domestic affairs under the monarchy; Weimar Republic; Third Reich; postwar Germanies. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 448: Rise and Fall of Nazi Germany
(B) Forces and factors leading to rise and collapse of Nazi rule. Social, economic, foreign policies; propaganda techniques. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 452: War and Diplomacy: World War I
(O) Origins, political, social and economic impact of World War I. Stress on diplomatic background, military and diplomatic events. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 453: War and Diplomacy: World War II
(O) Origins, political, social and economic impact of World War II. Emphasis on diplomatic background, military and diplomatic events. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 460: The Holocaust
(C) Extermination of European Jews and millions of other European civilians during World War II studied in human and historical perspective. Course focuses on Nazi perpetrators' ideology of anti-Semitism and their machinery of destruction, the responses of the victims, and the action and inaction of the rest of the world. Prerequisite: HIS 100, 101, 110, 111, 150, JST 140, IST 200, or 210. Also listed as JST 460. (3 cr. hr.)

HIS 461: Modern Israel and the Arab-Israeli Conflict
(O) History of Zionism (Jewish nationalism) and modern Israel from the 1860s to the present. Focus on the history of Zionism and the growth of a Jewish state in Palestine; on the history of Arab-Israeli conflict. HIS 100, 101, 110, 111, 150, IST 200, 210, or JST 140. Also listed as JST 461. (3 cr. hr.)

HIS 465: The Soviet Union, 1917-1953
(C) An intensive examination of the critical period of the Russian Revolution, and the gradual building of Soviet society. Prerequisite: HIS 100, 101, 110, 111, or 150. (3 cr. hr.)

HIS 490: Seminar
(A) Methods of historical investigation; their application to topics in selected historical periods. (3 cr. hr.)
HIS 491: Readings in History
(A) Individual study in selected areas of history. Prerequisite: Consent of department. (1-3 cr. hr.)

HIS 492: Senior Tutorial
(O) Guided reading for approved honors candidates in history in senior year. Normally followed by HIS 493. (3 cr. hr.)

HIS 493: Senior Thesis
(O) Research seminar leading to preparation of Senior Honors Thesis. Prerequisite: HIS 492, consent of department. (3 cr. hr.)

HIS 524: Issues in 19th-Century U.S. History
(C) Historical study of major issues in 19th-century American history with special attention to teaching materials and approaches. (3 cr. hr.)

HIS 528: Issues in the U.S. Civil Rights Movement
(C) Origins, ideologies, activities, results, and historiographical interpretations of movement to obtain civil and political rights for African Americans, 1945-1975. (3 cr. hr.)

HIS 529, 629: Special Topics in History
(C) Selected topics. May be taken more than once as subtitle changes. Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

HIS 530: Issues in African-American History
(C) Major historical arguments and historiographical issues in African American history from African origins to the present: origins and nature of slavery, rise of Jim Crow South, urban ghetto formation, civil rights movement. Special attention to teaching materials and methods. Prerequisites: 12 hours of undergraduate or graduate work in American history, or permission of instructor. (3 cr. hr.)

HIS 531: Issues in African History
(C) Historical and historiographical survey of peoples of Africa-human origins, population movements, spread of Islam, slave trade, colonialism, independence and underdevelopment. Special attention to teaching methods and materials. Prerequisites: At least 12 hours of course work in social studies on the graduate or undergraduate level. (3 cr. hr.)

HIS 532: Issues in European History Since 1500
(C) Historical and historiographical study of major themes in Europe since 1500. Special attention given to teaching materials and methods. (3 cr. hr.)

HIS 533: Issues in Asian History
(C) Historical and historiographical study of selected countries of Asia. Main themes include diversity in the past and present; continuity and change in Asian civilizations; Asia in world history; colonialism and nationalism; economic, political and social developments; and modernization and Asian identity. Special attention given to teaching materials and methods. (3 cr. hr.)

HIS 538: Teaching About Nazi Germany and the Holocaust
(C) In depth study of Nazi Germany and Holocaust with special attention to pedagogical strategies. Prerequisite: 12 hours of History and student teaching or permission of instructor. (3 cr. hr.)

HIS 545: Issues in Women's History
(C) Major issues in the history of women in the United States with special attention to pedagogical strategies and materials. (3 cr. hr.)

Related Education Courses

AED 400: Student Teaching
(F) Full-time supervised social studies teaching in public schools for ten weeks. (6 cr. hr.)

SSS 300: Introduction to Secondary Social Studies
(A) This course introduces students to unit and lesson planning, focuses on the history of American education as it relates to social studies, familiarizes students with the social studies learning standards, and makes comparisons between middle school and high school teaching. Includes 100-hour field experience. (3 cr. hr.)

SSS 301: Pre-Practice Teaching Seminar
(F) Integrated study of: a) Introduction to Secondary Education; b) Introduction to Methods of Teaching Social Studies; c) Introduction to Contemporary Secondary School Issues; d) Preparation for specific practice teaching assignment. S, U grades assigned. (11 cr. hr.)

SSS 303: Post-Practice Teaching Seminar
(F) Problem approach drawing upon experience of students during practice teaching. Designed to focus on contemporary educational issues, beginning the job search and application process, teaching and learning at the middle school level and exploring the history and philosophy of teaching. S, U grades assigned. (1 cr. hr.)

Values Course

VAL 322: Value Conflict in American History
(O) Study of values extant in selected incidents in American history which were characterized by severe conflict. Among possible topics: loyalists and patriots 1763-1800, anti-Catholicism 1840-1900, secession, war and Reconstruction 1860-1880, labor conflict in late 19th century America, Jim Crowism, segregation and civil rights conflict 1890-1970, nativism 1840-1900, the “Red Scare” 1918-1970, patriotic and dissenters 1963-1973. Prerequisite: HIS 200 or 201. (3 cr. hr.)

Honors Program

Faculty
Arnold Talentin (Coordinator)

Description
SUNY Cortland's Honors Program is designed for students with high ability and unusual motivation. It brings together accomplished teachers and outstanding students in courses taught especially for the Honors Program. The courses are designed to provide enriched academic experiences consistent with the students' academic abilities and interests.

Qualifications for Admission
Admission to the program is open to entering fall freshmen and rising sophomores. To be eligible for admission, applicants should have an exceptional academic record based on grades, standardized tests (SAT, ACT), course selection and extracurricular activities. A limited number of students transferring from honors programs at other institutions may also be included.
Requirements
To complete the Honors Program, students must take at least 24 credit hours of honors level courses. Students fulfill this requirement by taking a combination of specially designated honors courses, contract courses and a course in which they complete the required honors thesis. Students may also use a maximum of two Writing Intensive (WI) courses beyond the all-college requirements toward the completion of the honors program.

- Specially designated honors courses are offered in a variety of General Education categories, including GE 2: Prejudice and Discrimination; GE 3: Contrasting Cultures; GE 4: Fine Arts; GE 5: History and the History of Ideas; and GE 7: Science, Technology and Culture. In addition, a few majors now offer honors sections of their courses. Some of the courses offered through the General Education program and in the majors are unique to the Honors Program, and others are special honors sections of courses offered to the general student population.

- Contract courses are regular courses that students take for honors credit. The student establishes a contract with the faculty member teaching the course that spells out the additional work the student will do for honors credit. Contract courses may be taken in the major or outside of the major, but no more than two contract courses may be counted towards the 24 hours needed to complete the honors program. Guidelines for taking contract courses are available in the Honors Program office.

- Writing Intensive (WI) courses are specially designated courses that emphasize the development of writing skills. All students at Cortland must complete two WI courses in order to graduate. Honors Program students may count an additional two WI courses (but no more than two) towards the 24 hours needed to complete the honors program.

- The honors thesis is a requirement for completing the honors program. Guidelines for completing the thesis are available in the Honors Program office. Students must complete the thesis for credit by taking an independent study in their major or a course in their major in which the thesis can be completed as a course assignment. For example, many majors offer senior research seminars to their students. These seminars make excellent vehicles for completing the honors thesis.

Some courses with special honors sections currently included in the Honors Program are:

INT 300: Interdisciplinary Studies: The Artist in Modern Society
CPN 101 or 103: Academic Writing II
ANT 102: Contrasting Cultures
AST 200: Introduction to Asia
INT 301: Modern Western Thought
SOC 350: Civil Society
SCI 320: Science, Technology and Culture
EXS 290: Social Problems and Issues in Sport and Exercise

TOTAL CREDIT HOURS REQUIRED FOR THE PROGRAM: 24
Human Service Studies

2 + 2 CAPPING PROGRAM
(Open only to transfer students)

SCHOOL
Arts and Sciences

FACULTY
Stuart H. Traub (Coordinator)

PROGRAMS OFFERED
Bachelor of Arts in Human Service Studies
Bachelor of Science in Human Service Studies

MAJOR OFFERED
Human Service Studies

DESCRIPTION
The Human Service Studies Program offers transfer students a "cutting edge" program of study leading to the B.A. or B.S. Career opportunities abound in the field of human services. According to the Bureau of Labor Statistics, one of the most significant areas of employment growth in the next decade or so will be in human service occupations.

The degree programs combine a broad liberal education in the social and behavioral sciences which builds upon prior professional educational experiences and prepares students for employment in human services or graduate study in related fields. The programs meet the needs of two-year college graduates with the A.A., A.S. or A.A.S. in human services who are looking for an advanced degree that will provide them with marketability in a field that will continue to grow.

SPECIAL FEATURES
• Designed for transfer students with the A.S., A.A., or A.A.S. in human services from articulating colleges
• SUNY Cortland will accept the coursework satisfactorily completed that is specified in the articulation agreements between SUNY Cortland and the two-year SUNY community colleges
• Interdisciplinary program provides students with a body of knowledge and a perspective building upon prior professional educational experiences
• Emphasizes the multi-disciplinary nature of human services by focusing on the mastery of concepts, theory and research from political science, psychology, health, sociology, recreation, economics, communications and philosophy.

Requirements
1. Degree Requirements listed on pages 36-41 of this catalog apply to the following majors.

2. Liberal Arts Requirements:
   B.A. - 90 credit hours
   B.S. - 75 credit hours

Major in Human Service Studies [HUS]
SUNY Cortland offers graduates of human service programs from selected community colleges the opportunity to obtain a bachelor's degree in human service studies. The major is called a "capping" program because it enables a student who has a technical degree from a community college to gain the liberal arts and science curriculum necessary to obtain a bachelor's degree.

CAREER POTENTIAL
• Social/case workers
• Residential counselors
• Home health aides
• Child care workers

A. Required Courses: Three credits from each of the following categories. Minimum of 18 credit hours of the major in residence at SUNY Cortland, selected from the following categories. Students MUST complete a minimum of three credits of 300- or 400-level courses chosen from three separate categories in addition to HUS 490.

Category 1: Research and Statistical Tools 3 credit hours
- ANT 493: Anthropological Methods
- ECO 221: Economic Statistics
- HLU 299: Statistical Concepts and Applications for Health Sciences
- HLU 599: Public Health Statistics
- MAT 201/PSY 201/COM 230: Statistical Methods
- POL 112: Introduction to Political Research
- POL 312: Methods of Political Analysis
- POL 315: Evaluation Research
- PSY 360: Applied Behavior Analysis I
- REC 407: Evaluation and Research
- SOC 493: Sociological Methods I
- SOC 494: Sociological Methods II

Category 2: Public Policy 3 credit hours
- AAS 120: Politics and Multiculturalism
- ECO 105: Introduction to Political Economy and Public Policy
- ECO 311: Economic Development
- HUS 430/SOC 430: Social Welfare Institutions
- HLU 560: Health and Public Policy
- PHI 240: Social and Political Philosophy
- POL 341: Current Issues in Public Policy

Category 3: Management and Administration 3 credit hours
- ANT 315: Development Anthropology
- COM 320: Organizational Communication
- ECO 385: Human Resource Management
- MGT 250: Principles of Management
- PHI 233: Management Ethics
- POL 240: Introduction to Public Administration
- REC 344: Commercial Recreation Management
- REC 495: Administration of Recreation

Category 4: Contemporary Human Service Issues 3 credit hours
- BIO 325: Biology of Human Aging
- ECO 385: Human Resource Management
- HLU 137: Child and Adolescent Sexual Abuse

Center for Aging and Human Services
Old Main, Room 122
(607) 753-5784
E-mail: ctragehus@cortland.edu
www.cortland.edu/humanserv/
The B.A. in human service studies requires achievement of intermediate-level proficiency in a foreign language. This may be accomplished by successfully completing course work in a foreign language through the 202 level or by demonstrating such proficiency by exam.

B. Other: varies by degree (A.A., A.S. or A.A.S.) and transfer credits.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

The B.S. in human service studies requires that students complete the following in addition to college and major requirements:

A. Six credit hours (two courses) from human service studies categories 3, 5, and 6
B. CAP 100: Introduction to Computer Applications
C. Two to four credit hours from the following:

Note: All B.S. candidates must successfully complete a one-semester college-level foreign language course (101) or the equivalent (e.g., earning CLEP or AP credits); or have earned a score of 85 or higher on the New York State Regents examination in a foreign language.

THE HUMAN SERVICE STUDIES

HUMAN SERVICE STUDIES

HUS 430: Social Welfare Institutions
(C) Sociological study of process of institutionalization of welfare. Focus is on American society with some comparative analysis with other industrialized societies. Also listed as SOC 430. Prerequisite: SOC 100 or 150 or ANT 102 (3 cr. hr.)

HUS 470: Sociology of the Family
(B) Comparative perspective of the family as a social institution, focusing on analysis of historical and cross-cultural variations with American society, with some comparative analysis of other societies. Topics covered include demographic changes, changes in family functions, relationship of the family to other social institutions, contemporary family issues and problems. Also listed as SOC 470. Prerequisite: SOC 100 or 150 or ANT 102 (3 cr. hr.)

HUS 490: Senior Seminar in Human Services
(B) In depth study of major theoretical, empirical, policy, political and/or philosophical topics in human services. Specific topics will vary. Open to human service majors with senior status. (3 cr. hr.)
Individualized Degree Program

Faculty
Virginia B. Levine (Coordinator)

Programs Offered
Bachelor of Arts in Individualized Degree Program
Bachelor of Science in Individualized Degree Program

Major Offered
Individualized Degree Program

Description
Students who wish to pursue baccalaureate study in areas that draw upon several fields of study or go beyond traditional academic majors may present a proposal for this specialized program, which is designed to meet individual interests and learning objectives. The area of concentration must be interdisciplinary and coherent, with course work which defines a conceptual theme. A traditional minor is also required. The degree plan is formulated in consultation with a faculty mentor. The program is open to all full-time and part-time students at SUNY Cortland who have been admitted to degree status.

Students who want to propose an individualized degree program should contact the program coordinator to discuss their interests and the procedures governing the application process.

Special Features
- Opportunity to design individual major program in combination with traditional minor
- Emphasis on student responsibility and motivation
- Ability to combine internships with course work

Requirements
1. Degree Requirements listed on pages 36-41 of this catalog apply.
2. Liberal Arts Requirements: B.A. - 90 credit hours; B.S. - 75 credit hours

Major in Individualized Degree Program [IDP]
The Individualized Degree Program combines a traditional minor with an interdisciplinary concentration which is designed to meet the unique needs of the student. Hands-on experience is often part of the concentration.

Career Potential
The program offers a vast variety of opportunities for careers, depending upon the interests of each student. Past examples include:
- Technical theatre production
- Adolescent health issues
- Music industry

A. Required Courses: 24 credit hours minimum in concentration
B. Other: 15-24 credit hours in traditional minor
C. At least half of the area of concentration and minor taken in residence at SUNY Cortland
D. At least 45 credit hours of upper-level course work, as defined by the respective departments
E. Six credit hours of WI courses required, at least three of which are in the concentration

Individualized Degree Program Policies
1. Proposals are due to the Individualized Degree Program Committee by the time a student has completed 78 credit hours toward graduation. (Exceptions are possible for junior-level transfer students.)
2. Deadlines for submission of proposals to committee members for review are Oct. 15, Feb. 15 and June 15 of each academic year. Students must meet with the program coordinator prior to the deadline dates.
3. The maximum number of credits of completed course work which may apply to a student’s area of concentration is nine.
4. Individualized Degree Program students may qualify for cooperative education academic field experiences if two grade point averages are met: 2.5 grade point average in the area of concentration and 2.3 cumulative grade point average.
5. Requests for alterations in a student’s degree plan must be made through the advisor-mentor and approved by the program coordinator.

Total Credit Hours Required for Graduation: 124

Example of the B.A. in Individualized Degree Program over four years

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Interdisciplinary Centers

Center for Advancement of Technology in Education (CATE)

FACULTY
Mark Connell (Director)

MISSION OF THE CENTER
The mission of the Center for Advancement of Technology in Education (CATE) is to promote and facilitate the integration of technology into the curriculum and to educate faculty and students in the theory and practice of current and emerging instructional technologies.

FUNCTIONS OF THE CENTER
• To recommend priorities to the College with respect to technology and the College mission.
• To promote discussion among faculty and professional staff regarding software and hardware technology needs.

Center for Aging and Human Services

FACULTY
Anne K. Vittoria (Director)

MISSION OF THE CENTER
The Center for Aging and Human Services has a multidisciplinary focus and seeks to be a leader in creative teaching and the development of academically sound and theoretically strong gerontology and human services curricula; to be an innovator in responding to substantive directions of change in the gerontological and human services fields in research and research-related activities; to develop and cultivate dynamic sites, physically and socially, where a community of thinkers and doers recognizes older adults as partners and truly learns about as well as from older persons; and to be an active and steadfast advocate in word and deed, politically and socially, for the aged population and disenfranchised, oppressed persons in general.

The Center reports to the dean of arts and sciences and is governed by a 16-member council of faculty, students, agency directors and leaders in the field of aging.

FUNCTIONS OF THE CENTER
• Coordination of the current gerontology programs, including the concentration in social gerontology and the minor in social gerontology. For a detailed description of the current programs, see the sociology/anthropology section in this catalog.

Career Information
SUNY Cortland offers an interdisciplinary minor in computer applications for students to develop skills and knowledge useful in professional development and the workplace. The minor is designed to complement any academic major and focuses on the development of technology applications within various academic disciplines. Students completing the minor will have been exposed to a variety of computers and software applications as tools in a variety of “real world” environments and will have had experiences in solving problems in their respective disciplines.

• To pro-actively expedite and facilitate the College's activities in instructional technology, including distance learning, technology instruction and support, classroom instructional technology activities and the Computer Applications Program (see page 110 of this catalog).

Career Information
Career opportunities are outstanding in both gerontology and human services. Many students attend graduate school in a variety of areas, including administration in aging, aging services, research on aging, public policy development and education. Typical employment areas, in both the public and private sectors, include social work, long-term care, service coordination, counseling, business and management, research and policy, health care, speech pathology, recreation and leisure studies and secondary and college-level education.

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(607) 753-5784
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Center for International Education

Henry Steck (Director)

MISSION OF THE CENTER

The Center for International Education provides an integrated framework for the College’s many international activities and programs. Its mission is to promote, coordinate and initiate programs and events which further international education within the campus environment and in the Cortland community. The Center reports to the dean of the School of Arts and Sciences and is governed by a board that includes membership from various College-wide units that address different aspects of international study.

FUNCTIONS OF THE CENTER

- Help develop and enhance the College’s existing curricular offerings and programs with an international focus.
- Work closely with the College’s Study Abroad Program, the International Studies Program, the International Communications and Culture Department, the Project for Eastern and Central Europe, and the International Programs Office.
- Develop new international programs for the College and funding proposals for that purpose.
- Work with faculty and staff to encourage and facilitate faculty and staff exchanges, visiting international faculty and research, teaching and service abroad by SUNY Cortland faculty.
- Work with the Admissions Office and the Enrollment Management Office to attract and retain students involved in the College’s international course offerings and programs.
- Assist the International Student Association and aid the international student advisor and the director of Whitaker Hall in enriching the educational experience of the College’s international students.
- Initiate, promote and coordinate international events and activities of interest to the campus as well as to Cortland and the surrounding community.
- Work with the Office of International Programs at SUNY System Administration.

Study Abroad

The International Programs Office administers the College’s many opportunities for study abroad. See page 256 of this catalog.

The International Studies Program

The International Studies Program is an interdisciplinary major in which students study the modern world as a whole rather than any one country or society within it. The program has special appeal for students interested in foreign languages, study abroad and global studies. See page 184 of this catalog.

International Communications and Culture Department

This department offers opportunities for the study of foreign languages, foreign literatures and foreign cultures. Liberal arts majors and minors in French and Spanish are administered through this department. Students who incorporate education courses into their programs may qualify for professional certification as teachers. The department also offers courses in Arabic, Chinese and German, and participates in interdisciplinary programs in cinema study and international study. See page 177 of this catalog.

The Project for Eastern and Central Europe (PECE)

The Project for Eastern and Central Europe fosters and develops affiliations and working relationships between SUNY Cortland and universities in Eastern and Central Europe. PECE sponsors conferences for this purpose as well as student and faculty exchanges. PECE is dedicated to fostering shared knowledge, cooperation and mutual understanding among the peoples of Eastern and Central Europe and those in the United States.

Whitaker Hall

Whitaker Hall is a student residence hall containing a number of designated single and double rooms, many with a private bath. Whitaker Hall has a decidedly international atmosphere. Students from around the world live in Whitaker with American students. Preference is given to Cortland students who would like to live with a roommate from another country. World culture nights and evenings of global awareness featuring talks, games, music and food are a regular part of Whitaker’s special programming. Through its satellite system, residents can view television programming from around the world.

Global Ambassadors (International Student Organization)

Open to all Cortland students, the purpose of the Global Ambassadors is to provide a link between American students and those from other countries. Travel, activities and programs sponsored by the club foster an atmosphere in which students from other countries can learn about American life and culture while American students learn about the life and culture of the other countries.
The Center for Multicultural and Gender Studies functions “as the unit of the College with responsibility for curriculum, research, faculty development, cultural events, student support and other activities related to multicultural and gender studies.”

Formerly known as the Multicultural Studies Program, the Center was established in 1985 to fulfill the mission of the College: “To create a climate that promotes understanding of and appreciation for human diversity.”

Creating a multicultural and gender awareness atmosphere requires the emphasis of the intellectual and artistic contributions of groups that traditionally have been underrepresented in higher education as well as the historical and often institutionalized obstacles these groups have had to overcome.

The agenda of the Center is truly multifaceted. Through its curriculum programs, the Center emphasizes the intellectual and artistic contributions of groups that traditionally have been underrepresented. Through its work with other College units, the Center also strives to positively influence the extracurricular campus environment.

The Center offers a major and minor in African American Studies and minors in Asian Studies, Jewish Studies, Latin American Studies, Native American Studies and Women’s Studies. It also oversees curriculum programs in these areas. Courses in lesbian and gay concerns are offered, but no minor is available yet.

Students who study in these areas are encouraged to think critically and write thoughtfully about the historic, social, economic and political conditions that affect all people living in a culturally diverse society.

African American Studies
The African American Studies Program is the oldest of the ethnic studies programs at SUNY Cortland.

Administration of the African American Studies Program and advisement of its students are provided by the African American Studies Committee, a subcommittee of the Center for Multicultural and Gender Studies.

For more information, see page 83 of this catalog.

Asian Studies
The Asian studies minor is an interdisciplinary program designed to serve the needs of students majoring in any subject area who desire more knowledge regarding Asia and Asian American concerns.

Administration of the Asian Studies Program and advisement of its students are provided by the Asian Studies Committee, a subcommittee of the Center for Multicultural and Gender Studies.

For more information, see page 189 of this catalog.

Jewish Studies
The Jewish Studies Program explores the cultural and religious experiences of the Jewish people from their beginnings to the present. At SUNY Cortland, Jewish studies attempts to shed light on the difficult choices all non-dominant groups face with regard to acculturation and assimilation.

Administration of the Jewish Studies Program and advisement of its students are provided by the Jewish Studies Committee, a subcommittee of the Center for Multicultural and Gender Studies.

For more information, see page 83 of this catalog.

Latin American Studies
Latin American studies offers a minor designed to complement many academic majors. Students choosing the minor will study the history and cultural production of Latin Americans from the perspective of several disciplines.

Administration of the Latin American Studies Program and advisement of its students are provided by the Latin American Studies Committee, a subcommittee of the Center for Multicultural and Gender Studies.

For more information, see page 190 of this catalog.
Native American Studies
The most recent interdisciplinary and multicultural studies program to be developed at SUNY Cortland, Native American studies offers a minor designed to complement many academic majors. Students choosing this minor will study the Native American cultures from the perspectives offered by several disciplines.

Administration of the Native American Studies Program and advisement of its students are provided by the coordinator and the Native American Concerns Committee, a subcommittee of the Center for Multicultural and Gender Studies. For more information, see page 200 of this catalog.

Women's Studies
The study of women, their challenges and their experiences was introduced in 1988 to the SUNY Cortland curriculum. With interdisciplinary courses in such areas as African American studies, English, health and sociology, the Women's studies minor is designed to complement all academic majors.

Administration of the Women's Studies Program and advisement of its students are provided by the Women's Studies Committee, a subcommittee of the Center for Multicultural and Gender Studies.

For more information, see page 250 of this catalog.

Interdisciplinary Studies

COURSE DESCRIPTIONS

SUNY Cortland offers a number of courses that are not connected to a single specific academic department or program. These courses cross disciplines and allow students to explore topics from multiple perspectives. The broad focus enables students to grasp complex topics from varied disciplines.

COR 101: The Cortland Experience: A First Year Seminar
(A) A seminar designed to facilitate the intellectual and social integration of first-time college students into the academic community at SUNY Cortland. (1 cr. hr.)

CPV 400: Cooperative Education
(A) Elective work experience in public, private and/or governmental agencies. Experiences are sponsored, approved and evaluated by academic departments and are coordinated by the Internship and Volunteer Office. Credit is based on the content and duration of the experience and will be evaluated on an individual basis by the academic department involved. Prerequisites: Junior or senior standing, good academic standing (see catalog definition) with no outstanding incompletes, consent of department in consultation with the Internship and Volunteer Office. Consult individual academic departments for additional prerequisites and policies. (1-16 cr. hr.)

INT 201: Adirondack Winter Studies
(S) This course is designed to provide students with background knowledge and experience in the physical, cultural, historical, environmental and aesthetic elements and issues of the Adirondacks. Prerequisite: Consent of coordinator. (2 cr. hr.)

INT 210: The Theory and Practice of Peer Tutoring
(A) An introduction to tutoring at the college level. Topics include strategies for tutoring one-on-one and in groups, problem solving and instructional techniques, learning theory, learning styles, disabilities, cultural diversity and the ethics of tutoring. (2 cr. hr.)

INT 230: Sexism and Heterosexism: An Integrated Study
(B) Integrated study of sexism and heterosexism from interdisciplinary perspective. Emphasis on gender and sexual orientation as factors upon which prejudice and discrimination are based, both in United States and other societies. Also listed as MGS 230. (3 cr. hr.)

INT 270: Exploring Education
(A) Introduction to education and teaching through the perspectives of a variety of disciplines such as psychology, history, sociology, philosophy and political science. Open to students in all major fields. (3 cr. hr.)

INT 300: Interdisciplinary Studies: The Artist in Modern Society
(F) Students will explore the foundations of western modern artistic expression from the Age of Enlightenment to the 20th century. Works studied may include poetry, fiction, drama, music and art of the Romantic and Modern periods. (3 cr. hr.)

INT 301: Modern Western Thought
(O) Analysis of transformation of ideas: focus on relationship between humans and nature, and the evolution of human society in 19th and early 20th century in the West. Major attention given to the influence of Darwin, Marx and Freud and to implications of their work for the central values Western society always has claimed for itself, e.g. individual freedom, equality, reason and progress. (3 cr. hr.)

MGS 130: Society and Sexual Orientation
(O) Introduction to origins and continuing consequences of the oppression of lesbian, gay, bisexual and other sexually marginalized persons. Rights and advocacy issues examined. (1 cr. hr.)

MGS 230: Sexism and Heterosexualism: An Integrated Study
(B) Integrated study of sexism and heterosexism from interdisciplinary perspective. Emphasis on gender and sexual orientation as factors upon which prejudice and discrimination are based, both in United States and other societies. Also listed as INT 230. (3 cr. hr.)
International Communications and Culture

DEPARTMENT

SCHOOL
Arts and Sciences

FACULTY
Wes Weaver (Chair), Catherine Baranello, Mark Cerosaletti, Hazel Cramer, Gina Gammage-Sikora, Christopher Gascon, Ginger Fairbanks, Timothy Gerhard, José Guisado, Jill Gillespie, Norma Helsper, Susan Kather, Colleen Kattau, Justine Kolb, Jean LeLoup, Arnold Levine, Patricia Martinez de la Vega, Glen McNeal, Paul Miller, M arie Ponterio, Robert Ponterio, Anne Scott, Radmila Tomoko Walter

PROGRAMS OFFERED
Bachelor of Arts in Adolescence Education: French (7-12)
Bachelor of Arts in Adolescence Education: Spanish (7-12)
Bachelor of Arts in French
Bachelor of Arts in Spanish

MAJORS OFFERED
Adolescence Education: French (7-12)
Adolescence Education: Spanish (7-12)
French
Spanish

CONCENTRATIONS OFFERED IN SPANISH
International Business, Cuernavaca, Mexico
Mexican History and Literature, Cuernavaca, Mexico

MINORS OFFERED
French
Spanish

DESCRIPTION
The International Communications and Culture Department offers opportunities for the study of foreign languages, foreign literatures and foreign cultures. Students develop multilingual communicative skills for a wide range of purposes. Liberal arts majors and minors in French and Spanish are available, and students who incorporate professional education courses in their programs may qualify for initial certification in adolescence education. Courses in American Sign Language, Chinese, English as a second language, German and Japanese also are offered.

The department participates in interdisciplinary programs leading to majors in international studies, Latin American studies and women's studies.

SPECIAL FEATURES
• Study abroad (See pages 259-260 of this catalog for a listing of International and Study Abroad programs.)
• Honor Societies: National honor societies in French (Pi Delta Phi) and Spanish (Sigma Delta Pi)
• Internship opportunities
• Language clubs

• Language Proficiency Certificates: SUNY Cortland has been chosen by the Chambre de Commerce de Paris as a testing site for the certificate for proficiency in commercial French.
• Practicum in undergraduate teaching (French)
• Up-to-date foreign language learning center for access to authentic electronic materials and multimedia development

Requirements
1. Degree Requirements listed on pages 36-41 of this catalog apply to the following majors described below.
2. Liberal Arts Requirements: 90 credit hours
3. Up to 15 credit hours of course work at the 300-level or above in any semester of study in an approved French or Spanish study abroad program may count towards fulfillment of major or minor requirements.
4. Students must participate in periodic assessment activities.

Note: FRE 318 and SPA 318 and 319 meet the General Education Category 3 requirement. FLT 299, FRE 311, 315, 316, ICC 201, SPA 313, 315, 317, meet the General Education Category 6 requirement.

Major in Adolescence Education: French (7-12) [AFR]
Students develop language skills and cultural awareness and acquire the pedagogical background necessary to teach French in grades 7-12 in New York State.

CAREER POTENTIAL
• Middle school teacher
• High school teacher
• French in the elementary school +

A. Required French courses: 30 credit hours of FRE courses at 300-level or above. At least 15 hours must be from the following group (courses focusing on literature and culture): FRE 307, 310, 311, 315, 316, 318, 413, 415, 417, 419, 423, 499 or 515.

Note: At least three hours must be at the 400-level or above.

B. Core Professional Education Courses: 41-42 credit hours

PSY 101: General Psychology *
PSY 232: Adolescent Psychology * or
PSY 332: Educational Psychology *
PSY 331: Psychology of Exceptional Children * or
PSY 432: Psychology of Learning Disabilities *
EDU 449: Literacy in the Middle and Secondary School
EDU 471: Foundations of Modern Education
HLH 110: Personal and Community Health or
HLH 199: Critical School Health Issues
AED 323: Seminar for Field Observation *
AED 391: Introduction to Adolescence Education *
AED 437/438: Methods of Teaching Foreign Languages in Middle/Junior and High Schools I and II
AED 439: Student Teaching: Adolescence Education - Foreign Languages **
Major in Adolescence Education: Spanish (7-12) [ASP]

Students develop language skills and cultural awareness and acquire the pedagogical background necessary to teach Spanish in grades 7-12 in New York State.

CAREER POTENTIAL
- Middle school teacher
- High school teacher
- Spanish in the elementary school

A. Required Spanish Courses: 30 credit hours
- SPA 305: Spanish Conversation and Composition
- SPA 306: Advanced Spanish Conversation
- SPA 307: Advanced Spanish Grammar
- SPA 308: Advanced Spanish Composition
- SPA 318: Spanish Peninsular Civilization (GE 3) or SPA 319: Latin American Civilization (GE 3, pending approval)
- One Spanish course at 400-level (3 cr. hr.)
- Elective courses in Spanish at 300-level or above (12 cr. hr.)

B. Core Professional Education Courses: 41-42 cr. hr.
- PSY 101: General Psychology *
- PSY 232: Adolescent Psychology * or PSY 332: Educational Psychology *
- PSY 331: Psychology of Exceptional Children * or PSY 432: Psychology of Learning Disabilities *
- EDU 449: Literacy in the Middle and Secondary School
- HLH 110: Personal and Community Health
- HLH 199: Critical School Health Issues
- AED 323: Seminar for Field Observation *
- AED 391: Introduction to Adolescence Education *
- AED 437/438: Methods of Teaching Foreign Languages in Middle/Jr. and High Schools I and II
- AED 439: Student Teaching: Adolescence Education – Foreign Languages **

* Required prior to AED 437 and 438
** Requirements for student teaching: 2.5 grade point average in required professional course work; 2.7 grade point average in major course work; 24 credit hours of SPA courses, grade of B or better in FL M methods block; passing score on LAST. Grade point averages are figured with all major and/or professional courses taken to date, even if not required prior to student teaching.

+ Spanish adolescence education majors are also eligible for French K-6 extension by taking ICC 324: Foreign Languages for the Elementary School.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Spanish [SPA]

Students develop oral and written Spanish language and culture skills that, combined with preparation in related disciplines, lead to a wide variety of career options.

A. Required Courses: 15 credit hours
- SPA 305: Spanish Conversation and Composition
- SPA 306: Advanced Spanish Conversation
- SPA 307: Advanced Spanish Grammar
- SPA 308: Advanced Spanish Composition
- SPA 318: Spanish Peninsular Civilization (GE 3) or SPA 319: Latin American Civilization (GE 3)
- One Spanish course at 400-level (3 cr. hr.)
- Elective courses in Spanish at 300-level or above (12 cr. hr.)

B. Core Professional Education Courses: 41-42 cr. hr.

CAREER POTENTIAL
- International trade
- International communications
- Diplomacy, intelligence and law enforcement
- Tourism and hospitality
- Social services
- Bilingual services
- Graduate work

A. Required Courses: 15 credit hours
- SPA 305: Spanish Conversation and Composition
- SPA 306: Advanced Spanish Conversation
- SPA 307: Advanced Spanish Grammar
- SPA 308: Advanced Spanish Composition
- SPA 318: Spanish Peninsular Civilization (GE 3) or SPA 319: Latin American Civilization (GE 3)

B. One Spanish course at 400-level (3 cr. hr.)
C. Elective courses in Spanish at 300-level or above (12 cr. hr.)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Minor in Spanish [SPA]

Eighteen credit hours in courses numbered 300 or above are required. Up to 15 credit hours in any semester of study abroad in Spanish in an accredited university program may count toward fulfillment of the requirement.

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18
Major in Spanish with a concentration in International Business: Mexico [SPA/IBMX]

Students study international business at the Centro Bilingüe in Cuernavaca, Mexico, during their junior and senior years.

CAREER POTENTIAL
• International trade
• International banking

A. Required Courses at Cortland: 30 credit hours
   SPA 305: Spanish Conversation and Composition
   SPA 306: Advanced Spanish Conversation
   SPA 307: Advanced Spanish Grammar
   SPA 308: Advanced Spanish Composition
   ECO 105: Political Economy and Social Thought
   ECO 110: Principles of Macroeconomics
   SPA 318: Spanish Peninsular Civilization (GE 3)
   or SPA 319: Latin American Civilization
   ECO 111: Principles of Microeconomics
   ECO 221: Economic Statistics
   SPA 320: Spanish for the Professions

B. Required Courses in Cuernavaca, Mexico: 62 credit hours
   1103: Math I
   1105: Computer Science 1 (4 cr. hr.)
   1207: Sociology of Administration
   2420: Introduction to Accounting
   2419: Introduction to Administration
   2421: Introduction to Law
   3425: Financial Administration
   3526: Accounting
   3527: Legal Issues in Marketing
   3528: International Economy
   4739: Customs Law
   Internship (15 cr. hr.)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Example of the B.A. in Adolescence Education: Spanish (7-12) over four years

Courses do not necessarily need to be taken in the sequence that appears below. Most students choose to complete some of their requirements through study abroad.

First Year

Fall
CPN 100 or 102
GE 1
SPY 101
Foreign language

Second Year

Fall
CPN 101 or 103
SPA 305
GE 5
GE 8a
PSY 232

Third Year

Fall
SPA 318 or 319 (GE 3)
AED 391
HLH 110
SPA 300-level
EDU 471
Free elective/minor (1 cr. hr.)

Fourth Year

Fall
SPA 320
AED 437 (methods block)
AED 438 (methods block)
Free elective/minor
Free elective/minor (WI)

Example of the B.A. in Mexican History and Literature [SPA/MXHL]

Students study Mexican history and literature at the Centro Bilingüe in Cuernavaca, Mexico, during their junior and senior years.

CAREER POTENTIAL
• Nongovernmental organizations
• Tourism and hospitality
• International communications
• Bilingual services
• Diplomacy, intelligence and law enforcement

A. Required Courses at Cortland: 15 credit hours
   SPA 305: Spanish Conversation and Composition
   SPA 306: Advanced Spanish Conversation
   SPA 307: Advanced Spanish Grammar
   SPA 308: Advanced Spanish Composition
   SPA 318: Spanish Peninsular Civilization (GE 3)
   or SPA 319: Latin American Civilization
   ECO 105: Political Economy and Social Thought
   ECO 110: Principles of Macroeconomics
   ECO 221: Economic Statistics

B. Required Courses in Cuernavaca, Mexico: 60 credit hours
   1102: Syntax I
   1103: WS Reading and Comprehension
   1105: Research Methods
   1208: Syntax II
   1211: Computer Science I (4 cr. hr.)
   2315: Translation of Written Texts
   2421: Communication Theories
   2422: Study of Dialects
   2423: WS Oral and Written Expression
   2317: Computer Science II (4 cr. hr.)
   3527: Mexican Literature GE 6 (4 cr. hr.)
   3528: Hispano-American Geography
   3529: Mexican History
   004: Literary Investigations
   3633: Art History
   4738: History of the Colonization of Americas (4 cr. hr.)
   4739: Pre-colonial Latin-American History (4 cr. hr.)
   4841: Analytical Thinking (4 cr. hr.)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Example of the B.A. in Adolescence Education: Spanish (7-12) over four years

Courses do not necessarily need to be taken in the sequence that appears below. Most students choose to complete some of their requirements through study abroad.

First Year

Fall
CPN 100 or 102
GE 1
SPY 101
Foreign language

Second Year

Fall
CPN 101 or 103
SPA 305
GE 5
GE 8a
PSY 232

Third Year

Fall
SPA 318 or 319 (GE 3)
AED 391
HLH 110
SPA 300-level
EDU 471
Free elective/minor (1 cr. hr.)

Fourth Year

Fall
SPA 320
AED 437 (methods block)
AED 438 (methods block)
Free elective/minor
Free elective/minor (WI)
International Communications and Culture

COURSE DESCRIPTIONS

General Courses

ICC 129, 229, 329, 429: Special Topics in International Communications and Culture
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

ICC 201: Introduction to the Literature of U.S. Latinos
(O) Selected works of drama, fiction and poetry by U.S. authors of Latin American heritage, written primarily in English. Some knowledge of Spanish helpful, but not necessary. Prerequisite: CPN 101 or 103. (3 cr. hr.)□

ICC 324: Foreign Languages For The Elementary School
(O) Theory, methodology, materials, classroom management and curriculum development for teaching foreign languages at the elementary school level (FLES). In-school practicum component included. Approved by NYSED for FLES certification. Prerequisite: Any 300-level FRE or SPA course. (3 cr. hr.)

ICC 325: Foreign Language Practicum in the Elementary Classroom
(O) Opportunity for advanced language students to present weekly foreign language lessons to elementary school pupils. In addition, weekly group meeting with course instructor. May be repeated for up to four credits in any one language. Prerequisite: ICC 324. (1 cr. hr.)

ICC 353: Introduction to Romance Linguistics
(O) Introduction to theoretical and descriptive linguistics for Romance languages: phonetics and phonology, morphology, semantics, syntax and pragmatics. (3 cr. hr.)

ICC 523: Integrating Technology in the Foreign Language Classroom
(C) Focus on learning how to use communications technologies and develop related foreign language materials with an emphasis on pedagogically sound integration of these technologies and materials in the foreign language curriculum. Technologies to be explored include: presentation software, interactive multimedia, the World Wide Web and real-time communication. Prerequisite: Graduate status or consent of department. (3 cr. hr.)

Related Education Courses

AED 323: Seminar for Field Observation
(C) Seminar for field observation in adolescence education (French and Spanish). Seminar-based course to provide a variety of field experiences for preservice teachers. Observations and field reports from secondary classroom experiences required. S, U grades are assigned. Prerequisites: Admission to the adolescence education program and grade point average consistent with “good standing” status — not below 2.5. (1 cr. hr.)

AED 391: Introduction to Adolescence Education
(A) Students will develop a coherent and comprehensive personal educational philosophy; analyze the role of education and teachers in society; demonstrate an understanding of teacher certification standards and requirements; evaluate teaching, lesson planning and implementation and cooperative skills; and develop a portfolio. The course includes 25 hours of field observation/teaching experience. (3 cr. hr.)

AED 437: Methods of Teaching Foreign Languages in Middle/Junior and High Schools I
(A) Prerequisites: PSY 101, and PSY 232 or 332 and AED 391 or EDU 391 (required for adolescence education majors) or INT 270. Twenty-four hours of study in the language at 300 level or above. Must be taken concurrently with AED 438. Student must receive a grade of B or better in this course as one requirement of eligibility for student teaching. (3 cr. hr.)

AED 438: Methods of Teaching Foreign Languages in Middle/Junior and High Schools II
(A) Prerequisites: PSY 101, and PSY 232 or 332 and AED 391 or EDU 391 (required for adolescence education majors) or INT 270. Twenty-four hours of study in the language at 300 level or above. Must be taken concurrently with AED 437. Student must receive a grade of B or better in this course as one requirement of eligibility for student teaching. (3 cr. hr.)

AED 439: Student Teaching: Adolescence Education - Foreign Languages
(A) Prerequisites: AED 437 and 438. Twenty-four hours of study in the language at 300 level or above. Consent of department based on language proficiency. See major department for eligibility criteria. S, U grades are assigned. (14 cr. hr.)

EDU 449: Literacy in the Middle and Secondary School
(F) Methods, materials and assessment for fostering literacy at the middle and secondary levels. (3 cr. hr.)

EDU 471: Foundations of Modern Education
(A) Social, historical, philosophical. (3 cr. hr.)□

American Sign Language Courses

ASL 101: Beginning American Sign Language I
(B) Introduction to the study of American Sign Language (ASL), including grammar and syntax, basic vocabulary and appropriate protocol when using the language. Emphasis on developing communication strategies in ASL and on the configuration and culture of the deaf community. (4 cr. hr.)

ASL 102: Beginning American Sign Language II
(B) Continuation of work begun in ASL 101. Prerequisite: ASL 101. (3 cr. hr.)

Chinese Courses

CHI 101: Beginning Chinese I
(F) Introduction to the skills of listening, reading, speaking and writing, with exposure to Chinese culture. Emphasis on developing communicative strategies in Chinese. (3 cr. hr.)□

CHI 102: Beginning Chinese II
(S) Continuation of work begun in CHI 101. Prerequisite: CHI 101. (3 cr. hr.)□
CHI 202: Intermediate Chinese II
(S) Continuation of work undertaken in Intermediate Chinese I. Prerequisite: CHI 201 or equivalent. (3 cr. hr.) ■

English as a Second Language Courses

ESL 101: English as a Second Language I
(B) Introduction for non-native English speakers designed to further develop and strengthen academic English skills including listening, speaking, reading, writing and study skills. Prerequisite: Consent of department. (3 cr. hr.) ■

ESL 102: English as a Second Language II
(B) Continuation of work done in ESL 101. Prerequisite: ESL 101. (3 cr. hr.)

Foreign Literature in English Translation

Note: The courses listed below do not require knowledge of a foreign language.

FLT 299: Foreign Literature in Translation
(O) Analysis of selected foreign-language literature in English translation. May be repeated as subtitle changes. Prerequisite: CPN 100 or 102. (3 cr. hr.) ■

FLT 493: Foreign Films in Translation
(O) Analysis of translated texts of 12 films. Critical works on these films, subsequent viewing of films. Subtitles vary. Also listed as CIN 493. (3 cr. hr.) ■

French Courses

FRE 101: Beginning French I
(A) Introduction to the skills of listening, reading, speaking and writing, with exposure to French and Francophone culture. Emphasis on developing communicative strategies in French. (4 cr. hr.) ■

FRE 102: Beginning French II
(A) Continuation of work begun in FRE 101. Prerequisite: FRE 101 (3 cr. hr.) ■

FRE 129, 229, 329, 429, 529: Special Topics in French
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

FRE 201: Intermediate French I
(A) Continued development of the skills of listening, reading, speaking and writing with emphasis on developing communicative strategies at the intermediate level. Expanding cultural knowledge with exposure to literature. Prerequisite: FRE 102. (3 cr. hr.) ■

FRE 202: Intermediate French II
(A) Continuation of work undertaken at the intermediate level in FRE 201. Prerequisite: FRE 201. (3 cr. hr.) ■

FRE 205: French Conversation and Composition
(C) Development of increased listening, speaking, reading and writing ability in French through conversational activities and role-playing. Acquisition of survival skills, tools for expressing opinions and emotions, and expanded vocabulary. Grammar review based on individual needs apparent in student writings. Prerequisite: FRE 202. (3 cr. hr.) ■

FRE 307: French Through the Media
(C) Study of the changing image of French society as portrayed in a variety of media (films, the World Wide Web, television, the press). Emphasis on oral expression, listening comprehension and vocabulary expansion. Grammar review undertaken on an individual basis, through students' writing. Prerequisite: FRE 202. (3 cr. hr.) ■

FRE 309: Grammatical Structure of French
(C) Morphology, grammar and syntax of present-day French, oral and written. Prerequisite: FRE 202. (3 cr. hr.) ■

FRE 310: Pratique de la Lecture
(C) Techniques of close reading, including procedures used in explication de texte. Practice in written French through compositions and journal-writing. Prerequisite: FRE 202. (3 cr. hr.) ■

FRE 311: Francophone Literatures
(O) Novels, poetry and drama in French from Canada, Africa, the French Antilles, Vietnam, etc. (places other than continental France). Introduction to the study of genre using Francophone literature as texts. Prerequisite: FRE 202. (3 cr. hr.) ■

FRE 312: La Pratique de l'Écriture
(O) Extensive writing in French on a wide range of topics explored through a variety of sample texts including electronic resources such as online government documents, radio and television materials, and various other literary and nonliterary texts, both current and historical. Discussions and written assignments submitted and evaluated in French. Emphasis on clarity of expression, attention to various styles of writing (descriptive, expository, persuasive, narrative, etc.) Prerequisite: FRE 202. (3 cr. hr.) ■

FRE 315: Introduction to French Literature I
(O) Survey of literary genres, representative works: medieval period to 1700. Prerequisite: FRE 202. (3 cr. hr.) ■

FRE 316: Introduction to French Literature II
(S) From 1700 to modern times. Prerequisite: FRE 202. (3 cr. hr.) ■

FRE 318: French Civilization
(C) Modern French society, culture. Readings, discussion in French. Subtitles specify emphasis on historical background or specific contemporary topics. May be repeated as subtitle changes. Prerequisite: FRE 202. (3 cr. hr.) ■

FRE 320: French and Careers
(C) Development of technical language skills for effective communication in various fields, using authentic materials drawn from print and electronic media. Role-playing and written assignments providing practice in everyday situations encountered in the tourism industry, translation and interpreting, the medical profession, banking, the business world. Prerequisites: FRE 202. (3 cr. hr.) ■

FRE 331: Practicum: Teaching Beginning French I
(O) Participation as supervised teaching assistant in all activities of Beginning French I; special responsibility for leading structured drills and conversation with small groups. Prerequisite: FRE 202. (2 cr. hr.)

FRE 332: Practicum: Teaching Beginning French II
(O) Participation as supervised teaching assistant in all activities of Beginning French II; special responsibility for leading structured drills and conversation with small groups. Prerequisite: FRE 202. (2 cr. hr.)
FRE 333: Practicum: Teaching Intermediate French I
(A) Participation as supervising teaching assistant in all activities of Intermediate French I; special responsibility for leading structured drills and conversation with small groups. Prerequisite: FRE 305, consent of instructor. (2 cr. hr.)

FRE 334: Practicum: Teaching Intermediate French II
(A) Participation as supervising teaching assistant in all activities of Intermediate French II; special responsibility for leading structured drills and conversation with small groups. Prerequisite: FRE 305, consent of instructor. (2 cr. hr.)

FRE 407: Commercial French
(O) Vocabulary and forms of French commercial usage. Enrolled students may register to take the exam for the certificate for proficiency in commercial French offered by the Chambre de Commerce et d'Industrie de Paris. Prerequisite: One 300-level French course, 305 or above. (3 cr. hr.)

FRE 413: French Literature of the Seventeenth Century
(O) Descartes, Corneille, Moliere, Racine, Pascal, La Rochefoucauld, according to subtitle. May be repeated as subtitle changes. Prerequisite: FRE 315 or 316. (3 cr. hr.)

FRE 415: French Literature of the Eighteenth Century
(O) Literature of the Enlightenment. Voltaire, Rousseau, Montesquieu or Diderot; the Encyclopedists, La Nouvelle Héloïse, according to subtitle. May be repeated as subtitle changes. Prerequisite: FRE 315 or 316. (3 cr. hr.)

FRE 417: Literature of the Nineteenth Century
(O) Romanticism, realism, symbolism, naturalism. Novel from 1815 to 1850, novel from 1850 to 1900, poetry of Romantic period, symbolist poetry, drama and opera after 1850, according to subtitle. May be repeated as subtitle changes. Prerequisite: FRE 315 or 316. (3 cr. hr.)

FRE 419: Literature of the Twentieth Century
(O) Selected readings. Subtitles indicate area of study, which may be a genre, a period, a literary or philosophical movement, or a theme. May be repeated as subtitle changes. Prerequisite: FRE 315 or 316. (3 cr. hr.)

FRE 423: Themes in Literature
(O) Themes as basis for study of several works or authors, e.g., women, love, society, revolution. For students with knowledge of French, although subject may be comparative in nature if indicated by subtitle. May be repeated as subtitle changes. Prerequisite: FRE 315 or 316. (3 cr. hr.)

FRE 499: Senior Seminar
(S) Drawing on broad background senior majors have acquired in French literature, civilization and language, the seminar promotes synthetic and analytic reflection on a specific theoretical topic, e.g., Francophone culture in the Western (or non-Western) world, recent French literary theory, literature in relation to the other arts. Substantial writing in French is required. Required for French majors, open to SFR or ASF majors and FRE minors. Prerequisites: Senior standing. (3 cr. hr.)

FRE 503: Advanced Grammatical Structure of French
(O) Advanced work in French stylistics; special problems in morphology, grammar and syntax of present-day French, oral and written. (3 cr. hr.)

FRE 504: Teaching French Civilization
(O) France and the modern Francophone world. In-depth study of various aspects of French and Francophone civilization, with particular focus on the development and integration of materials for use in the public school classroom. (3 cr. hr.)

FRE 505: Techniques of Translating French
(O) Career-oriented translation training: film dubbing, simultaneous translation, commercial translation, etc. May be repeated as subtitle changes. (3 cr. hr.)

FRE 506: Teaching French Literature
(O) In-depth study of selected texts from French and Francophone literature, with particular focus on the development and integration of materials for use in the public school classroom. Prerequisite: Two literature courses at the 300 or 400 level. (3 cr. hr.)

FRE 515: Seminar in Literature
(O) Topics defined by subtitle. Knowledge of French required. Major texts read in French even when topic in comparative literature is presented. (3 cr. hr.)

FRE 517: Independent Study
(O) Individual supervised study. May be repeated; no more than six semester hours may be credited toward degree. Prerequisite: Two semesters of 300-level courses, consent of department. (1-3 cr. hr.)

German Courses

GER 101: Beginning German I
(F) Introduction to the skills of listening, reading, speaking and writing, with exposure to German culture. Emphasis on developing communicative strategies in German. (4 cr. hr.)

GER 102: Beginning German II
(S) Continuation of work begun in GER 101. Prerequisite: GER 101 or equivalent. (3 cr. hr.)

GER 129, 229, 329, 429: Special Topics in German
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

GER 201: Intermediate German I
(F) Continued development of the skills of listening, reading, speaking and writing with emphasis on developing communicative strategies at the intermediate level. Expanding cultural knowledge with exposure to literature. Prerequisite: GER 102 or equivalent. (3 cr. hr.)

GER 202: Intermediate German II
(S) Continuation of work undertaken at the intermediate level in GER 201. Prerequisite: GER 201 or equivalent. (3 cr. hr.)

GER 517: Independent Study
(O) Individual supervised study. May be repeated; no more than six hours may be credited toward degree. Prerequisite: Two semesters of 300-level courses and consent of department. (2-3 cr. hr.)
Spanish Courses

SPA 101: Beginning Spanish I
(A) Introduction to the skills of listening, reading, speaking and writing, with exposure to Hispanic culture. Emphasis on developing communicative strategies in Spanish. (4 cr. hr.) ■

SPA 102: Beginning Spanish II
(A) Continuation of work begun in SPA 101. Prerequisite: SPA 101 or equivalent. (3 cr. hr.) ■

SPA 129, 229, 329, 429, 529: Special Topics in Spanish
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.) ■

SPA 201: Intermediate Spanish I
(A) Continuous development of the skills of listening, reading, speaking, and writing, with emphasis on developing communicative strategies at the intermediate level. Expanding cultural knowledge with exposure to literature. Prerequisite: SPA 102 or equivalent. (3 cr. hr.) ■

SPA 202: Intermediate Spanish II
(A) Continuation of work undertaken at the intermediate level in SPA 201. Prerequisite: SPA 201 or equivalent. (3 cr. hr.) ■

SPA 301: Spanish Language Study in Mexico
(W) Study in Cuernavaca, Mexico, during the Winter Session. The course is designed for students who have completed the intermediate level of Spanish. Concentration on grammar, composition and comprehension. May be repeated once with special permission of department. Prerequisite: SPA 202, consent of department. (3 cr. hr.) ■

SPA 305: Spanish Conversation and Composition
(A) Oral, written Spanish beyond intermediate level. Prerequisite: SPA 202. (3 cr. hr.) ■

SPA 306: Advanced Spanish Conversation
(A) Advanced conversational practice, discussions, reports. Prerequisite: SPA 305. (3 cr. hr.) ■

SPA 307: Advanced Spanish Grammar
(A) Advanced course in syntax, composition: subtle nuances, exceptions, current idiomatic turns of the language, both oral and written. Prerequisite: SPA 202. (3 cr. hr.) ■

SPA 308: Advanced Spanish Composition
(A) Written Spanish beyond intermediate level. Emphasis on advanced structure, idiomatic expressions by means of original composition. Prerequisite: SPA 305 or semester in Spain. (3 cr. hr.) ■

SPA 313: Survey of Spanish-American Literature
(O) From colonial times to the present. Readings, writing, discussion of principal authors, works. Prerequisite: SPA 305. (3 cr. hr.) ■

SPA 315: Survey of Spanish Literature
(O) Representative works from medieval period to the present. Readings, writings, discussions, reports. Prerequisite: SPA 305. (3 cr. hr.) ■

SPA 317: Literary Types in Spanish
(O) Introduction to analysis of literature by studying various genres (prose, poetry, drama) according to subtitle. May be repeated as subtitle changes. Prerequisite: SPA 202. (3 cr. hr.) ■

SPA 318: Spanish Peninsular Civilization
(B) Extensive readings on social, historical, literary, economic development in Spain. Prerequisite: SPA 305. (3 cr. hr.) ■

SPA 319: Latin American Civilization
(B) Extensive readings on social, historical, literary, economic development in Latin America. Prerequisite: SPA 305. (3 cr. hr.) ■

SPA 320: Spanish for the Professions
(C) Basic course for the acquisition of technical language skills for effective communication in everyday situations related to the practice of law enforcement, education, social work, health care and welfare. Prerequisite: SPA 305. (3 cr. hr.) ■

SPA 330: Música de la España Contemporánea
(O) Overview of contemporary Spanish society through study of various genres of popular music: cantautor, flamenco, new wave, heavy metal, fusion. Prerequisite SPA 305. (3 cr. hr.) ■

SPA 355: Spanish Pronunciation and Phonetics
(O) Detailed study of a standard Spanish sound system and dialectal differences among Spanish-speaking countries. Practice and investigation of Spanish sounds in context. (3 cr. hr.) ■

SPA 411: The Golden Age of Spanish Literature I
(O) Extensive readings in literature of 16th century: Renaissance poetry, prose or theatre according to subtitle. May be repeated as subtitle changes. Prerequisite: SPA 308. (3 cr. hr.) ■

SPA 417: Spanish Literature of the Nineteenth Century
(O) Nineteenth century: Romanticism; Realism; Naturalism. Subtitles indicate period to be studied. May be repeated as subtitle changes. Prerequisite: SPA 308. (3 cr. hr.) ■

SPA 419: Literature of Twentieth Century Spain
(O) Subtitles indicate topics: the generation of ’98; drama; prose; poetry. May be repeated as subtitle changes. Prerequisite: SPA 308. (3 cr. hr.) ■

SPA 421: Spanish Literature of the Medieval Period
(O) Middle Ages prose, lyric and narrative poetry, according to subtitle. May be repeated as subtitle changes. Prerequisite: SPA 308. (3 cr. hr.) ■

SPA 422: Spanish-American Literature
(O) Subtitles indicate topics: novel, short fiction, drama, poetry, la novela del dictador, women in literature or other titles may be offered. May be repeated as subtitle changes. Prerequisite: SPA 308. (3 cr. hr.) ■

SPA 423: Themes in Literature
(O) Recurring themes appearing in works of one or several authors. Knowledge of Spanish necessary although subject studied may be compared with other literatures in translation. May be repeated as subtitle changes. Prerequisite: SPA 308. (3 cr. hr.) ■

SPA 503: The Grammatical Structure of Spanish
(O) Phonology, morphology, syntax of present day standard Spanish. Prerequisite: SPA 306. (3 cr. hr.) ■

SPA 517: Independent Study
(O) Individual supervised study. May be repeated; no more than six credit hours may be credited toward degree. Prerequisite: Two semesters of 300-level courses. (1-3 cr. hr.)
International Studies
INTERDISCIPLINARY PROGRAM

SCHOOL
Arts and Sciences

FACULTY
Sharon R. Steadman (Coordinator)

PROGRAMS OFFERED
Bachelor of Arts in International Studies
Bachelor of Arts in Adolescence Education: Social Studies and International Studies (7-12)

MAJORS OFFERED
International Studies
Adolescence Education: Social Studies and International Studies (7-12)

CONCENTRATIONS OFFERED
Area Concentrations: Africa, Asia and Pacific Basin, Europe, Latin America
Disciplinary Concentrations: Culture and Globalism, Geography, Global Economic Systems, Global Political Systems, Historical Development, International Health, Women's Studies

MINORS OFFERED
International Studies

DESCRIPTION
The international studies (IST) major is a unique global studies approach to understanding the international world in the context of a liberal arts education. The interdisciplinary nature of the major provides students with knowledge of the historic and contemporary development of the international system as well as the opportunity to choose the direction of their study of particular aspects of the global social, economic and political structure from disciplinary or geographical vantage points.

Students also complete the IST major with a strong foreign language background, enabling them to begin careers in the international world immediately upon graduation.

SPECIAL FEATURES
- Wide-ranging study-abroad opportunities
- Opportunities for internship experience
- Independent study and collaborative research with faculty members
- Involvement in the UniPlanet international Internet news magazine

CAREER POTENTIAL
- International business positions
- International law practice
- World Bank positions
- United Nations translators/posts
- World Trade Organization posts
- U.S. government/State Department positions
- Non-Government corporation and organization positions

Requirements
1. Degree Requirements listed on pages 36-41 of this catalog apply to the following majors.

2. Liberal Arts Requirements: 90 credit hours

The IST major's 36 credit hours comprise a set of five core courses and a seven-course concentration chosen from the list below. The core courses orient the student to the historical processes and contemporary economic issues of the modern international system. The concentration may be geographical in nature, or be focused within a particular discipline. Alternatively, the student may choose an individualized concentration which will be interdisciplinary in nature, with course work defined by a conceptual theme or problem, or with a geographical focus not presently offered. The individualized concentration may be drawn from throughout the College's course offerings.

Note: Some courses in concentrations may have prerequisites not listed. Waivers of requirements and approval for substitution of courses may be granted only by the coordinator with the approval of the associate dean. Courses taken in a concentration may not count for a minor in the same field (e.g., a Latin American concentration cannot be combined with a Latin American minor). In order to satisfy major requirements, students may take topic courses offered in individual departments, arrange for an independent study, or complete up to six credit hours of an internship (CPV 400), with approval of the advisor, the international studies coordinator and the associate dean.

Students majoring in international studies are required to demonstrate additional foreign language proficiency beyond the regular College language requirement. The IST language requirement may be fulfilled in one of the following ways:

A. Successfully completing 12 hours of course work in a foreign language at the 300-level or above.
B. Successfully completing one semester of study abroad in the target language; course work or other programs of study must be in the target language. Courses or other study conducted in English will not be accepted in fulfillment of this requirement.
C. Satisfying the College foreign language requirement (i.e. 13 credit hours or its equivalent) in a second foreign language. Students whose native language is not English may be exempt from the language proficiency requirement.
D. Earning a rating of Intermediate High on the American Council of Teachers of Foreign Language/Educational Testing Service academic scale, as determined by an oral interview with a qualified tester. Students should contact the International Communications and Culture Department for additional details.

INTERNATIONAL STUDIES CORE COURSES

IST 400: Seminar: Themes in International Studies
HIS 101: The World since 1500
ECO 105: Political Economy and Social Thought
Major in International Studies with an area concentration in Africa [IST/AFRI]
Provides an understanding of how African peoples and cultures have been affected, over time, by contacts with a much wider world.
A. Required Courses: IST Core: 15 credit hours
B. Elective Courses: 21 credit hours chosen from the following:
   - AN T 304: Peoples of Africa
   - ENG 365: Third World Literature
   - FRE 311: Francophone Literatures
   - GRY 485: Africa, South of the Sahara
   - HIS 225: Introduction to Africa
   - HIS 321: Africa, Human Origins to 1800
   - HIS 322: Modern Africa, 1800-Present
   - HIS 431: South Africa
   - HIS 530: Issues in African-American History
   - POL 290: Introduction to African Politics and Society

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in International Studies with an area concentration in Asia and Pacific Basin [IST/ASIA]
Provides a broad understanding of the diverse societies and peoples of Asia, which constitute more than half of the world's population.
A. Required Courses: IST Core: 15 credit hours
B. Elective Courses: 21 credit hours chosen from the following:
   - AN T 310: Peoples of South and Southeast Asia
   - AN T 312: Peoples of the Middle East
   - AN T 330: Religions of Asia
   - ECO 313: Economic Development of Asia
   - HIS 383: Chinese Civilization
   - HIS 384: Modern China
   - HIS 385: History of Japan
   - HIS 386: Modern Pacific Asia
   - HIS 435: East Asian-American Relations
   - POL 262: Comparative Politics: Asia
   - POL 376: Asian Political Thought
   - POL 454: International Politics in Asia
   - POL 462: Political Culture and Behavior in Asian Societies

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in International Studies with an area concentration in Europe [IST/EURO]
Provides a broad understanding of the forces that have made modern Europe and are shaping its culture, its people, and its politics in the post-Cold War era.
A. Required Courses: IST Core: 15 credit hours
B. Arts and Literature elective courses: 3 credit hours chosen from the following:
   - ATH 122: Art in the Modern World
   - ENG 457: Modern Irish Fiction
   - ENG 471: The Modern English Novel
   - A course in German, French, or Spanish Literature (e.g., FRE 419, SPA 419 or a German literature course taken abroad) to be chosen in consultation with the student's advisor.
C. Economics, Geography and Political Science elective courses: 6 credit hours chosen from the following:
   - ECO 304: Comparative Economic Systems
   - GRY 484: Geography of Europe
   - POL 260: Comparative Politics: Europe
   - POL 461: Europe Today: People and Politics
   - POL 465: Contemporary British Politics and Government

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in International Studies with an area concentration in Latin America [IST/LAT]
Through study of the culture, economic systems and political science of this area students gain exposure to a major player in the international scene, as well as regions within the United States.
A. Required Courses: IST Core: 15 credit hours
B. Elective Courses: 21 credit hours chosen from the following:
   - AN T 310: Peoples of Latin America
   - ECO 312: Economic Development in Latin America
   - FLT 399: Foreign Literature in Translation
   - GRY 482: Central America and the Caribbean
   - HIS 325: Colonial Latin America
   - HIS 326: Modern Latin America
   - POL 264: Comparative Politics: Latin America
   - POL 455: International Politics in Latin America
   - POL 463: Political Culture and Behavior in Latin American Societies
   - SPA 313: Survey of Spanish-American Literature
   - SPA 318: Hispanic Civilization
   - SPA 423: Themes in Literature

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in International Studies with a disciplinary concentration in Culture and Globalism [IST/CGLO]
Students gain insight into the cultural institutions of global cultures in preparation to encounter the global issues facing present-day indigenous and migrant populations.
A. Required Courses: IST Core: 15 credit hours
B. Elective Courses: 9 credit hours chosen from the following:
   - AN T 230: Prejudice and Discrimination
   - AN T 315: Development Anthropology
   - AN T 352: U.S. Ethnic Identity and Conflict
   - AN T 404: Applied Anthropology
   - AN T 492: Anthropological Theory
   - ANT 302: Native American Ethnology
   - HIS 384: Modern China
   - HIS 385: History of Japan
   - HIS 386: Modern Pacific Asia
   - HIS 435: East Asian-American Relations
   - POL 290: Introduction to African Politics and Society
   - POL 376: Asian Political Thought
   - POL 454: International Politics in Asia
   - POL 462: Political Culture and Behavior in Asian Societies
   - SPA 313: Survey of Spanish-American Literature
   - SPA 318: Hispanic Civilization
   - SPA 423: Themes in Literature

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

...
D. Elective Courses: 6 credit hours chosen from the following:
   ANT 234: Anthropology of Gender
   ANT 300: Human Evolution and Survival
   ANT 306: Folk Societies and Lifestyles
   ANT 350: Language in Society and Culture
   ANT 410: Cultural Ecology
   ANT 493: Anthropological Methods

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in International Studies with a disciplinary concentration in Global Economic Systems [IST/GES]
Students will gain a strong background in economic theory and a clear understanding of key economic trends, issues and policies as they relate to globalization and the changing world economy.

A. Required Courses: IST Core: 15 credit hours

B. Elective Courses: 21 credit hours chosen from the following:
   ECO 110: Principles of Macroeconomics
   ECO 111: Principles of Microeconomics
   ECO 300: Macroeconomic Theory
   ECO 301: Economics of the Firm
   ECO 304: Comparative Economic Systems
   ECO 306: Comparative Approaches in Political Economy
   ECO 307: Marxist Economics
   ECO 311: Economic Development
   ECO 312: Development of Latin America
   ECO 313: Economic Development of Asia
   ECO 325: Political Economy of Women
   ECO 326: Political Economy of Race and Class
   ECO 335: Resource and Environmental Economics
   ECO 383: Labor Economics
   ECO 441: International Trade
   ECO 443: International Finance

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in International Studies with a disciplinary concentration in Historical Development [IST/HDEV]
Focusing on the last 500 years, this concentration traces the historical basis of the modern world system and then allows students to focus on particular regions and historical topics.

A. Required Courses: IST Core: 15 credit hours

B. Required Course: 3 credit hours:
   HIS 100: The World to 1500

C. Elective Courses: 9 credit hours chosen from the following:
   HIS 225: Introduction to Africa
   HIS 321: Africa, Human Origins to 1800
   HIS 322: Modern Africa, 1800-Present
   HIS 325: Colonial Latin America
   HIS 326: Modern Latin America
   HIS 384: Modern China
   HIS 385: History of Japan
   HIS 386: Modern Pacific Asia
   HIS 430: The Vietnam War
   HIS 431: South Africa
   HIS 435: East Asian-American Relations
   HIS 461: Modern Israel and the Arab-Israeli Conflict
   HIS 530: Issues in African-American History

D. Elective Courses: 9 credit hours chosen from the following:
   HIS 318: The History of Women in Modern Europe
   HIS 333: Modern Russia, 850-1894
   HIS 334: Russia, since 1894
   HIS 346: Renaissance and Reformation
   HIS 348: Europe since 1914
   HIS 363: Jews in the Modern World, 1789-1948
   HIS 441: Britain since 1688
   HIS 443: Ireland since 1660
   HIS 445: France, 1800-1945
   HIS 460: The Holocaust
   HIS 465: The Soviet Union, 1917-1953

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in International Studies with a disciplinary concentration in International Health [IST/IHLH]
Prepares the individual for an entry level position with international agencies that deal with international health, nutrition, development and relief issues.

A. Required Courses: IST Core: 15 credit hours

B. Required Courses: 15 credit hours:
   HLH 111: International Health and Culture
   HLH 203: Community Health
   HLH 220: Safety Education and Emergency Response
   HLH 323: Foods and Nutrition
   HLH 391: Epidemiology and Biostatistics

C. Elective Courses: 3 credit hours chosen from the following:
   BIO 102: Ecology and the Human Environment
   HLH 390: Environmental Health and Ecology
   HLH 392: Environmental Pollutants and Toxicology

D. Elective Courses: 3 credit hours chosen from the following:
   HLH 110: Personal and Community Health
   HLH 201: Health Problems of the Underserved
   HLH 360: Health Administration and Planning

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
Major in International Studies with a disciplinary concentration in Global Political Systems [IST/GPS]

Students gain an understanding of both the political life of areas of the world such as Latin America, Europe and Africa but also to the dynamics of international politics.

A. Required Courses: IST Core: 15 credit hours
B. Required Courses: 9 credit hours:
   POL 101: Introduction to World Politics
   POL 250: International Relations
   POL 362: Politics of Developing Nation States
C. Elective Courses: 6 credit hours chosen from the following:
   POL 160: Model European Union
   POL 260: Comparative Politics: Europe
   POL 262: Comparative Politics: Asia
   POL 264: Comparative Politics: Latin America
   POL 290: Introduction to African Politics and Society
D. Elective Courses: 6 credit hours chosen from the following:
   POL 129, 229, 329, 429, 529: Special Topics in Political Science (offered as topic, as appropriate, with advisor’s approval)
   POL 350: American Foreign Policy
   POL 376: Asian Political Thought
   POL 441: Comparative Public Policy
   POL 450: International Law
   POL 454: International Politics in Asia
   POL 455: International Politics in Latin America
   POL 456: International Politics in the Middle East
   POL 461: Europe Today: People and Politics
   POL 462: Political Culture and Behavior in Asian Societies
   POL 463: Political Culture and Behavior in Latin American Societies
   POL 465: Contemporary British Politics and Government

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Dual Major in Adolescence Education: Social Studies and International Studies (7-12) [SSA and IST]

Note: This program is currently undergoing curricular change. Check with the department for updates.

This program allows students who major in international studies to qualify for certification to teach adolescence education in social studies (grades 7-12). It combines a major in international studies with a professional semester that consists of professional preparation and student teaching.

A. Requirements for the international studies major (see above)
B. Professional Preparation: 44-68 credit hours
   (Including additional social science courses)
   HLH 199: Critical School Health Issues
   PSY 101: General Psychology I
   PSY 232: Adolescent Psychology
   PSY 332: Educational Psychology
   ECO 105: Political Economy and Social Thought
   GRY 425: Geography in the Classroom
   GRY 520: Maps in the Classroom
   GRY 480: United States
   POL 100: Introduction to American Government
   HIS 100 and 101 or HIS 110 and 111 and
   HIS 200 and 201 and 3 hours at the 300 level or above
   AED 310: Grammar and the Writing Process
   (pending approval) or
   EDU 449: Literacy in the Middle and Secondary School
   SHH 300: Normal Language Development
   PSY 350: Psychology of Language
   SSS 300: Introduction to Secondary Social Studies
   (A 100-hour field requirement is attached to this course)
C. Professional Semester: 18 credit hours
   SSS 301: Pre-Practice Teaching Seminar
   AED 400: Student Teaching
   SSS 303: Post-Practice Teaching Seminar

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 127

Minor in International Studies [IST]

A. Required courses: 9 credit hours:
   IST 400: Seminar: Themes in International Studies
B. Elective Courses: 9 credit hours:
   Foreign language beyond the 202 level: 3 credit hours
   Electives in either an area or a disciplinary concentration: 6 credit hours

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18
Example of the B.A. in International Studies over four years

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
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<tbody>
<tr>
<td>Fall</td>
<td></td>
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<tr>
<td>IST 200</td>
<td>Fall</td>
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<tr>
<td>ECO 105 (GE 1)</td>
<td>Foreign language</td>
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<td>CPN 100 or 102</td>
<td>GE course</td>
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<td>Spring</td>
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<td>IST 210</td>
<td>Foreign language</td>
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<td>CPN 101 or 103</td>
<td>IST concentration</td>
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Related Education Courses

AED 400: Student Teaching
(F) Full-time supervised social studies teaching in public schools for ten weeks (6 cr. hr.)

SSS 300: Introduction to Secondary Social Studies
(A) This course introduces students to unit and lesson planning, focuses on the history of American education as it relates to social studies, familiarizes students with the social studies learning standards and makes comparisons between middle school and high school teaching. Includes 100-hour field experience. (3 cr. hr.)

SSS 301: Pre-Practice Teaching Seminar
(F) Integrated study of a.) Introduction to Secondary Education; b.) Introduction to Methods of Teaching Social Studies; c.) Introduction to Contemporary Secondary School Issues; d.) Preparation for specific practice teaching assignment. S, U grades assigned. (11 cr. hr.)

SSS 303: Post-Practice Teaching Seminar
(F) Problem approach drawing upon experience of students during practice teaching. Designed to focus on contemporary educational issues, beginning the job search and application process, teaching and learning at the middle school level and exploring the history and philosophy of teaching. S, U grades assigned. (1 cr. hr.)

Related Education Courses

International Studies

COURSE DESCRIPTIONS

(F) Key ideas, themes and selected topics are examined and analyzed related to the historical development of the modern international system. Focus on the social, political and economic processes which combined to create the modern international system 1600-1900. Consideration of the historical bases of contemporary problems such as international inequality, role of the West in contributing to underdevelopment, international competition, war. (3 cr. hr.)

IST 129, 229, 329, 429, 529: Special Topics in International Studies
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

(S) Emphasis is on the historical processes that have in the 20th century created the modern international system. Focus on major historical, political, economic and social developments. Special emphasis on problems of development and underdevelopment, theories of development, key areas of the world, and selected world problems. IST majors are encouraged to take IST 200 first, when possible. (3 cr. hr.)

IST 300: Global Journalism
(A) Introduction to using Internet resources for research and writing of articles to be published in the Dragon Planet and other Internet locations. Instruction in constructing Web pages and Internet journalism. Prerequisite: CPN 101 or 103. (4 cr. hr.)

IST 310: Independent Study: Selected Topics
(O) Independent study in selected topics in international studies. (1-3 cr. hr.)

IST 400: Seminar: Themes in International Studies
(B) Culminating seminar for international studies majors; particular theme of theoretical and contemporary importance (e.g., world hunger, economic inequalities, state-building and its effects, North-South relationships) addressed. Readings and discussions will reflect various concentrations within international studies program. Seminar will stress multidisciplinary team approaches to major global problems. Prerequisite: Consent of international studies coordinator. (3 cr. hr.)
SUNY Cortland 2003-2004 Undergraduate Catalog

SCHOOL
Arts and Sciences

FACULTY
Henry Steck (Co-coordinator, Academics)
Position Vacant (Co-coordinator, Cultural Events)

MINOR OFFERED
Jewish Studies

DESCRIPTION
The Jewish studies minor is an interdisciplinary program focusing on the study of the Jewish people — their religion, history, literature and culture. The program seeks to enhance the student's understanding of the Jewish people and the variety of their cultural experiences while also furthering the College's mission to study and combat prejudice and discrimination. The minor is designed to complement a number of academic majors. Administration and advisement for this program are conducted by the Jewish Studies Committee of the Center for Multicultural and Gender Studies.

SPECIAL FEATURES
• Overseas program in Israel

Minor in Jewish Studies [JST]
The minor in Jewish studies consists of 18 hours nine hours in required courses and nine hours of electives. Relevant special topics courses in some departments may also be acceptable in addition to the specified courses below. With advisement from a Cortland Jewish studies advisor, students may complete all or part of the minor in an accredited summer, semester, or year academic program in Israel.

CAREER POTENTIAL
• Jewish educator
• Community outreach work
• Jewish community relations
• Multicultural affairs

A. Required Courses: 9 credit hours
JST 140: Basic Judaism
JST 361/HIS 361: Jews in the Ancient World
JST 363/HIS 363: Jews in the Modern World

B. Other: 9 hours from among the following. No more than six may be taken in history.
ANT 312: Peoples of the Middle East
JST 250/ENG 250: Introduction to Jewish Authors
JST 329: Special topics
JST 360: Directed Study
JST 362/HIS 362: Jews in the Middle Ages
JST 460/HIS 460: The Holocaust
JST 461/HIS 461: Modern Israel and the Arab-Israel Conflict
POL 456: International Politics of the Middle East
RLS 200: World Religions
SOC 352/ANT 352: U.S. Ethnic Identity and Conflict
SOC 475: Sociology of Religion

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18

Jewish Studies

INTERDISCIPLINARY MINOR

Jewish Studies COURSE DESCRIPTIONS

JST 129, 229, 329, 429, 529: Special Topics in Jewish Studies
(O) Selected topics in Jewish studies offered by faculty from different departments. Topics will vary from semester to semester. Prerequisite for JST 429 only: JST 140, 361, 362, 363, 460, HIS 361, 362, 363, or 460. (3 cr. hr.)

JST 140: Basic Judaism
(S) Overview of development of Judaism from its ancient roots to its modern forms. Main topics will include history of Judaism, major tenets, rituals, customs and contemporary issues. (3 cr. hr.)

JST 250: Introduction to Jewish Authors
(O) Introduction to Jewish themes in American literature and in translation from the Yiddish. Prerequisite: CPN 101 or 103. Also listed as ENG 250. (3 cr. hr.)

JST 350: Topics in Jewish Studies
(O) Selected topics in Jewish studies offered by faculty from different departments. Topics will vary from semester to semester. Prerequisite: JST 140 or any other Jewish studies course. (3 cr. hr.)

JST 360: Directed Study
(O) Directed individual study in selected areas of Jewish studies. Prerequisite: JST 140, 361, 362, 363, HIS 361, 362 or 363. (1-3 cr. hr.)

JST 361: Jews in the Ancient World
(C) Intellectual and political history of the Jewish people to the compilation of the Talmud in the third century. Prerequisite: JST 140, HIS 100, 101, 110, 111 or 150. Also listed as HIS 361. (3 cr. hr.)

JST 362: Jews in the Middle Ages
(C) History of the Jewish people from the third century to the Enlightenment. Prerequisite: JST 140, HIS 100, 101, 110, 111 or 150. Also listed as HIS 362. (3 cr. hr.)
JST 363: Jews in the Modern World
(C) European Jewry from the Enlightenment to the establishment of Israel as a state. Topics include: emancipation and assimilation; East European and Russian Jews to World War I; immigration to America; modern Israel; anti-Semitism and the Holocaust. Prerequisite: JST 140, HIS 100, 101, 110, 111, 150, 200 or 201. Also listed as HIS 363. (3 cr. hr.) ■

JST 460: The Holocaust
(C) Extermination of European Jews and millions of other Europeans during World War II studied in human and historical perspective. Course focuses on Nazi perpetrators' ideology of anti-Semitism and their machinery of destruction, the responses of the victims, and the action and inaction of the rest of the world. Prerequisite: HIS 100, 101, 110, 111, 150, IST 200, 210 or JST 140. Also listed as HIS 460. (3 cr. hr.) ■

Latin American Studies
INTERDISCIPLINARY MINOR

SCHOOL
Arts and Sciences

FA C U L T Y
German Zarate (Coordinator)

MINOR OFFERED
Latin American Studies

DESCRIPTION
SUNY Cortland’s Latin American studies minor is interdisciplinary. It is designed to complement many academic majors. Students choosing the minor will study the history and cultural production of Latinos and Latin Americans from the perspective of several disciplines.

Administration of this program and advisement of its students is provided by the Latin American Studies Committee, a subcommittee of the Center for Multicultural and Gender Studies.

SPECIAL FEATURES
• Internships
• Overseas opportunities

Minor in Latin American Studies [LLAS]

CAREER POTENTIAL
• Social services
• Education
• International communications
• Tourism
• Business — domestic and international

A. Required course: 3 credit hours:
SOC 352/ANT 352: U.S. Ethnic Identity and Conflict
(Prerequisite: SOC 150: Introduction to Sociology or ANT 102: Introduction to Cultural Anthropology)

B. Three credit hours from:
SPA 305: Spanish Conversation and Composition
SPA 306: Advanced Spanish Conversation
SPA 307: Advanced Spanish Grammar
SPA 308: Advanced Spanish Composition

C. Six credit hours from:
ANT 314: Peoples of Latin America
ECO 312: Economic Development of Latin America
GRY 482: Geography of Central America and the Caribbean
HIS 325: Colonial Latin America
HIS 326: Modern Latin America
ICC 201: Introduction to the Literature of U.S. Latinos
POL 264: Comparative Politics: Latin America
POL 455: International Politics in Latin America
ATH 324: Spanish and Spanish American Art
INT 300: Special Topics

D. Three credit hours from:
SPA 313: Survey of Spanish American Literature I or
SPA 315: Survey of Spanish Literature I or
SPA 318: Hispanic Civilization or
SPA 422: Contemporary Spanish American Literature

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 15
LITERACY

Literacy

DEPARTMENT

SCHOOL
Education

FACULTY
Dorothy Troike (Chair), Bill Buxton (Interim Chair, 2003-2004), Maureen Boyd, Sheila Cohen, Kathy Ferrito, Michele Irvin Gonzalez, Ellen Jampole, Brandi Mathers, Pamela Summers

PROGRAMS OFFERED
Master of Science in Education: Literacy Education

DESCRIPTION
The Literacy Department provides undergraduate course work for the following programs: Bachelor of Arts or Bachelor of Science in Childhood Education, Bachelor of Arts or Bachelor of Science in Early Childhood Education, Bachelor of Arts or Bachelor of Science in Early Childhood and Childhood Education, Bachelor of Science in Special Education/Childhood, and Bachelor of Arts in Adolescence Education.

Seniors in their final semesters of undergraduate study may request permission to register for courses at the 500 level for graduate credit. Students are cautioned that application to the graduate literacy program is competitive. Successful completion of literacy course work does not guarantee acceptance into the graduate literacy program.

LITERACY

COURSE DESCRIPTIONS

EDU 371: Teaching Elementary School Reading and Language Arts I
(A) Part I of integrated approach to teaching reading, writing, speaking and listening in elementary school. (3 cr. hr.)

EDU 372: Teaching Elementary School Reading and Language Arts II
(A) Part II of integrated approach to teaching reading, writing, speaking and listening in elementary school. Strategies for teaching special needs of children included. Prerequisite: EDU 371. (3 cr. hr.)

EDU 449: Literacy in the Middle and Secondary School
(F) Methods, materials and assessment for fostering literacy at the middle and secondary levels. (3 cr. hr.)

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
Mathematics

DEPARTMENT

SCHOOL
Arts and Sciences

FACULTY
R. Bruce Mattingly (Chair), Abolghassem Alemzadeh, Cristina Bacuta, Carol J. Bell, Cecile Dore, Daniel L. Driscoll, George F. Feissner, Ter-Jenq Huang, E. Paul Mosbo, Mahdi H. Rubaii

PROGRAMS OFFERED
Bachelor of Arts in Mathematics
Bachelor of Science in Mathematics
Bachelor of Arts in Adolescence Education: Mathematics (7-12)
Bachelor of Science in Adolescence Education: Mathematics (7-12)
Bachelor of Science in Adolescence Education: Physics and Mathematics (7-12)

MAJORS OFFERED
Mathematics
Adolescence Education: Mathematics (7-12)
Adolescence Education: Physics and Mathematics (7-12)

MINORS OFFERED
Mathematics

DESCRIPTION
The Mathematics Department offers programs for students interested in developing quantitative, logical reasoning and problem-solving skills in preparation for careers in business, government or industry, or for graduate study in mathematics. Students interested in teaching may choose a concentration leading to provisional certification in mathematics or joint certification in physics and mathematics for grades 7-12.

SPECIAL FEATURES
• Mathematics Club
• Mathematics Computer Laboratory
• Institutional Memberships in the Association for Women in Mathematics (AWM), Mathematical Association of America (MAA) and the National Council of Teachers of Mathematics (NCTM)
• Putnam Examination and Mathematical Contest in Modeling teams
• Participation in regional undergraduate mathematics conferences

Requirements
1. Degree Requirements listed on pages 36-41 of this catalog apply to the following majors.
2. Liberal Arts Requirements: B.A. – 90 credit hours; B.S. – 75 credit hours
3. Students transferring to SUNY Cortland from other colleges intending to major in mathematics should have completed at least 12 credit hours of calculus and 6 credit hours of additional mathematics at the calculus level or above by the beginning of their junior year.

Major in Mathematics [MAT]
The liberal arts program in mathematics provides broad background in both pure and applied mathematics. The B.S. option is more appropriate for students interested in scientific and technical applications of mathematics.

CAREER POTENTIAL
• Actuary
• Computer analyst
• Cryptologist
• Statistician

A. Required Courses: 27 credit hours
MAT 125, 126, 227, 328: Calculus I, II, III, IV
MAT 224: Discrete Mathematics
MAT 272: Linear Algebra
MAT 370: Algebraic Structures I
MAT 420: Intermediate Analysis
MCS 186: Introductory Programming

B. Additional MAT or MCS electives:
9 credit hours (B.A.), 15 credit hours (B.S.)
Both the B.A. and B.S. degree require nine hours of any MAT or MCS courses numbered 300 or above. The B.S. degree requires six additional hours of MAT or MCS courses excluding MAT 101, 102, 110, 111, 115, 201 or 499.

C. Physical Science: 0-7 credit hours (B.S. only)
Two courses must be chosen from the following:
CHE 221: General Chemistry I
CHE 222: General Chemistry II
GLY 261: Physical Geology
GLY 262: Historical Geology
PHY 150: Astronomy
PHY 201: Principles of Physics I
PHY 202: Principles of Physics II
These courses may also simultaneously satisfy the requirements for General Education Category 8, providing seven additional elective hours.

D. Foreign Language: 0-13 credit hours (B.A.), 0-4 credit hours (B.S.)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
Major in Adolescence Education: Mathematics (7-12) [AEM]
This major leads to New York State certification to teach mathematics in grades 7-12.

CAREER POTENTIAL
• Curriculum coordinator
• Educational administrator
• Mathematics teacher, high school or junior high school

A. Required Courses: 39 credit hours
   MAT 125, 126, 227, 328: Calculus I, II, III, IV
   MAT 224: Discrete Mathematics
   MAT 272: Linear Algebra
   MAT 370: Algebraic Structures I
   MAT 375: Geometry I
   MAT 420: Intermediate Analysis
   MAT 446: Introduction to Probability and Statistics
   MAT 480: History of Mathematics
   MCS 186: Introductory Programming
   MAT elective numbered 300 or higher

B. Core in Professional Preparation: 40-41 credit hours
   AED 391: Introduction to Adolescence Education
   EDU 435: Content and Methods of Teaching Mathematics in Middle/Junior High School
   EDU 442: Methods of Teaching Mathematics in the Secondary School
   EDU 449: Literacy in the Middle and Secondary School
   AED 492: Field Experiences in Mathematics Teaching
   AED 493: Student Teaching – Adolescence Mathematics I
   AED 494: Student Teaching – Adolescence Mathematics II
   PSY 101: General Psychology I
   PSY 232: Adolescent Psychology
   PSY 332: Educational Psychology
   PSY 350: Psychology of Language
   HLH 110: Personal and Community Health
   HLH 199: Critical School Health Issues

C. Physical Science: 0-7 credit hours (B.S. only)
   Two courses must be chosen from the following:
   CHE 221-222: General Chemistry I and II
   GLY 261: Physical Geology
   GLY 262: Historical Geology
   PHY 150: Astronomy
   PHY 201: Principles of Physics I
   PHY 202: Principles of Physics II
   These courses may also simultaneously satisfy the requirements for General Education Category 8, providing 7 additional elective hours.

D. Foreign Language: 0-13 credit hours (B.A.),
   0-7 credit hours (B.S.)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Adolescence Education: Physics and Mathematics (7-12) [APM]
This major leads to New York State certification to teach both physics and mathematics in grades 7-12.

CAREER POTENTIAL
• High school teacher
• Technical specialist
• Public school administration
• Graduate study in higher education

ACCEPTANCE TO THE PROGRAM
Students will be accepted to the program after 45 credit hours have been completed. At that time students must have an overall grade point average of 2.5 and a grade point average of 2.5 in physics, in related areas, and in the professional core courses.

A. Required Courses in Physics: 30 credit hours
   PHY 150: Astronomy
   PHY 201, 202, 203: Principles of Physics I, II and III
   PHY 325: Programming
   PHY 357: Intermediate Physics Lab
   PHY 410: Modern Physics
   PHY 420: Classical Mechanics
   PHY 450: Electricity and Magnetism

B. Required Courses in Mathematics: 30 credit hours
   MAT 125, 126 and 227: Calculus I, II and III
   MAT 430: Differential Equations
   MAT 224: Discrete Mathematics
   MAT 272: Linear Algebra
   MAT 370: Algebraic Structures I
   MAT 375: Geometry I
   MAT 446: Probability and Statistics
   MAT 480: History of Mathematics

C. Required Courses in Related Areas of Science: 8 credit hours
   CHE 221-222: General Chemistry I and II

D. Required Professional Courses: 38 credit hours
   PSY 101: General Psychology
   PSY 232: Adolescent Psychology
   AED 391: Introduction to Adolescence Education
   EDU 442: Methods of Teaching Mathematics in Secondary School
   AED 443: Methods II: Teaching the Sciences in the Middle and Secondary Schools
   AED 444: Laboratory Practicum
   AED 445: Student Teaching: Adolescence Education - Science
   SHH 300: Normal Language Development
   PSY 350: Psychology of Language
   EDU 449: Literacy in the Middle and Secondary School
   Additionally, each teacher candidate will be required to submit a professional portfolio.

* To be eligible for AED 445: Student Teaching, a minimum grade point average of 2.5 is required overall and in physics, related and professional areas. A student must complete all program requirements before student teaching can begin with the exception of those courses allowed by the Physics Department, the Mathematics Department and the secondary science coordinator.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION:
B.A.: 133-146; B.S.: 133-140

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
Minor in Mathematics [MAT]

Required courses:
Eighteen credit hours of MAT or MCS courses, including MAT 121 or 125, MAT 122 or 126 and MAT 224 and at least one elective course at the 200 level or above. At most six credit hours may be chosen from the following courses: MAT 101, 102, 105, 110, 111, 115, MCS 186. MAT 101 and 102 are open only to CED(W), ECE(W), ECC(W) and SPC(W) majors.

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 24

Example of the B.S. in Adolescence Education: Mathematics (7-12) over four years

The sample program is given as a model only and does not represent expectations for all programs offered. Students should consult an advisor in the Mathematics Department to obtain up-to-date program requirements.

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Mathematics

COURSE DESCRIPTIONS

Computer Science

MCS 186: Introductory Programming
(A) Simple data types, arithmetic statements, input/output statements, simple control structures and one-dimensional arrays. (3 cr. hr.) ■

MCS 584: Topics in Computer Science
(O) Topics from areas of common interest to instructor, students. May be repeated as subtitle changes. Prerequisite: Consent of department. (3 cr. hr.) ■

Mathematics Courses

MAT 101: Concepts of Elementary School Mathematics I
(A) Topics include sets and logic, numeration systems, number theory, rational numbers and decimals. Open only to elementary education majors (including EEDW). Not open to mathematics majors. (3 cr. hr.) ■

MAT 102: Concepts of Elementary School Mathematics II
(A) Topics include elementary probability, statistics, geometry and measurement. Open only to elementary education majors (including EEDW). Not open to mathematics majors. Prerequisite: MAT 101. (3 cr. hr.) ■

MAT 105: Mathematics in Modern Society
(B) The use of basic mathematical concepts from algebra and geometry to analyze problems in modern society. Topics may include voting systems, fair division, interpreting statistics, scheduling, routing, linear programming, population growth, patterns and symmetry. Prerequisite: Two units of Regents high school mathematics. (3 cr. hr.) ■

MAT 111: Algebra for College Students
(A) Course for students with inadequate preparation for MAT 115. Topics include: linear functions and linear systems, quadratic and other polynomial functions, rational functions. Additional topics to be selected from algebra of functions, matrices and determinants. Prerequisite: Two units of Regents high school mathematics. Not open to students with credit for any higher-numbered mathematics course. (3 cr. hr.)

MAT 115: Preparation for Calculus
(A) Course is designed to prepare students for calculus. Topics include: exponential and logarithmic functions, trigonometry, conic sections, sequences and series. Prerequisite: MAT 111 or three units of Regents high school mathematics. Not open to students with credit for any calculus course. (3 cr. hr.) ■

MAT 121: Calculus A
(A) Introduction emphasizing techniques, applications. Not open to mathematics majors or students with credit in MAT 125. Prerequisite: MAT 115 or four years of high school mathematics. (3 cr. hr.) ■

MAT 122: Calculus B
(S) Not open to mathematics majors or students with credit in MAT 126. Prerequisite: MAT 121 or 125. (3 cr. hr.) ■

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
MAT 125: Calculus I
(A) Basic concepts. Theory, techniques of integration, differentiation. Not open to students with credit in MAT 121. Prerequisite: MAT 115 or four years of high school mathematics. (3 cr. hr.) ■

MAT 126: Calculus II
(A) Continuation of MAT 125. Not open to students with credit in MAT 122. Prerequisite: A grade of C or above in either MAT 125 or 121. (3 cr. hr.) ■

MAT 129, 229, 329, 429, 529: Special Topics in Mathematics
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.) ■

MAT 201: Statistical Methods
(A) Basic concepts of probability, descriptive and inferential statistics including central tendency, variability, correlation, regression, parametric tests. Mathematics majors may take course only as free elective. Also listed as COM 230, PSY 201, ECO 221. (3 cr. hr.) ■

MAT 224: Discrete Mathematics
(A) An introduction to the methods of set theory, symbolic logic, combinatorics, and functions and mappings. Topics include matrix operations, techniques of proof, and applications in sequences, relations and graph theory. (3 cr. hr.) ■

MAT 227: Calculus III
(A) Vector calculus, partial differentiation, multiple integration, differential equations. Prerequisite: A grade of C or above in MAT 126. (3 cr. hr.) ■

MAT 272: Linear Algebra
(A) Vector spaces emphasizing Euclidean n-spaces, linear systems, matrix algebra. Prerequisite: A grade of C or above in MAT 224. (3 cr. hr.) ■

MAT 328: Calculus IV
(A) Sequences, series, continuity and limit theorems. Prerequisite: A grade of C or above in MAT 227. (3 cr. hr.) ■

MAT 354: Numerical Analysis I
(O) Techniques, applications of numerical analysis. Prerequisite: MAT 227 or 122. (3 cr. hr.) ■

MAT 370: Algebraic Structures I
(A) Abstract algebra including groups, rings, fields. Prerequisite: A grade of C or above in MAT 272. (3 cr. hr.) ■

MAT 375: Geometry I
(A) Axiom systems, foundations of Euclidean geometry, projective geometry. Prerequisite: A grade of C or above in MAT 224. (3 cr. hr.) ■

MAT 420: Intermediate Analysis
(A) Basic concepts, including theory of functions, limits, integration, convergence. Prerequisites: A grade of C or above in MAT 328. (3 cr. hr.) ■

MAT 425: Methods of Applied Mathematics
(S) Mathematical techniques useful in study of sciences: vector analysis, matrix algebra, functions of a complex variable, differential equations, Fourier transforms. Prerequisites: MAT 227, PHY 202. Also listed as PHY 425. (3 cr. hr.) ■

MAT 430: Differential Equations
(S) Linear differential equations of first and second orders, total, partial differential equations. Prerequisite: MAT 227. (3 cr. hr.) ■

MAT 446: Probability and Statistics
(A) Probability as mathematical system; discrete, continuous random variables and their distribution functions; topics in statistical inference, including estimation, hypothesis-testing. Prerequisite: A grade of C or above in MAT 227. (3 cr. hr.) ■

MAT 450: Theory of Numbers
(O) Elementary number theory; divisibility theory, congruences, residues, diophantine equations. Prerequisites: MAT 370; 122 or 126. (3 cr. hr.) ■

MAT 475: Geometry II
(O) Continuation of MAT 375; includes non-Euclidean systems. Prerequisite: MAT 375. (3 cr. hr.) ■

MAT 480: History of Mathematics
(B) Backgrounds in origins, development of mathematics in various western cultures. Prerequisites: A grade of C or above in MAT 224 and either MAT 126 or 122. (3 cr. hr.) ■

MAT 495: Readings in Mathematical Literature
(F, M) Logic, sets, mathematical systems, relations and techniques of proof. Prerequisite: Consent of department. (3 cr. hr.) ■

MAT 501: Fundamental Concepts of Mathematics
(F, M) Logic, sets, mathematical systems, relations and techniques of proof. Prerequisite: Consent of department. (3 cr. hr.) ■

MAT 502: Applied Concepts in Adolescence Mathematics
(M, S) Applications and extensions of concepts basic to secondary school mathematics. Topics discussed include Greek mathematics; Euclidean, hyperbolic and spherical geometries; number theory and fractals. Real world applications of the aforementioned topics will be a major component of the course. Prerequisite: Consent of department. (3 cr. hr.) ■

MAT 537: Complex Analysis
(O) Introduction to integration, differentiation, series expansion of complex functions. Prerequisite: MAT 501. (3 cr. hr.) ■

MAT 558: Mathematical Statistics
(O) Selected topics in mathematical statistics. Prerequisite: MAT 501. (3 cr. hr.) ■

MAT 567: Topology I
(O) Basic concepts; point-set topology, metric spaces, topological spaces, connectedness, compactness. Prerequisites: 501. (3 cr. hr.) ■

Related Education Courses

AED 391: Introduction to Adolescence Education
(A) Students will develop a coherent and comprehensive personal educational philosophy; analyze the role of education and teachers in society; demonstrate an understanding of teacher certification standards and requirements; evaluate teaching, lesson planning and implementation and cooperative skills; and develop a portfolio. The course includes 25 hours of field observation/teaching experience. (3 cr. hr.)
AED 399: Mathematics Practicum
(O) For students serving as tutors and providing other assistance in 100-level college mathematics courses or in mathematics classes in grades 7-12. Course may be repeated for a maximum of three credit hours. H, S, U grades are assigned. Prerequisites: AED 391, MAT 224, MAT 227 and permission of department chair. (1-2 cr. hr.)

AED 492: Field Experiences in Mathematics Teaching
(A) Seventy-five hours of directed observation of junior or senior high mathematics teachers and other school personnel. H, S, U grades are assigned. Prerequisites: AED 391, EDU 435, 442, 449; HLH 110 or 199; PSY 232 or 332; MAT 224, 272, 328, 370, 375; MCS 186; and grade point average of at least 2.5 both overall and in all MAT/MCS courses. (2 cr. hr.)

AED 493: Student Teaching - Adolescent Mathematics I
(A) Five weeks of full-time student teaching supervised by college faculty. H, S, U grades are assigned. Prerequisite: AED 492. (5 cr. hr.)

AED 494: Student Teaching - Adolescent Mathematics II
(A) Seven weeks of full-time student teaching supervised by college faculty. H, S, U grades are assigned. Prerequisites: AED 492 and 493. (7 cr. hr.)

AED 540: Technologies in the Adolescence Mathematics Classroom
(C) Graphing calculators as teaching tools. The Internet as a source for mathematical software packages to promote active learning. A number of software packages dealing with a variety of mathematical topics, including graphing functions, geometry and calculus will be investigated. (3 cr. hr.)

EDU 435: Content and Methods of Teaching Mathematics in Middle/Junior High School
(S) Prerequisite: INT 270. (3 cr. hr.)

EDU 442: Methods of Teaching Mathematics in the Secondary School
(A) Prerequisite: AED 391 or EDU 391. (3 cr. hr.)

EDU 449: Literacy in the Middle and Secondary School
(F) Methods, materials and assessment for fostering literacy at the middle and secondary levels. (3 cr. hr.)

EDU 471: Foundations of Modern Education
(A) Social, historical, philosophical. (3 cr. hr.)
PROGRAM OVERVIEW

Air Force ROTC is available to SUNY Cortland students under a cross-enrollment arrangement with the Air Force ROTC detachment at Cornell University. Information about the program may be obtained through the Admissions Office at SUNY Cortland or by contacting the Cornell University ROTC Office at the address above.

The objective of the Air Force Officer Education Program is to prepare men and women for positions as officers in the United States Air Force. The program is designed to teach students about the mission and organization of the Air Force, the historical development of air power, leadership and management. Students study national security policy and the role of the military in a democratic society. This program includes specific courses in aerospace studies and practical leadership laboratories.

ELIGIBILITY

The Air Force Officer Education Program is open to any qualified undergraduate or graduate student enrolled in any major field of study. An applicant must be a United States citizen to become a commissioned officer. Noncitizens may enroll and will receive certificates acknowledging completion of the course but cannot receive a commission.

All applicants receive physical examinations at no cost and must meet certain physical requirements to be accepted.

All students who successfully complete the AFROTC program are awarded a baccalaureate degree, tendered a commission and enter the Air Force as second lieutenants. Second lieutenants commissioned in non-flying categories are required to serve on active duty for four years. Pilots are required to serve on active duty for ten years after completing flying training. Navigators serve six years after completing training.

Army ROTC

Army ROTC – Cornell University
101 Barton Hall, Ithaca, N.Y. 14853
(607) 255-4000
E-mail: armyrotc@cornell.edu
http://armyrotc.cornell.edu

PROGRAM OVERVIEW

Army ROTC is available to SUNY Cortland students under a cross-enrollment arrangement with the Army ROTC detachment at Cornell University. Information about the program may be obtained through the Admissions Office at SUNY Cortland or by contacting the Cornell University ROTC Office at the address above.

By enrolling in the Army Reserve Officer Training program through Cornell University, students at SUNY Cortland are afforded opportunities to complement their study in one of the College’s academic majors with training that can lead to commissioning as a second lieutenant upon graduation. The curriculum stresses techniques of organizing, motivating and leading others, and is sufficiently flexible to be incorporated easily into the overall curriculum planned by the student. It recognizes that such disciplines as the natural sciences, the social sciences and the humanities are consistent with qualifications for officers in the active forces and reserves.

ELIGIBILITY

The Army ROTC four-year program of instruction consists of a two-year basic course for freshmen and sophomores and a two-year advanced course for juniors and seniors. Students may enroll in the program at any time up to and including the second semester of the sophomore year.

Military science classes meet every Tuesday afternoon at Cornell University.

Students at SUNY Cortland may enroll in an ROTC program as long as specific medical, academic and related requirements of the program are met.

After the first two years of the program, comprising the basic phase, cadets are eligible for consideration for the advanced phase. When accepted for the advanced phase students sign a written contract with the United States government under which they agree to complete the advanced phase and accept a commission if tendered. At this time these students enlist in the United States Army Reserve. Until this point participants in the ROTC program incur no obligation for military service. Active or Reserve obligations follow commissioning.
**Example of the Air Force ROTC program**

Students in the Four-Year Program are required to take all courses listed below. Students in the Two-Year Program are required to take all of the courses listed for the third and fourth years. Students enrolled in the One-Year Program are required to take all courses listed for the fourth year. There are no prerequisites for any aerospace studies.

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### Course Descriptions

**AFS 161: The Foundations of the United States Air Force I**

(F) This is a survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officer training and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems and an introduction to communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followship experiences. (1 cr. hr.)

**AFS 162: The Foundations of the United States Air Force II**

(S) Continuation of Air S 161. (1 cr. hr.)

**AFS 211: The Evolution of USAF Air and Space Power I**

(F) This course is designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons and dirigibles to the role of air power in Bosnia-Herzegovinia. Historical examples are provided to extrapolate the development of Air Force capabilities (competencies) and missions (functions) to demonstrate the evolution of what has become today’s USAF air and space power. Furthermore, the course examines several fundamental truths associated with war in the third dimension: e.g., Principles of War and Tenets of Air and Space Power. As a whole, this course provides the students with a knowledge-level understanding of the general element and employment of air and space power from an institutional, doctrinal and historical perspective. In addition, students will continue to discuss the importance of the Air Force Core Values by examining operational examples and historical Air Force leaders and will continue to develop their communication skills. (1 cr. hr.)

**AFS 212: The Evolution of USAF Air and Space Power II**

(S) Continuation of Air S 211. (1 cr. hr.)

**AFS 331: Air Force Leadership Studies I**

(F) This course is a study of leadership, quality management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course. (3 cr. hr.)

**AFS 332: Air Force Leadership Studies II**

(S) Continuation of Air S 331. (3 cr. hr.)

**AFS 401: National Security Affairs/Preparation for Active Duty I**

(F) This course examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course. (3 cr. hr.)

**AFS 402: National Security Affairs/Preparation for Active Duty II**

(S) Continuation of Air S 401. (3 cr. hr.)

### Leadership Laboratory Courses

All Air Force cadets spend two hours a week throughout the academic year in a leadership laboratory, for which no academic credit is given. Occasionally laboratories are held at times other than the normally scheduled period. All cadets are expected to participate in an evening formal dinner and to meet minimum physical fitness and weight standards each semester. Leadership Lab is open to students qualified to compete for an Air Force commission.

**AFS 141-142: Initial Military Experiences**

Introduction to the responsibilities, life, and work of an Air Force officer. Basic knowledge of drill and ceremonies, military courtesies, and the wearing of the uniform. Field trip to local military installation.

**AFS 241-242: Intermediate Military Experiences**

Develops skills in giving commands for drill and ceremonies. Introduction to the Air Force base environment in which the Air Force officer functions. Includes a look at career areas available based on academic majors. Students participate in leadership situations through military drills and ceremonies. Field trip to a local military installation.

**AFS 341-342: Junior Officer Leadership**

Cadets assume leadership responsibilities similar to those of a junior officer. Emphasis is on the importance of applying effective human relations skills in dealing with superiors, peers, and subordinates. Cadets also gain insight into the general structure and progression patterns common to selected Air Force officer career fields.

**AFS 441: Advanced Leadership Experiences**

Cadets assume command leadership responsibilities to operate a military organization. Cadets apply effective leadership and managerial techniques with individuals and groups and participate in self-analysis of leadership and managerial abilities.

**AFS 442: Precommissioning Laboratory**

Factors that facilitate transition from civilian to military life are reviewed. The need for military security, base services and activities, personal finances, travel regulations and social obligations is introduced.
Army ROTC

COURSE DESCRIPTIONS

All cadets take one course and a leadership laboratory each semester in military science. The number of hours a week spent in the classroom varies from semester to semester, as does the credit received for each course.

MLS 101: Foundations of Officership
(F) Students examine the U.S. defense structure in terms of organization, personnel, and relationships among and between military forces and branches of the government. The U.S. Army force structure is examined at all levels. The complexities and magnitude of operating the defense organization are studied to provide a framework for subsequent instruction. Students develop skills in conducting oral and written presentations. Required. (1 cr. hr.)

MLS 102: Basic Leadership
(S) This course allows students to develop a basic understanding and appreciation of theories of social and organizational psychology and behavior as they apply to the military setting. Attention is given to leader types, the source and exercise of authority, and the impact of varying styles of leadership, resource management, motivation and organizational effectiveness. The student is instructed in the concepts of integrity, ethics and professionalism. Classes on historical events and strategy are also presented. Required. (1 cr. hr.)

MLS 201: Individual Leadership Studies
(F) Delves into theoretical and practical leadership instruction. Specifically, students examine several aspects of communication and leadership concepts such as written and oral communication, effective listening, assertiveness, personality, adult development, motivation and organizational culture and change. Each lesson maximizes student participation, inspires intellectual curiosity and clarifies practical application. The course concludes with a major leadership and problem-solving case study. Upon completion, students will be well grounded in fundamental leadership principles and will be better prepared to apply such principles to a wide variety of life experiences. (1 cr. hr.)

MLS 202: Leadership and Teamwork
(S) Students learn the basic principles of group dynamics at the level of the smallest military unit, the squad. Troop-leading procedures are introduced through case studies and role-playing exercises. Leadership theories introduced in MLS 102 are examined in a variety of realistic settings. The practical application of behavioral theories is explored in the context of small military organizations. The course will also provide practical knowledge of the various forms of topographic representation. Students will use maps in terrain association and land navigation. Knowledge of topography is complemented by an orientation on significant environmental influences of physical, social and climatic factors. Portions of the course offer experience in land navigation and orienteering. Required. Prerequisite: MLS 102 or instructor approval. (1 cr. hr.)

MLS 301: Leadership and Problem Solving
(F) After an initial introduction to techniques of presenting briefings, students are provided with a broad understanding of the principles and application of teamwork in military organizations. Particular emphasis is given to the leadership responsibilities of the commander as the team coordinator. This course helps students develop an understanding of the roles and contributions of the various branches of the Army in support of the military team. Required. (2 cr. hr.)

MLS 302: Leadership and Ethics
(S) This course takes on the nature of decision-making and the tactical application of the military team. Through the use of conferences and extensive practical exercises, students develop familiarity with the factors influencing a leader's decisions and the process of planning, coordinating, and directing the operations of military units through operation plans and orders. Required. Prerequisite: MLS 331. (2 cr. hr.)

MLS 303: Armed Conflict in Society
(F) This course provides practical knowledge in American military history. It is primarily an overview course designed to provide an understanding of the art and nature of warfare and particularly how warfare has affected the United States. The course consists of three primary areas of instruction with an emphasis on American military history. The first area of instruction addresses the art and theory of modern warfare. It analyzes America's first attempt at war, the American Revolution, and ends with the development of modern warfare under Napoleon Bonaparte. The second phase focuses on America at war in the nineteenth century. It places particular emphasis on the American Civil War and the strategy of annihilation versus the strategy of attrition. The final phase looks at warfare in the twentieth century and finishes with an analysis of the future of warfare for the military of the United States. Required. (2 cr. hr.)

MLS 401: Leadership and Management
(F) This course provides an overview of the functions, responsibilities and interrelationships among small-unit leaders, the commander, and the staff. Discussions focus on actions of small-unit leaders, communication skills, army operations, the logistical support of the army in the field, and the army training system. The course focuses on the dynamics of leadership in battle through the detailed analysis of a series of case studies. Just war theory, ethics, and professionalism are also addressed in a seminar fashion. Required. (2 cr. hr.)
MLS 402: Leadership and Ethics
(S) A continuation of MIL 441. Conferences and seminars examine the techniques of effective military leadership, with special attention given to professionalism and ethical considerations in the armed forces during both peacetime and conflict. Army operations and basic doctrine are also discussed. This is a capstone course designed to prepare the student for commissioning. Required. (2 cr. hr.)

Practical Leadership Training
All Army Officer-Education Students
No credit is given for leadership training, but participation is required for successful completion of the AROTC program. Students receive physical education credit for the laboratory. Each semester, cadets register for the appropriate leadership laboratory, consisting of physical fitness training three times per week, two hours of military training each week, and one or two weekend training exercises per semester.

MLS 151-152: Leadership Laboratory I
Cadets meet for two hours each week to learn a variety of military skills including rappelling, first aid, drill and ceremonies, weapons familiarization, and physical fitness training.

MLS 251-252: Leadership Laboratory II
Cadets meet for two hours each week as members of the cadet organization to participate in practical leadership exercises. Types of practical activities include rifle marksmanship, orienteering, drill and ceremonies, signal communications, physical fitness training, first aid, tactics, and field exercises.

MLS 351-352: Leadership Laboratory III
Cadets meet for two hours a week and occasional weekends to prepare for a five-week summer camp that follow their junior year. Emphasis is placed on the development of individual practical and leadership skills. Cadet rotate through leadership positions to practice applying decision-making skills in myriad situations.

MLS 451-452: Leadership Laboratory IV
Senior cadets plan and operate the leadership laboratory programs for MIL S I-III cadets. The development of planning and supervisory skills is emphasized. Cadets have an opportunity to practice leadership skills developed during previous ROTC training and summer camp experiences. Includes two to three hours a week devoted to physical fitness.

Professional Military Education (PME) Requirements
In addition to the ROTC classes and leadership laboratories listed above, a number of courses are required as part of the contracted student's academic program. These courses are offered by the university and round out the student's professional education. The PME component of the ROTC program requires at least one college course in each of the following areas: communication skills, military history, and an introduction to computers. These courses must be completed prior to graduation and commissioning. Courses that meet these requirements are approved by the Professor of Military Science.

Native American Studies
INTERDISCIPLINARY PROGRAM

SCHOOL
Arts and Sciences

FACULTY
Ellis McDowell-Loudan (Coordinator)

MINOR OFFERED
Native American Studies

CAREER POTENTIAL
• Teacher
• Consultant
• Counselor
• Journalist

DESCRIPTION
SUNY Cortland’s Native American studies minor is interdisciplinary. It is designed to complement numerous academic majors. Students choosing the minor will study the history and culture of Native Americans from the perspective of several disciplines.

Minor in Native American Studies [NAMS]
A. Required Courses: 15 credit hours
   ANT 102: Introduction to Cultural Anthropology or
   ANT 300: Human Evolution and Survival
   ANT 301: Native American Archaeology

   ANT 302: Native American Ethnology
   HIS 314: Native American History
   ENG 256: Introduction to American Indian Literature

B. Three credit hours from:
   HLH 201: Health Problems of the Underserved
   ANT/SOC 352: U.S. Ethnic Identity and Conflict
   PSY 210: Racial and Gender Stereotypes
   ANT/SOC 230: Prejudice and Discrimination

C. Electives: 3 credit hours
   (selected in consultation with minor advisor)
   ANT 201: World Cultures
   ANT 305: Archaeology of Eastern United States
   ANT 314: Peoples of Latin America
   ANT 315: Development Anthropology
   ANT 400: Fieldwork in Archaeology
   ANT 406: Contact and Culture Change
   HIS 300: Colonial America, 1450-1750
   HIS 309: New York State
   HIS 325: Colonial Latin America
   MUS 101: World Music
   ATH 233: Art History III

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 21