Programs,
Degree Requirements,
Course Descriptions
Adolescence Education

SCHOOL
Arts and Sciences

SUNY Cortland offers 15 graduate certification programs that prepare candidates to teach in grades 7-12. Adolescence education programs are available in the following areas of study, leading to a Master of Arts in Teaching (M.A.T.) or a Master of Science in Education (M.S.Ed.):

Adolescence Education: Biology (7-12) — M.A.T.
Adolescence Education: Biology (7-12) — M.S.Ed.
with Middle Childhood Extension (5-6)
Adolescence Education: Chemistry (7-12) — M.A.T.
Adolescence Education: Chemistry (7-12) — M.S.Ed.
with Middle Childhood Extension (5-6)
Adolescence Education: Earth Science (7-12) — M.A.T.
Adolescence Education: Earth Science (7-12) — M.S.Ed.
with Middle Childhood Extension (5-6)
Adolescence Education: English (7-12) — M.A.T.
Adolescence Education: English (7-12) — M.S.Ed.
with Middle Childhood Extension (5-6)
Adolescence Education: Mathematics (7-12) — M.A.T.
Adolescence Education: Mathematics (7-12) — M.S.Ed.
with Middle Childhood Extension (5-6)
Adolescence Education: Physics (7-12) — M.A.T.
Adolescence Education: Physics (7-12) — M.S.Ed.
with Middle Childhood Extension (5-6)
Adolescence Education: Physics and Mathematics (7-12) — M.S.Ed.
with Middle Childhood Extension (5-6)
Adolescence Education: Social Studies (7-12) — M.S.Ed.
Note: Program is in the Geography and History departments.

All adolescence education programs are housed in the School of Arts and Sciences, in the department area of content. For specific program requirements, the appropriate department pages should be consulted. Additional requirements for New York State teacher certification are found on pages 108-109 of this catalog.

Adolescence Education

COURSE DESCRIPTIONS

AED 600: Introduction to Adolescence Education
(A) Secondary school programs and forces that have produced them. Criticisms and future of secondary schools. Selected topics in educational measurement and evaluation. Formerly listed as EDU 600. (3 cr. hr.)

AED 642: Methods I: Teaching the Sciences in the Middle and Secondary Schools
(S) 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 533, AED/EDU 600. (3 cr. hr.)

AED 643: Methods II: Teaching the Sciences in the Middle and Secondary Schools
(F) Students will participate in the development of sample course syllabi, a comprehensive laboratory safety plan, field trip proposal and strategies for facilitating parental/community involvement. Students will design and implement classroom demonstrations and laboratory exercises. Alignment of lesson plans with state and national learning standards and state core curriculum guides, strategies for motivation of students with diverse needs and learning styles, and development of assessment tools that parallel those of Regents examinations will be emphasized. Students will explore the uses of technology to enhance the teaching-learning environment in the science classroom. The course will conclude with a discussion of the importance of continuing self-evaluation and professional growth and development. Twenty-five hours of experience in middle and secondary school. Prerequisite: AED 642. (3 cr. hr.)

AED 644: Seminar for Field Practicum
(A) Seminar for field experiences in adolescence education: science (7-12). Biweekly meetings to discuss observations made in middle and secondary school classrooms. Twenty-five hours of field experience required. Prerequisite: AED/EDU 600. (1 cr. hr.)

AED 645: 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, 11th, or 12th grade level. A discipline-specific student teaching seminar is held on campus once during the semester. Prerequisites: PSY 533, AED 643 and 644. See major department for eligibility criteria. S, U grades are assigned. (14 cr. hr.)

AED 646: Seminar in the Teaching of Science in the Middle and Secondary Schools
(S) Significant curriculum patterns, practices, research; investigations based on individual needs, interests. (3 cr. hr.)

AED 661: Language Development in Adolescents for Non-Literature Majors
(B) Combines models of first-language acquisition, the structure of the English language, cooperative learning, sentence combining and accelerated learning to develop an overall model for enhancing language development of all adolescents, regardless of dialect and socioeconomic standards. (3 cr. hr.)
Adolescence Education: Science (7-12)

SCHOOL
Arts and Sciences

FACULTY
Rena Crockett Janke (Coordinator)

PROGRAMS OFFERED
Master of Arts in Teaching in Adolescence Education:
  Biology (7-12)
  Chemistry (7-12)
  Earth Science (7-12)
  Physics (7-12)
Master of Science in Education in Adolescence Education:
  Biology (7-12)
  Chemistry (7-12)
  Earth Science (7-12)
  Physics (7-12)
  Physics/Mathematics (7-12)

Master of Arts in Teaching
Adolescence Education: Biology (7-12) [ABi]
Adolescence Education: Chemistry (7-12) [ACH]
Adolescence Education: Earth Science (7-12) [AES]
Adolescence Education: Physics (7-12) [APH]

The M.A.T. is designed for applicants who have a bachelor’s degree in biology, chemistry, geology (earth science), or physics, or a closely related field, and who are seeking initial certification to teach one of the sciences in grades 7-12.

CAREER POTENTIAL
• Teacher: biology, chemistry, earth science or physics in grades 7-12
• Teacher: seventh or eighth grade general science (requires study in at least three sciences)

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a degree program as stated in this catalog, the applicant for enrollment in the program leading to the M.A.T. in adolescence education: science (7-12) should present the following:
1. All undergraduate transcripts that reflect the requirements listed under relevant science:
   Biology
   • evidence of completion of a bachelor’s degree in biology or functionally related area
   • at least 30 credit hours of course work in biology
   • at least 12 credit hours of course work in chemistry
   • at least eight credit hours of introductory physics
   • at least four credit hours of physical geology
   Chemistry
   • evidence of completion of a bachelor's degree in chemistry or functionally related area
   • at least 30 credit hours of course work in chemistry
   • at least eight credit hours of course work in both introductory biology and introductory geology
   • at least eight credit hours in introductory physics

   Earth Science
   • evidence of completion of a bachelor's degree in geology or functionally related area
   • at least 30 credit hours of course work in geology/earth science, including a course in meteorology
   • at least eight credit hours of course work in biology and eight credit hours in chemistry
   • at least eight credit hours in physics, plus three credit hours of astronomy

   Physics
   • evidence of completion of a bachelor's degree in physics or functionally related area
   • a least 30 credit hours of course work in physics
   • at least eight credit hours in chemistry
   • at least eight credit hours of course work in introductory biology or introductory geology
   • Calculus I, II, III and differential equations

2. An overall undergraduate grade point average of at least 2.5 and a grade point average in the major of at least 2.5.
3. Three letters of recommendation from former professors or professional colleagues who can speak to the candidate’s preparation and competence for teaching science in grades 7-12.
4. An interview with the coordinator of adolescence education: science (7-12).
5. Application to the SUNY Cortland Teacher Education Program.

PROGRAM REQUIREMENTS
A. Content: *Nine credit hours in area of specialization: biology, chemistry, geology or physics

B. Pedagogy: *33 credit hours, 19 credit hours of course work plus 14 credit hours of student teaching
   LIT 549: Literacy in the Middle and Secondary School
   AED 661: Language Development in Adolescents for Non-Literature Majors
   AED 600: The Secondary School
   AED 642: Methods I: Teaching Science in the Middle and Secondary School
   AED 643: Methods II: Teaching Science in the Middle and Secondary Schools
   AED 644: Field Practicum
   AED 645: Student Teaching
   PSY 533: Advanced Developmental Psychology

One of the following courses must be taken to fulfill New York State certification requirements:
   HLH 110: Personal and Community Health or
   HLH 199: Critical School Health Issues

   *Nineteen credit hours in pedagogy and nine credit hours in content must be taken prior to student teaching. Submission of a professional development portfolio and a minimum overall grade point average of 3.0 are required to be eligible to student teach.

C. Culminating Master’s Project: Three credit hours
   SCI 699: Master’s Project: Inquiry Curriculum Design

Note: Specific information regarding additional requirements for qualification for the initial certificate in New York State may be found on pages 108-109 of this catalog.

TOTAL CREDIT HOURS REQUIRED: 45
Master of Science in Education
Adolescence Education: Biology (7-12) [ABI]

CAREER POTENTIAL
- Teacher: biology (grades 7-12)
- Science department chair

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to an M.S.Ed. in adolescence education: biology (7-12) should present the following:
1. All undergraduate transcripts that reflect evidence of completion of a bachelor's degree in biology or functionally related subject area. The transcripts need to show at least 30 credit hours of course work in the area of the certification.
2. Documentation of an initial/provisional certificate, or a certificate of qualification for provisional certification, to teach biology in grades 7-12 issued by the New York State Education Department.
3. An overall undergraduate grade point average of at least 2.5.
4. Three letters of recommendation from former professors or professional colleagues who can speak to the candidate’s preparation and competence for teaching biology in grades 7-12.
5. An interview with the coordinator of adolescence education: science (7-12).

PROGRAM REQUIREMENTS
A. Content: 21 credit hours in the sciences
   12 credit hours in graduate biology
   Nine credit hours in chemistry, geology or physics
B. Pedagogy: Six credit hours
   Option I: Without middle childhood extension
   AED 646: Seminar in Teaching Science in the Middle and Secondary Schools
   Education elective from the areas of social, historical, philosophical or psychological foundations of education
   Option II: Leads to a middle childhood extension certificate for grades 5-6
   EDU 533: Introduction to Middle Childhood Education
   PSY 533: Advanced Developmental Psychology
C. Culminating Master's Project: Three credit hours
   SCI 699: Master's Project: Inquiry Curriculum Design

ADDITIONAL REQUIREMENTS
Other requirements for the award of the degree may be determined by the departments concerned and must be ascertained by the student in consultation with the adolescence education science coordinator.

Note: Specific information regarding additional requirements for qualification for the professional certificate in New York State may be found on pages 108-109 of this catalog.

TOTAL CREDIT HOURS REQUIRED: 30

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Master of Science in Education
Adolescence Education: Chemistry (7-12) [ACH]

CAREER POTENTIAL
- Teacher: chemistry (grades 7-12)
- Science department chair

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to an M.S.Ed. in adolescence education: chemistry (7-12) should present the following:
1. All undergraduate transcripts that reflect evidence of completion of a bachelor's degree in chemistry or functionally related subject area. The transcripts need to show at least 30 credit hours of course work in the area of the certification.
2. Documentation of an initial/provisional certificate, or a certificate of qualification for initial or provisional certification, to teach chemistry in grades 7-12 issued by the New York State Education Department.
3. An overall undergraduate grade point average of at least 2.5.
4. Three letters of recommendation from former professors or professional colleagues who can speak to the candidate’s preparation and competence for teaching chemistry in grades 7-12.
5. An interview with the coordinator of adolescence education: science (7-12).

PROGRAM REQUIREMENTS
A. Content: 21 credit hours in the sciences
   12 credit hours in graduate chemistry
   Nine credit hours in biology, geology or physics
B. Pedagogy: Six credit hours
   Option I: Without middle childhood extension
   AED 646: Seminar in Teaching Science in the Middle and Secondary Schools
   Education elective from the areas of social, historical, philosophical or psychological foundations of education
   Option II: Leads to a middle childhood extension certificate for grades 5-6
   EDU 533: Introduction to Middle Childhood Education
   PSY 533: Advanced Developmental Psychology
C. Culminating Master's Project: Three credit hours
   SCI 699: Master's Project: Inquiry Curriculum Design

ADDITIONAL REQUIREMENTS
Other requirements for the award of the degree may be determined by the departments concerned and must be ascertained by the student in consultation with the coordinator of adolescence education: science (7-12).

Note: Specific information regarding additional requirements for qualification for the professional certificate in New York State may be found on pages 108-109 of this catalog.

TOTAL CREDIT HOURS REQUIRED: 30
**Master of Science in Education**  
**Adolescence Education: Earth Science (7-12) [AES]**

**Career Potential**
- Teacher: earth science (grades 7-12)
- Science department chair

**Admission Requirements**
In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to an M.S.Ed. in adolescence education: earth science (7-12) should present the following:
1. All undergraduate transcripts that reflect evidence of completion of a bachelor's degree in geology/earth science or functionally related subject area. The transcripts need to show at least 30 credit hours of course work in the area of the certification, including astronomy and meteorology.
2. Documentation of an initial/provisional certificate, or a certificate of qualification for provisional certification, to teach earth science in grades 7-12 issued by the New York State Education Department.
3. An overall undergraduate grade point average of at least 2.5
4. Three letters of recommendation from former professors or professional colleagues who can speak to the candidate's preparation and competence for teaching earth science in grades 7-12.
5. An interview with the coordinator of adolescence education: science (7-12).

**Program Requirements**
A. Content: 21 credit hours in the sciences  
12 credit hours in graduate geology  
Nine credit hours in biology, chemistry or physics  
B. Pedagogy: Six credit hours  
Option I: Without middle childhood extension  
AED 646: Seminar in Teaching Science in the Middle and Secondary Schools  
Education elective from the areas of social, historical, philosophical or psychological foundations of education  
Option II: Leads to a middle childhood extension certificate for grades 5-6  
EDU 533: Introduction to Middle Childhood Education  
PSY 533: Advanced Developmental Psychology  
C. Culminating Master's Project: Three credit hours  
SCI 699: Master's Project: Inquiry Curriculum Design

**Additional Requirements**
Other requirements for the award of the degree may be determined by the departments concerned and must be ascertained by the student in consultation with the coordinator of adolescence education: science (7-12).

*Note: Specific information regarding additional requirements for qualification for the professional certificate in New York State may be found on pages 108-109 of this catalog.*

**Total Credit Hours Required:** 30

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**Master of Science in Education**  
**Adolescence Education: Physics (7-12) [APH]**

**Career Potential**
- Teacher: physics (grades 7-12)
- Science department chair

**Admission Requirements**
In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to an M.S.Ed. in adolescence education: physics (7-12) should present the following:
1. All undergraduate transcripts that reflect evidence of completion of a bachelor's degree in physics or functionally related subject area. The transcripts need to show at least 30 credit hours of course work in the area of the certification.
2. Documentation of an initial/provisional certificate, or a certificate of qualification for provisional certification, to teach physics in grades 7-12 issued by the New York State Education Department.
3. An overall undergraduate grade point average of at least 2.5
4. Three letters of recommendation from former professors or professional colleagues who can speak to the candidate’s preparation and competence for teaching physics in grades 7-12.
5. An interview with the coordinator of adolescence education: science (7-12).

**Program Requirements**
A. Content: 21 credit hours in the sciences  
12 credit hours in graduate physics  
Nine credit hours in biology, chemistry or geology  
B. Pedagogy: Six credit hours  
Option I: Without middle childhood extension  
AED 646: Seminar in Teaching Science in the Middle and Secondary Schools  
Education elective from the areas of social, historical, philosophical or psychological foundations of education  
Option II: Leads to a middle childhood extension certificate for grades 5-6  
EDU 533: Introduction to Middle Childhood Education  
PSY 533: Advanced Developmental Psychology  
C. Culminating Master's Project: Three credit hours  
SCI 699: Master's Project: Inquiry Curriculum Design

**Additional Requirements**
Other requirements for the award of the degree may be determined by the departments concerned and must be ascertained by the student in consultation with the coordinator of adolescence education: science (7-12).

*Note: Specific information regarding additional requirements for qualification for the professional certificate in New York State may be found on pages 108-109 of this catalog.*

**Total Credit Hours Required:** 30
Adolescence Education: Physics and Mathematics (7-12) [APM]

CAREER POTENTIAL
- Teacher: physics and mathematics (grades 7-12)
- Science department chair

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to an M.S.Ed. in adolescence education: physics and mathematics (7-12) should present the following:
1. All undergraduate transcripts which reflect evidence of completion of a bachelor’s degree in physics/mathematics or functionally related subject area. The transcripts need to show at least 30 credit hours of course work in physics and at least 30 hours of course work in mathematics.
2. Documentation of an initial/provisional certificate, or a certificate of qualification for initial or provisional certification, to teach physics and mathematics issued by the New York State Education Department.
3. An overall undergraduate grade point average of at least 2.5.
4. Three letters of recommendation from former professors or professional colleagues who can speak to the candidate’s preparation and competence for teaching physics/mathematics in grades 7-12.
5. An interview with the coordinator of adolescence education: science (7-12).

PROGRAM REQUIREMENTS
A. Content: 24 credit hours in physics and mathematics
   12 credit hours in graduate physics
   12 credit hours in graduate mathematics
B. Pedagogy: 3-6 credit hours
   Option I: Without middle childhood extension
   AED 540: Technologies in the Adolescence Mathematics Classroom
   Option II: Leads to a middle childhood extension certificate for grades 5-6
   EDU 533: Introduction to Middle Childhood Education
   PSY 533: Advanced Developmental Psychology
C. Culminating Master’s Project: Three credit hours
   SCI 699: Master’s Project: Inquiry Curriculum Design

ADDITIONAL REQUIREMENTS
Other requirements for the award of the degree may be determined by the departments concerned and must be ascertained by the student in consultation with the coordinator of adolescence education: science (7-12).

Note: Specific information regarding additional requirements for qualification for the professional certificate in New York State may be found on pages 108-109 of this catalog.

TOTAL CREDIT HOURS REQUIRED: 30-33

Science

COURSE DESCRIPTIONS

Biological Sciences

BIO 501: Advanced Invertebrate Biology
(F-O) Structure and function, evolution, and life histories of major invertebrate phyla. Three lectures, one three-hour laboratory. Prerequisite: Four semesters of college-level biology or permission of instructor. Not open to students with credit for BIO 401. (4 cr. hr.)

BIO 502: Comparative Functional Morphology
(O) An examination of the principles and breadth of vertebrate functional morphology. Emphasis on the linkage of structure and function from the comparative and phylogenetic perspectives. Students may not receive credit for both BIO 402 and BIO 502. Prerequisite: Four semesters of biology or permission of the instructor. (3 cr. hr.)

BIO 505: Case Studies in Conservation Biology
(M-O) Selected case studies in conservation biology, including conservation of species and genetic diversity, endangered species reintroductions, and the application of geographic information systems and computer models to the discipline. Not open to students with credit for BIO 405. Oral presentation, discussions and investigative laboratories/field trips. Prerequisites: One year of introductory biology. (3 cr. hr.)

BIO 508: Entomology
(C) An overview of insect biology including behavior, ecology, systematics, physiology, morphology and the economic/medical impact of insects on human societies. Not open to students with credit for BIO 408. Prerequisites: A minimum of four semesters of biology courses or permission of the instructor. (3 cr. hr.)

BIO 510: Advanced Field Biology
(M) Examination of biological diversity and ecology in terrestrial and aquatic communities of New York. The course is taught during August at Cortland’s Outdoor Education Center in Adirondack State Park. Daily and evening classes include field trips, laboratories, and lectures. Students are assessed a fee for room and board. Students will be expected to lead one planned activity and discussion for graduate credit. Prerequisite: BIO 110 and 111 or BIO 201 and 202. Not open to students with credit for BIO 307 or 310. (3 cr. hr.)

BIO 512: Limnology
(F) Aquatic biology covering thermal, physical, chemical attributes of fresh water and their effect on composition of an aquatic ecosystem. Two lectures, one three-hour laboratory. Prerequisites: BIO 110-111 or BIO 201-202, CHE 222. (3 cr. hr.)

BIO 514: Mammalian Physiology
(F) Functions of mammalian organ systems, including the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems. Three lectures, one three-hour laboratory. Prerequisite: A course in cell biology or equivalent or permission of instructor. (4 cr. hr.)
BIO 516: Controversies in Evolutionary Biology  
(O) Advanced investigations of current areas of debate within modern evolutionary biology. Hypotheses addressed range from levels of selection to evolutionary medicine, with additional topics suggested by students. Includes critical evaluations of readings from the current literature (primary, secondary and popular). Primarily in a seminar format. Prerequisite: At least four semesters of biology courses or permission of the instructor. (3 cr. hr.)

BIO 521: Molecular Genetics  
(F-C) Modern genetic and molecular biological techniques applied to a study of genes, their structure, function, mutagenesis and regulation. Three lectures, one three-hour laboratory. Prerequisites: BIO 312, CHE 301. (4 cr. hr.)

BIO 522: Evolutionary Analysis  
(O) Analysis of the mechanics and patterns of biological evolution. Includes consideration of the historical development of ideas, the interpretation of examples from across the biological sciences and an emphasis on the modern understanding of evolutionary processes. Not open to students with credit for BIO 422 or 516. Prerequisites: Four semesters of biology including a course in genetics. (3 cr. hr.)

BIO 523: Field Mycology  
(M-O) Emphasis on field and laboratory techniques used in identifying macrofungi (mushrooms, polyopes, stinkhorns, coral fungi, jelly fungi, cup fungi, etc.). Skills involving microscopic preparations and interpretation of cells and tissues, microchemical reactions, and tissue sectioning will be developed. Lecture and laboratory topics will cover morphology, taxonomy, ecology and economic importance of macrofungi. Project and paper required. Prerequisite: Year of college-level biology. (3 cr. hr.)

BIO 524: Physiological Ecology  
(S-C) Physiological responses and adaptation of organisms to environmental factors. Prerequisite: Four semesters of undergraduate biology or permission of instructor. (3 cr. hr.)

BIO 525: Developmental Biology  
(S-O) Examination of embryology, molecular aspects of development, differentiation, regeneration and pattern formation. Three lectures, one three-hour laboratory. Prerequisite or corequisite: A course in cell biology or equivalent. (4 cr. hr.)

BIO 529, 629: Special Topics in Biological Sciences  
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.)

BIO 533: Biology Seminar  
(O) Selected topics dealing with current issues in biology. May be taken more than once as subtitle changes. Prerequisite: Consent of instructor. (1-3 cr. hr.)

BIO 600: Biology of Human Aging  
(F) Periodic relationships occurring among elements and their compounds. Current theories of atomic structure, bonding, acid-base behavior and coordination. Prerequisite: CHE 431. (3 cr. hr.)

BIO 607: Advanced Studies in Paleontology  
(O) Various chemical topics. Typical subtitles include: Organic Chemistry, Biochemistry, Environmental Chemistry, Chemistry and Energy, Geochemistry, Agricultural Chemistry, Chemistry and the Modern World. Maximum of nine credit hours may be elected, if subtitles differ. Not open to chemistry majors. Prerequisites: Nine hours of science, consent of department. (2-3 cr. hr.)

CHE 500: Advanced Organic Chemistry  
(O) Reaction mechanisms, physical organic chemistry and theoretical concepts in organic chemistry; recent developments. Prerequisites: CHE 302. (3 cr. hr.)

CHE 529, 629: Special Topics in Chemistry  
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.)

CHE 540: Advanced Inorganic Chemistry  
(F) Modern techniques of nuclear chemistry, neutron activation analysis, neutron diffraction. Prerequisite: CHE 540. (3 cr. hr.)

CHE 600: Radio and Nuclear Chemistry  
(O) Modern techniques of nuclear chemistry, neutron activation analysis, neutron diffraction. Prerequisite: CHE 540. (3 cr. hr.)

CHE 680: Independent Study in Chemistry  
(A) Directed study or research for qualified graduate students. (1-6 cr. hr.)

Geology  
GLY 529, 629: Special Topics in Geology  
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.)

GLY 550: Geology of New York State  
(O) 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.)

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, biostatigraphy. One three-hour lecture and/or discussion. May be repeated as subtitle changes. Prerequisite: GLY 363. (3 cr. hr.)
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Gly 570: plate tectonics
(O) Examination of the theory of plate tectonics, including critique of refereed scientific papers. Topics include geometry and driving forces of plate motions, and the geological and geophysical implications. One three-hour lecture/discussion. Prerequisites: GLY 261 and 12 hours of geology, biology, chemistry and/or physics at the 300 level or above. (3 cr. hr.)

Gly 573: history of geology
(O) Development, evolution of major concepts in geological sciences. Read peer-review scientific articles; class presentations, 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: paleoclimatology
(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 590: thesis
(O) Prerequisite: Consent of department. (3-6 cr. hr.)

Gly 590: independent research
(O) Advanced individual research into geological problems. Prerequisite: Thirty-six hours of geology. May be repeated for credit. (1-3 cr. hr.)

Physics

Phy 529, 629: special topics in physics
A selected topics course which may be taken more than once as the subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

Phy 530: statistical and thermal physics
(F) A study of the thermal properties of matter from macroscopic and molecular points of view. Topics include heat, temperature, entropy, the laws of thermodynamics, kinetic theory, ensembles and distribution functions, and classical and quantum statistics. Prerequisites: MAT 227, PHY 420. PHY 420 may be taken concurrently. (3 cr. hr.)

Phy 531: physical chemistry I
(F) Kinetic theory of gases, thermodynamics, introductory quantum chemistry, chemical bonding, Molecular spectroscopy. Prerequisites: CHE 222 and PHY 202 and MAT 126 or 236. Not open to students with credit for CHE 431. (3 cr. hr.)

Phy 532: physical chemistry II
(S) Chemical kinetics, solid and liquid states, phase equilibria, properties of solutions and surface chemistry. Prerequisite: PHY 531. Not open to students with credit for CHE 432. (3 cr. hr.)

Phy 559: advanced physics laboratory
(A) The development of additional techniques and skills in a special area of physics. May be repeated to perform different experiments. Prerequisite: PHY 202 or consent of department. (3 cr. hr.)

Phy 565: solid state physics
(S-C) The properties of solids. Topics include crystal structure, electronic and structural properties, the free-electron model, band theory, metals, semiconductors, superconductivity and magnetism. Prerequisites: PHY 410, MAT 430. MAT 430 may be taken concurrently. (3 cr. hr.)

Phy 570: nuclear physics
(O) A study of elementary nuclear theory. Topics include the properties of nuclei, radioactivity and transmutation. Prerequisite: PHY 410. Prerequisites PHY 410 and 450. (3 cr. hr.)

Phy 575: introduction to quantum mechanics
(S-C) The study of the physical laws underlying microscopic systems. Topics include the wavelike properties of matter, the motion of wave packets, Schrödinger’s equation, the solution of Schrödinger’s equation in one and three dimensions, operators, expectation values, the Heisenberg uncertainty principle, the quantum harmonic oscillator, the hydrogen atom and approximation methods. Prerequisite: MAT 430 and PHY 420. (3 cr. hr.)

Phy 590: Geophysical Methods
(O) 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 PHY 105 and 106, or 201 and 202. Also listed as PHY 595. (3 cr. hr.)

Phy 690: thesis
(O) Prerequisite: Consent of department. (3-6 cr. hr.)

Phy 690: independent study in physics
(O) Graduate independent study and/or research under faculty direction. A written report or thesis is required. May be repeated for not to exceed six credit hours. Prerequisite: Consent of department. (1-3 cr. hr.)

Science

Sci 699: Master’s Project: Inquiry Curriculum Design
(A) This course serves as a culminating experience for students in the Master of Arts or Master of Science in Education programs for the sciences. Students will become familiar with contemporary studies of the nature of science and with current research on the promotion of inquiry-based science at the secondary level. The primary focus will be the development of an original inquiry unit by collaborative curriculum design teams. Other assignments will include short reflective essays and lab designs. (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
American Civilization and Culture

PROGRAM

SCHOOL
Arts and Sciences

Note: This program is for international students only.

ADMISSION REQUIREMENTS
Applicants for enrollment in the program leading to the Certificate of Advanced Study (C.A.S.) in American Civilization and Culture should present the following:

1. B.A., B.S. or equivalent degree offered by a foreign university.
2. Demonstrated command of written and spoken English as verified by the appropriate scores on the TOEFL Examination.

PROGRAM REQUIREMENTS
1. A total of 18 hours of graduate course work.
2. Twelve hours of an approved interdisciplinary concentration with a demonstrable coherence and direction such as:
   American History or Government
   American Social and Economic History
   American and English Literature
   American Literature
   Foundations of American Education
   American Institutions
3. Six hours of graduate course electives in American civilization and culture to be selected in consultation with the advisor.
4. At least six credit hours of course work at the 600-level.
5. A minimum B (3.0) grade point average in courses taken to complete the program, with no grade below a C- counting toward certificate requirements.
6. Additional requirements: Students must meet any specific prerequisites for any course they wish to take or obtain special permission of the instructor and the department chair concerned. Special permission may require a diagnostic examination.

The specific course components of each student’s program of study must be approved by the faculty advisor and the dean of the student’s school.
**Childhood/Early Childhood Education**

**DEPARTMENT**

**SCHOOL**

Education

**FACULTY**

Cynthia Benton (Chair), Heather Bridge, Susana Davidenko, Virginia Dudgeon, Karen Hampson, Hee-Young Kim, Elizabeth Klein, Emilie Kudela, Andrea Lachance, Tony Byungho Lee, Thomas Lickona, Lin Lin, Joy Mosher, Ellen Newman, Renee Potter, Margaret Richardson, Patricia Roiger, Kimberly Rombach, Judith Schillo, Shufang Shi, Susan Stratton, Gail Tooker

**ADJUNCT FACULTY**

For a listing of adjunct faculty see pages 132-135.

**PROGRAMS OFFERED**

Master of Science in Teaching: Childhood Education

Master of Science in Education: Childhood Education

**Master of Science in Teaching**

**Childhood Education (1–6) [CHD]**

The M.S.T. is designed to begin in the spring or fall and continue through the following spring or fall for a total of 51 credit hours, including both summer sessions.

This is a full-time program that requires field experiences in schools each semester. On completion of the courses, college requirements, and state requirements detailed below, graduates will receive a master’s degree and New York State Initial Certification.

**CAREER POTENTIAL**

- Elementary school teacher

**ADMISSION REQUIREMENTS**

1. Completion of M.S.T. Graduate Program Application submitted to the Graduate Studies Office
2. An interview with graduate programs representative
3. B.A. or B.S. in a liberal arts area from a regionally accredited college
4. Approved concentration of 36 hours in a liberal arts area
5. Minimum of two undergraduate courses in each of the following areas: English, social studies (history, geography, economics, political science, sociology), mathematics and science, as well as general preparation in the following areas: physical education, fine arts and career and occupational studies
6. Foreign language: Successful completion of one year of college-level study of a language other than English or the equivalent. See page 108 of this catalog for alternate ways of meeting this requirement.
7. Child psychology course
8. Basic competency in technology (computing) as determined by the students’ records and experiences
9. Strong academic record, demonstrated by a minimum undergraduate grade point average of 3.0 or better, GRE scores, or other standard test scores, indicating the ability to do graduate-level work
10. Letter of introduction (writing sample) that includes a self-description, background of experiences, and goals
11. Resume
12. Application to the SUNY Cortland Teacher Education Program

**GRADUATION REQUIREMENTS**

1. Completion of all required courses in the M.S.T. program, including the master’s project.
2. Overall grade point average of at least 3.0 in the M.S.T. program.
3. Appropriate teaching dispositions

**NEW YORK STATE CERTIFICATION REQUIREMENTS**

1. Health Education Course that fulfills state mandate (e.g. Health 265)
2. Passing score on the Liberal Arts and Sciences Test (LAST)
3. Passing score on the Assessment of Teaching Skills - Written (ATS-W)
4. Content Specialty Test (CST)
5. Child Abuse Identification and Reporting workshop
6. School Violence Prevention and Intervention workshop

**COURSE SEQUENCE**

**A. First Semester:**

12 credit hours

- EDU 510: Inquiry into Teaching, Technology, and Research Observation (30 clock hours)
- LIT 511: Teaching Literacy in the Primary Grades
- EDU 512: Teaching Elementary School Mathematics
- EDU 513: Teaching Elementary School Science

**B. Second Semester or Summer Sessions I and II:**

12 credit hours

Session I: EDU 514: Teaching Elementary Social Studies
EDU, FSA, LIT, SPE elective

Session II: Tutorial (25 clock hours)
LIT 516: Teaching Literacy in the Intermediate Grades
EDU 650: Educational Assessment

**C. Third Semester or Summer Sessions I and II:**

12 credit hours

Practicum (100 clock hours)
- EDU 656: Classroom Applications of Child Development
- EDU 657: Elementary School Practicum and Research Seminar
- EDU 658: Classroom Organization and Management: Theory and Practice
- EDU 670: Foundations of Education

**D. Fourth Semester**

15 credit hours

- Teaching (minimum of two six-week, full-time teaching assignments at two levels)
  - EDU 690: Student Teaching I
  - EDU 691: Student Teaching II
  - EDU 698: Student Teaching/Culminating Research Project Seminar

**TOTAL CREDIT HOURS REQUIRED:** 51
Master of Science in Education
Childhood Education [CED]
The program is intended for students who have a bachelor’s degree in elementary or childhood education. It requires a minimum of 33 credit hours of approved graduate course work including culminating experience.

Career Potential
- Elementary school teacher
- Curriculum specialist
- Community college/college instructor

Admission Requirements
In addition to meeting the requirements for admission to a degree program as stated in this catalog, the applicant for enrollment in the program leading to a Master of Science in Education in Childhood Education (1-6) should present the following:

1. Official transcripts documenting a bachelor’s degree from a regionally accredited college or university
2. Documentation of an initial/provisional certificate, or a certificate of qualification for initial or provisional certification, in childhood education/elementary education issued by the New York State Education Department
3. An overall undergraduate grade point average of at least 2.8
4. Recommendation forms completed by two individuals. Forms are available from the Graduate Studies Office or the Web
5. A typewritten statement demonstrating commitment to and interest in childhood education as well as ability to write clearly and well. The statement must answer the questions below.
   - What are your reasons for committing to work with students in elementary school?
   - What are your reasons for selecting SUNY Cortland for graduate studies, and specifically for M.S.Ed. in Childhood Education?
   - What are your long-term goals and how do you see this program supporting you in achieving those goals?
   - What other information do you deem relevant for reviewers to know?

Students should matriculate before beginning course work and must establish candidacy for the degree between their sixth and 15th hour of course work.

According to College policy, no more than six graduate credit hours may be transferred from another college; only course work completed in the five years prior to completion of the graduate program may be included in the degree program.

Additional Requirements
Candidates for the degree must meet any additional undergraduate or graduate requirements for the award of the degree established by the Childhood/Early Childhood Education Department.

Such additional requirements must be ascertained by the student in consultation with a Childhood/Early Childhood Education Department advisor.

Specific information regarding requirements (state examinations, identification and reporting of child abuse and maltreatment, alcohol and drug abuse education, school violence prevention training, and foreign language requirements) for New York State teaching certification can be found on pages 108-109 of this catalog.

More detailed information is found in the Graduate Advisement Manual, available at the Childhood/Early Childhood Education Department or at the department Web site.

A. Required Initial Courses: Six credit hours
   EDU 651: Understanding and Conducting Educational Research
   EDU 671: Issues in Foundations of Education
   Prerequisite: Student Teaching

B. Required Core Courses: 15 credit hours
   EDU 551: e-Learning and the American Classroom
   EDU 660: Curriculum Analysis in American Education
   EDU 648: Seminar in Elementary Science Education
   EDU 522: Democracy and Social Education
   EDU 524: Conflict and Controversy in Social Education

C. Required Specialty Strands: 12 credit hours
Each student in the program must choose one specialty strand and take the courses in that strand.

Social Studies Strand
One arts and sciences graduate elective at 500-600 level (3 cr. hr.) approved by strand coordinator and

EDU 610: Advanced Topics in Mathematics Education
   Prerequisite: EDU 522, may be taken concurrently
   EDU 648: Seminar in Elementary Science Education
   Prerequisite: EDU 522, may be taken concurrently

EDU 652: Master’s Project or EDU 699: Master’s Thesis
   Prerequisite: Completion of 30 hours of course work

Math and Science Strand
One arts and sciences graduate elective at 500-600 level (3 cr. hr.) approved by strand coordinator and

EDU 610: Advanced Topics in Mathematics Education
   Prerequisite: EDU 522, may be taken concurrently
   EDU 648: Seminar in Elementary Science Education
   Prerequisite: EDU 522, may be taken concurrently

EDU 652: Master’s Project or EDU 699: Master’s Thesis
   Prerequisite: Completion of 30 hours of course work

Technology Specialist Strand
One arts and sciences graduate elective at 500-600 level (3 cr. hr.) approved by strand coordinator and

GRY 520: Maps in the Classroom
EDU 630: New Media in the Classroom
   Prerequisite: EDU 551
EDU 652: Master’s Project or EDU 699: Master’s Thesis
   Prerequisite: Completion of 30 hours of course work

Total Credit Hours Required: 33
EDU 510: Inquiry into Teaching, Technology and Research
(B) This course will introduce students to the field of teaching, which will include an exploration of teachers’ practices, the structure of schools, student diversity, current initiatives in education in New York State, and other general areas related to education. The course will also examine the uses of technology in the public schools and ethical issues in using technology. Finally, students will learn how to be consumers and creators of research as preparation for the research they will be reading and/or conducting in future semesters. Classroom observations required throughout the semester (30 clock hours). Prerequisite: Admission to the M.S.T. Program. Undergraduates restricted. (3 cr. hr.)

EDU 512: Teaching Elementary School Mathematics
(B) The goal of this course is to prepare pre-service teachers in the MST Program to teach mathematics to elementary school students in an effective, constructivist, and equitable manner. In class meetings, the instructor will use hands-on mathematics activities to model appropriate strategies for teaching mathematics in a student-centered classroom and to build pre-service teachers’ understandings of mathematics. Inquiry teaching will be also modeled and expected in students’ lesson plans. By completing class readings, course assignments, and observations of children in classrooms, students will develop a multitude of techniques and strategies for providing mathematics instruction to diverse learners. Prerequisite: Admission to the M.S.T. Program. Undergraduates restricted. (3 cr. hr.)

EDU 513: Teaching Elementary School Science
(B) This course will provide hands-on activities that enable students to experience inquiry and learning science in a constructivist manner. Through reflection of these experiences and on structured interactions with children, students will participate in action research as they simultaneously engage in real life applications of the National Science Standards and the New York State Math/Science Technology Learning Standards. Prerequisite: Admission to the M.S.T. Program. Undergraduates restricted. (3 cr. hr.)

EDU 514: Teaching Elementary School Social Studies
(B) This course investigates innovative and traditional approaches to teaching social studies concepts for children pre-K to 6. It emphasizes the objectives (including adaptation for diverse and exceptional children), curriculum content, materials and resources to engage in historical, social and citizenship understanding and activities at the appropriate developmental level. Experiences are provided to develop National Standards and State Learning Frameworks. Prerequisites: EDU 510, 512, 513 and LIT 511. (3 cr. hr.)

EDU 522: Readings, Research and Teaching Innovations in Mathematics and Science Education
(B) This course will examine issues related to the teaching and integration of math, science and technology in elementary school classrooms. Students will examine theory and classroom-based research to construct an understanding of how these subject areas can be made accessible to all learners. (3 cr. hr.)

EDU 523: Elementary School Science
(O) Objectives, content of science programs for children in prekindergarten through middle school. Planning pupil activities, utilizing teaching aids, materials. Prerequisite: Student teaching. (3 cr. hr.)

EDU 524: Democracy and Social Education
(B) This course will be conducted through research-based and self-reflective-oriented inquiry. Students will analyze and define democracy and social education in the context of American public schools. Students will confront the antidemocratic forces of greed, individualism, and intolerance in today’s society and be challenged to implement the study of social education with the goal of social justice. Students will be exposed to a theoretical and historical analysis of education and society. The course will also provide a practical analysis of classroom pedagogy and school organization. (3 cr. hr.)

EDU 530: Seminar in Student-Centered Experiential Learning
(O) Open to elementary/secondary education majors. This is a student-centered, active participation course based primarily on John Dewey’s philosophy. Requirements such as following the Core Practices which are based on Dewey’s work and derived from Foxfire remain constant and are applied during each meeting of the course. Readings, discussions, and activities are designed to help students understand and employ the Core Practices and other concepts during the course. Prerequisites: Students teaching at the elementary, early secondary, or secondary level; 2.3 grade point average required. (3 cr. hr.)

EDU 531: Creativity in Curriculum and Instruction
(O) Research, objectives and procedures related to creativity in teaching and learning. Emphasis on development, implementation and assessment of integrated curriculum activities to enrich learning experiences and nurture creative processes. (3 cr. hr.)

EDU 532: Elementary School Mathematics II
(O) Extension of EDU 522, introduces additional math concepts including informal geometry, metrics, number patterns, probability. Prerequisite: Student teaching. (3 cr. hr.)

EDU 533: Introduction to Middle Childhood Education
(A) Content and methods for integration of curricula for language arts, mathematics, social studies, and science in grades 5–8. Development of interdisciplinary models and assessments aligned with New York State Learning Standards for each of the disciplines and implemented through thematic team teaching and collaborative student projects, appropriate for the intermediate level. Prerequisites: EDU 441, 442 or 443, or SSS 301-02. (3 cr. hr.)

EDU 538: Discipline and Classroom Behavior in the Elementary School
(B) Identifying various behavior problems; alternative strategies for dealing with inappropriate behavior; discipline, classroom management as preventive measure; cognitive and affective approaches for resolving behavior problems. Not open to undergraduates having credit for EDU 478. Prerequisite: Student teaching. (3 cr. hr.)

EDU 551: e-Learning and the American Classroom
(B) This course is designed for practicing educators and teachers and will cover emerging educational technologies that are changing the way teachers perform their tasks. The emphasis of this course will be a hands-on approach to using new digital tools to enhance teaching, learning, and communication, not only within the classroom, but also to the larger contexts of schools, communities, and the world. Previous experience with personal computers is suggested but is not required. (3 cr. hr.)
EDU 552: Gender Issues in Education
(F) Seminar integrating recent scholarship on women and women's ways of knowing into a broader study of gender issues in education including socialization of men and women through education; socialization of women and men teachers and administrators and the costs and benefits of these structures for men and women. The course will focus upon application of these issues to policy and practice in education today. Prerequisites: junior, senior or graduate standing, education methods course, consent of instructor. Also listed as WST 552. (3 cr. hr.) ■

EDU 559, 659: Special Topics in Education
Selected topics. May be taken more than once as subtitles change. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

EDU 570: Character Education
(B) Character education is defined as helping students understand, care about, and act upon on widely shared ethical values such as respect, responsibility, honesty, fairness, caring and civic virtue. Emphasis on a comprehensive approach that integrates character development into every phase of school life — including academics and behavior — and develops the classroom and school into caring communities that embody good character. (3 cr. hr.)

EDU 610: Advanced Topics in Mathematics Education
(B) This course explores the elementary school mathematics curriculum as well as issues involving teaching mathematics and assessing mathematics learning at grade levels K-6. Throughout the semester, these issues are connected with the research in mathematics education, the NCTM standards, and New York State M.S.T. standards. Emphasis is placed on integrating mathematics with language arts, science, technology, and real life experiences. Prerequisite which may be taken concurrently: EDU 522. (3 cr. hr.)

EDU 611: Practicum in Corrective Elementary School Mathematics
(O) Practicum in diagnosis and remedial treatment. Prerequisite: EDU 610; may be taken concurrently with EDU 610. (3 cr. hr.)

EDU 620: Research and Evaluation in Early Childhood Education
(O) Uses of types of research; techniques for studying, evaluating teacher behavior, children's learning. Practicum required at beginning of concentration. (3 cr. hr.)

EDU 621: Learning Experiences for Young Children
(O) Concentrated, creative work in study, design and integration of learning experiences in specific subject, skill areas for infants through early primary years. Interdisciplinary workshops, practicum. (3-6 cr. hr.)

EDU 622: Programs and Theories in Early Childhood Education
(O) Model programs, underlying theories of learning and development. Overall curriculum design, continuity from preschool to early primary programs. Practicum, field trips to different types of programs. (3 cr. hr.)

EDU 623: Coping with Individual Differences in the Classroom
(O) Workshops in interpretive, instructional management competencies to deal effectively with educationally important differences in three- to eight-year-old children. Focus on disadvantaged child. Practicum. (2-4 cr. hr.)

EDU 627: Problems in the Teaching of Junior High School Mathematics
(O) Examination of junior high school mathematics curriculum; organizational patterns, materials, teaching techniques that develop mathematical competencies and understandings. Specific problem areas investigated. Prerequisite: Consent of instructor. (3 cr. hr.)
EDU 654: Seminar In Elementary Science Education II
(O) In-depth study of area of interest to student. Development of research proposal to be implemented, evaluated as integral part of course. Prerequisite: EDU 648. (3 cr. hr.)

EDU 656: Classroom Applications of Child Development
(B) This course is designed to examine the relationship between child development and elementary school curricula with a focus on identifying children's strengths and appreciating individual differences in order to promote the optimal development and learning of children with diverse characteristics and varying abilities and disabilities. Prerequisites: EDU 516 and 650. (3 cr. hr.)

EDU 657: Elementary School Practicum and Research Seminar
(B) This course has two components. Students will participate in a 100-hour practicum in an elementary school setting. Here they will work collaboratively with the classroom teacher in areas of planning, instruction, assessment and classroom management that will lead them towards a clearer understanding of the role of the teacher in the classroom and prepare them for the more intense student teacher semester. In addition, they will attend a weekly seminar focusing on issues related to the practicum. They will also explore issues, trends, and practices in classroom inquiry and teacher action research that will lead to the development of a research proposal for the M.S.T. Program master's project. The M.S.T. Coordinator will oversee the students' practicum experience. Prerequisites: EDU 516 and 650. (3 cr. hr.)

EDU 658: Classroom Organization and Management: Theory and Practice
(B) The course will introduce students to theories of classroom organization and management which address student learning and development. The course will include exploration of teachers' practices as they relate to the structure of schools, and student diversity, learning and development. Models for organization and management of the classroom environment, materials and procedures will be discussed, as will models for identifying, preventing and resolving behavior problems and promoting personal and social responsibility. All models considered in the course will be examined in light of application to experiences in the practicum setting. Prerequisites: EDU 516 and 650. (3 cr. hr.)

EDU 660: Curriculum Analysis in American Education
(A) The purpose of this course is to give students analytical tools with which to examine and create curricula so that curriculum material will best serve the needs of all learners. The course is presented in part as an historical overview of the curriculum field to help students understand the purposes and processes of public education. (3 cr. hr.)

EDU 666: Curriculum Construction
(O) Principles, practices, issues underlying construction of curriculum for public school. Analysis of selected programs. Also listed as EDA 666. (3 cr. hr.)

EDU 668: Integrative Teaching with Technology
(O) Focuses on preparing teachers to innovatively address learning standards for mathematics, science and technology, and to integrate subjects across the school curriculum using current technologies, e.g., Geographic Information System mapping software, Global Position System, Internet sources. Team problem solving, the scientific method, field-based experiments and lesson construction are applied in a variety of methods to implement math/science/technology learning standards. Also listed as GRY 668. (3 cr. hr.)

EDU 670: Foundations of Education
(B) This course will focus on the historical, philosophical, political-economic and social foundations of education, with an investigation of the basic purposes or ends of American schooling since the rise of the Common School in the 19th century. Topics will be examined in relation to current scholarship, the links between educational thought and practice as reflected in students' observations during the practicum, and the thematic threads in the M.S.T. program. Prerequisites: EDU 516 and 650. (3 cr. hr.)

EDU 683: Supervision in Elementary School Science
(O) Organization, principles, techniques for pre-kindergarten through middle schools. Curriculum development, design emphasizing techniques for evaluation. Prerequisites: EDU 648, 654. (3 cr. hr.)

EDU 684: Supervision of Student Teaching
(O) Identification of needs, problems of prospective teachers. Ways to guide, evaluate during student teaching experience. For teachers who are or will be supervising student teachers. Sectioning for elementary, secondary emphasis. (3 cr. hr.)

EDU 687: Introduction to Counseling and Guidance
(O) Selected personality theories, related concepts of counseling; applied techniques to educational settings. (3 cr. hr.)

EDU 690: Student Teaching I
(B) The culmination of the M.S.T. Program, this faculty-supervised teaching experience emphasizes applying the principles of learning and research gained throughout the program. A six-week, first-half semester of teaching in childhood or middle childhood settings (grades 1-6). Prerequisites: EDU 658 and 670. (6 cr. hr.)

EDU 691: Student Teaching II
(B) The culmination of the M.S.T. Program, this faculty-supervised teaching experience emphasizes applying the principles of learning and research gained throughout the program. A six-week, second-half semester of teaching in childhood or middle childhood settings (grades 1-6). Prerequisites: EDU 658 and 670. (6 cr. hr.)

EDU 698: Student Teaching/Culminating Research Project Seminar
(B) The culminating activity in the M.S.T. Program, this course will connect the strands of the program through review of research and discussion of philosophy, theory and practice. This seminar will meet for one and a half hours per week during each week of student teaching and for approximately 20 hours during the week between student teaching experiences. The seminar will focus on issues related to student teaching and completing the research project. Corequisite with EDU 690 and 691. Prerequisite: EDU 657. (3 cr. hr.)

EDU 699: Master's Thesis
(A) Optional culminating activity, resulting in original research and writing on a topic appropriate to a student's program, under direction of a thesis committee. Students accepted only at option of Childhood/Early Childhood Education Department. Master's thesis guidelines available from Childhood/Early Childhood Education Department. Prerequisites: EDU 651, consent of department and completion of 24 hours of course work. (6 cr. hr.)
Educational Leadership

DEPARTMENT

SCHOOL
Education

FACULTY
Mary Kinsella (Chair)

ADJUNCT FACULTY
For a listing of adjunct faculty see pages 132-135.

PROGRAMS OFFERED
Certificate of Advanced Study: Educational Leadership
The Certificate of Advanced Study (C.A.S.) program prepares students to become school administrators. The program requires 30 to 36 credit hours, depending on the student's area of interest, including an administrative internship. Students and their advisors develop programs to fit the student's career goals.

CAREER POTENTIAL
- Subject and content area supervisors
- Building administrators
- Directors of athletics and physical education
- Business officials
- Central office officials

MISSION STATEMENT
The SUNY Cortland Educational Leadership Department prepares educational leaders by integrating theory and practice to develop schools and other learning communities effectively.

A Certificate of Advanced Study (C.A.S.) will be given to students who have been accepted and satisfactorily completed all program requirements. Candidates must hold an earned master’s degree.

Candidates for school building leader (SBL) and school district leader (SDL) must hold a permanent teaching certificate and complete a minimum of 60 credit hours of approved graduate study above the bachelor’s degree. Candidates for the school district business leader (SDBL) must complete 66 credit hours of approved graduate study (a maximum of 30 credits may be transferred in from a previously earned master’s degree).

The New York State Education Department requires for the initial certificate as a school building leader that the candidate shall have successfully completed three years of classroom teaching service and/or pupil personnel service experience in public or non-public schools. The New York State Education Department requires for the professional certificate as a school district leader that the candidate shall have successfully completed three years of classroom teaching service and/or educational leadership service and/or pupil personnel service experience in public or non-public schools N-12.

The school building leader (SBL) certificate issued by the State of New York enables holders to qualify for positions at the building level such as principals and assistant principals.

The school district leader (SDL) certificate issued by the State of New York enables holders to qualify for positions at the district level such as superintendent and many assistant superintendent positions.

The school district business leader (SDBL) certificate issued by the State of New York enables holders to qualify for positions at the business operation of a school district.

ADMISSION REQUIREMENTS
To be considered for the Educational Leadership program, applicants must include, in addition to the completed graduate school application, the following materials:

1. Certification and Degree: Proof of permanent or professional New York State teaching certification for those applicants in public or non-public schools N-12.

2. Resume: An updated resume with a minimum of three references with current phone numbers.

3. Recommendations: Three completed, signed and dated Candidate Recommendation Forms, which are available at cortland.edu/edleadership/appinfo.html. These recommendation forms must be completed by practicing school leaders who support the applicants’ candidacy. Once completed by the reference person, the forms should be returned to the applicants in a signed and sealed envelope to insure confidentiality. They should be included in the submitted packet. Please note the following:
   a. Applicants from the teaching field must have one form from an administrator in their district’s central office, a second form from the immediate supervisor and a third form from a practicing educational administrator of their choice.
   b. Applicants from a non-teaching, non-traditional background, must have one recommendation form from their current organization’s chief executive officer, one form from their immediate supervisor and a third form from an educational supervisor/administrator of their choice.

4. Essay: A written essay (one-to-two pages, double-spaced with 12-point type) that addresses the following question: What is your vision of the school leader in American public schools of the 21st century?
   a. This essay is due at the time of all other application materials and becomes part of the application file; this paper should not be handed in at a separate time.
   b. This paper should be well written, word processed and in the form and quality that a future school leader would proudly provide a superintendent and/or board of education for review. A rubric for this essay may be downloaded at cortland.edu/edleadership/appinfo.html.

This completed packet, along with the graduate studies application, is to be returned to the Graduate Studies Office. Once the completed application packet is received, it will be scheduled for review by the Educational Leadership Department faculty committee.
ADMINISTRATIVE INTERNSHIP

All students must complete the requirements for an administrative internship under the supervision of a practicing school administrator and a representative of SUNY Cortland. Several options for satisfying the internship requirement are available and must be approved by the department chair.

The internship for the SDBL must be conducted in a business office environment. Students must complete at least 21 credit hours of course work before beginning the internship experience. At least six of the core courses must be completed with the 21 credit hours.

Advisement is available from the full-time faculty, handouts and the catalog available in the department office. For more information, call (607) 753-2444.

Certificate of Advanced Study
School Building Leader [SBL]

COURSE SEQUENCE

EDL 613: Principles of Financial Leadership
EDL 615: Educational Leadership and the Law
EDL 616: Principles of Curriculum Leadership
EDL 657: Principles of Organizational Leadership
EDL 678: Strategic Supervision and Leadership
EDL 680: Principal Leadership
EDL 683: Principles of Special Programs Leadership
EDL 696: Internship in School Leadership
EDL 699: Culminating Seminar
EDL ___: Elective

TOTAL CREDIT HOURS REQUIRED: 30

Note: Those students wishing to pursue a position as athletic director should take EDL 606 as an elective.

Note: Students who take EDL 690 as an elective can obtain both the SBL and SDL — School Building and District Leader [CAS_SBL(SDL]

Certificate of Advanced Study
School District Leader [SDL]

COURSE SEQUENCE

EDL 613: Principles of Financial Leadership
EDL 615: Educational Leadership and the Law
EDL 616: Principles of Curriculum Leadership
EDL 657: Principles of Organizational Leadership
EDL 678: Strategic Supervision and Leadership
EDL 683: Principles of Special Programs Leadership
EDL 690: Principles of School District Leadership
EDL 696: Internship in Educational Leadership
EDL 699: Culminating Seminar
EDL ___: Elective

TOTAL CREDIT HOURS REQUIRED: 30

Note: Students who take EDL 680 as an elective can obtain both the SBL and SDL — School Building and District Leader [CAS_SBL(SDL]

The Educational Leadership Department strongly suggests that students apply for admission into the dual SBL(SDL program (if qualified). Students will be more marketable in the work force with the dual School Building and School District Leader program.
EDL 606: Seminar in Athletic Program Leadership
(M) The responsibilities and tasks of the position of athletic director, including the leadership roles, development of program philosophy, eligibility, coaching requirements and the political aspects of the position. (3 cr. hr.)

EDL 613: Principles of Financial Leadership
(B) The role of financial management at the building level, the management of budgets, managing building and student accounts, working with the business office and officials, the diversity of roles and responsibilities, and the legal and ethical ramifications related to financial management at the school level. (3 cr. hr.)

EDL 615: Educational Leadership and the Law
(B) The legal, political and ethical issues faced by the school leader, and a basic understanding of parent and student rights, personnel issues, contract negotiations and management, and other legal and education regulations that affect the school leader. (3 cr. hr.)

EDL 616: Principles of Curriculum Leadership
(B) An understanding of curriculum, instruction, assessment and the program reform process, addressing the curriculum development process, and models and strategies for supervision of curriculum. (3 cr. hr.)

EDL 618: Field Studies in School Leadership
(B) An opportunity to observe, speak with, and shadow school leaders and to become acquainted with the various administrative roles throughout a school organization. (3 cr. hr.)

EDL 629: Special Topics in Educational Leadership
(O) An occasional course that will address special topics and issues as they relate to educational leadership, organizational development, legal processes, new mandates or other pertinent topics of concern. (3 cr. hr.)

EDL 656: Principles of Public School Finance
(B) The concepts, principles, regulations, laws, and roles and responsibilities required for managing and leading the multiple financial functions of the school district business office. (3 cr. hr.)

EDL 657: Principles of Organizational Leadership
(B) Explores the roles, responsibilities and skills of the strategic, instructional and political leader within the organization, addressing organizational development, systems thinking, complexity theory, cultural diversity and the change process. (3 cr. hr.)

EDL 666: Leadership in Curriculum Development
(B) The principles, practices and issues specific to and underlying the development of the curriculum in the public school. Focus is on the practical application of the techniques of curriculum development for specific and selected programs. (3 cr. hr.)

EDL 678: Strategic Supervision and Leadership
(B) An in-depth understanding of supervision of instructional and non-instructional staff and student management techniques through the exploration of theories of motivation, legal ramifications and models of supervision. (3 cr. hr.)

EDL 680: Principal Leadership
(B) The role of the principal, the change process, student guidance and management, legal aspects, curriculum supervision and models of decision-making and shared leadership. (3 cr. hr.)

EDL 683: Principles of Special Programs Leadership
(B) The principles, laws, mandates and procedures required to manage and provide leadership for special programs such as pupil personnel, special education, social services and supplementary funding programs. (3 cr. hr.)

EDL 685: Facilities Maintenance and Management
(O) The management, facilitation and design of school facilities, resources and assets, including state and federal regulations and the management and supervision of capital projects. (3 cr. hr.)

EDL 690: Principles of School District Leadership
(B) A focus on district leadership as it relates to organizational development, comprehensive instructional programs, strategic planning, district-wide financial management, working with policy and decision-making bodies, personnel development and legal, political and ethical issues. (3 cr. hr.)

EDL 696: Internship in Educational Leadership
(A) A field experience practicum providing on-the-job experiences in educational leadership and administration at both the building and district levels. (3 cr. hr.)

EDL 699: Culminating Seminar
(B) A culminating course providing a comprehensive assessment of students’ leadership and administrative understanding, skills and dispositions, and preparing them for the New York State assessment in educational leadership. (3 cr. hr.)
English Department

School
Arts and Sciences

Faculty
Karla Alwes (Chair), Ross Borden, Victoria Boynton, Amy Burtner, Wesley Clymer, Vaughn Copey, Mark DiCicco, Tim Emerson, David Faulkner, David Franke, Marni Gauthier, Alexander Gonzalez, T. Ellen Hill, Mary Lynch Kennedy, Denise D. Knight, Kathy Lattimore, Matthew Lessig, Gailanne Mackenzie, Noralyn Maselink, Edward McCorduck, Homer Mitchell, Nicola Morris, Emmanuel Nelson, Lisa Neville, Alex Reid, Linda Rosekrans, Cynthia Sarver, Karen Stearns, John Suarez, Paul Washburn, Laureen Wells-Weiss, Anne Wiegard, Janet Wolf

Adjunct Faculty
For a listing of adjunct faculty see pages 132-135.

Programs Offered
Master of Arts in English
Master of Arts in Teaching in Adolescence Education: English (7-12)
Master of Science in Education in Adolescence Education: English (7-12)

Master of Arts English [ENG]
A minimum of 30 credit hours of approved graduate work as described hereafter is required for the master of arts degree. A minimum of nine credit hours must be taken in courses at the 600 level.

Admission Requirements
In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to a master’s degree in English should present the following:
1. At least a B average in undergraduate English courses
2. At least a B cumulative average for all undergraduate courses
3. A foreign language is desirable, but the requirement may be met concurrently with graduate study
4. Thirty-three hours of undergraduate literature or 27 hours of literature and six hours of study in the English language or linguistics

Language Requirement
Competency in one modern foreign language or one classical language must be demonstrated before the completion of graduate work, unless this competency is demonstrated prior to admission. Competency in a foreign language is defined as the skill level attained by one year of college-level study or the equivalent of a language other than English. If this requirement has not already been met, candidates may take language courses concurrently with graduate study.

Master’s Thesis or Comprehensive Exam
Requirements for the degree include submission of a master’s thesis or passing the master’s comprehensive exam offered twice a year in April and July. The master’s thesis will be a substantial paper based on one of the approaches to literary analysis and interpretation studied in the course, Seminar in Literary Criticism, but it may originate in any graduate literature course. The paper should present an original thesis and incorporate the most recent research on the topic. This paper must be submitted at least two months prior to the date students expect to receive the degree and may not be submitted before degree candidacy is established. A passing score on the comprehensive exam is 80.

Additional Requirements
Other requirements for the award of the degree may be determined by the English Department and must be ascertained by students in consultation with a departmental graduate advisor.

Program Requirements
ENG 672: Seminar in Literary Criticism
One of the following four courses
   ENG 500: Old English
   ENG 530: Chaucer
   ENG 601: History of the English Language
   ENG 632: Middle English Literature
One course in 16th or 17th-Century British Literature
   ENG 538: Studies in 17th-Century English Literature
   ENG 539: Milton
   ENG 636: Seminar in Shakespeare
   ENG 640: Studies in English 1660-1800
One course in 18th or 19th-Century British Literature
   ENG 547: 19th-Century British Women Writers
   ENG 645: Studies in the Romantic Era
   ENG 646: Studies in the Victorian Era
One course in 20th-Century British or American Literature
   ENG 548: Studies in British Literature 1950-Present
   ENG 616: Studies in American Literature from 1900 to 1950
   ENG 617: Studies in American Literature Since 1950
   ENG 677: Seminar in Contemporary British Literature
One other course in American Literature
   ENG 615: Studies in American Literature to 1900
   ENG 616: Studies in American Literature from 1900-1950
   ENG 617: Studies in American Literature Since 1950
   ENG 622: Seminar in American Women Writers

Twelve credit hours of electives in English by advisement, to ensure, in conjunction with students’ undergraduate program, adequate distribution of courses over the fields of English and American literature. Only one non-literature elective may be taken.

Note: Requirements in the various categories may also be met by appropriate ENG 529 or 629 special topics courses.

Total Credit Hours Required: 30
Master of Arts in Teaching
Adolescence Education: English (7-12) [AEN]

The M.A.T. is designed for individuals who have completed a bachelor’s degree and are seeking a teaching certificate in adolescence education: English (7-12). It is not open to students who already have initial certification in secondary English. The program provides:

- the pedagogical course work, practica and student teaching experiences necessary for the initial certificate that qualifies individuals to teach in the public schools in New York State;
- the opportunity for advanced study in English and the language arts; and
- the master's degree necessary for the professional certificate in adolescence education: English (7-12).

A minimum of 48-51 credit hours of approved graduate study as described hereafter is required for the M.A.T.

ADMISSION REQUIREMENTS

In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to an M.A.T. in adolescence education: English (7-12) should present the following:

1. At least a B average in undergraduate courses in English, composition or comparative literature.
2. A grade point average of at least 3.0 in all undergraduate courses.
3. One year of college-level study or the equivalent of a language other than English. If this requirement has not already been met, the candidate may take language courses concurrently with graduate study.
4. Two letters of reference. Letters from undergraduate professors teaching in the subject areas identified in number one are required.
5. A minimum of 33 hours of approved undergraduate courses in English, composition or comparative literature.

LANGUAGE REQUIREMENT

Individuals making application for an initial certificate as a teacher of adolescence education: English (7-12) in New York State are required to complete one year of college-level study or the equivalent of a language other than English. If this requirement has not already been met, the candidate may take language courses concurrently with graduate study.

M.A.T. PORTFOLIO

Students are required to submit a student-teaching portfolio that provides documentation of reflective practices and teaching and learning processes. The portfolio must be submitted at least two months prior to the date students expect to receive the degree and may not be submitted before degree candidacy is established.

STUDENT TEACHING REQUIREMENT

To be eligible to student teach, students must have completed 15 credit hours in the pedagogical core, including ENG 504, 505, AED 541, 668, 669 and six credit hours in the content core.

ADDITIONAL REQUIREMENTS

Other requirements for the award of the degree may be determined by the English Department and must be ascertained by the student in consultation with a departmental graduate advisor.

COURSE OF STUDY

A. Pedagogical Core: 33 credit hours

Students are required to take the courses listed below. ENG 504, 505, AED 541, 668 and 669 must be completed before student teaching.

- ENG 504: Seminar in the Composing Process: Rhetoric and Analysis
- ENG 505: Participant-Observer Experience: Composing Process (50 hours of fieldwork)
- AED 541: Teaching-Learning Experience: Composing Process
- AED 576: Practicum I: Student Teaching in the Middle School
- AED 577: Practicum II: Student Teaching in the Secondary School
- AED 663: Seminar in Research in the Teaching of English
- AED 668: Language Development in Adolescence
- AED 669: Participant-Observer Experience: Language Development (50 hours of fieldwork)
- EDU 671: Issues in Foundations of Education

B. Content Core: 15 credit hours

Students are required to take a minimum of five courses in literature and/or rhetoric. These courses are selected in consultation with the M.A.T. graduate coordinator. Course selection is intended to increase knowledge of literature and to meet the content distribution required for a teacher of secondary English. A minimum of nine credit hours must be taken in courses at the 600 level. Depending on their background, students may be required to take a minimum of one course from each of the following six categories:

One course in American literature with emphasis on women authors and authors of color
- ENG 615: Studies in American Literature to 1900
- ENG 616: Studies in American Literature 1900 to 1950
- ENG 617: Studies in American Literature since 1950
- ENG 622: Seminar in American Women Writers

One course in literature before 1800
- ENG 500: Old English
- ENG 530: Chaucer
- ENG 538: Studies in Seventeenth-Century English Literature
- ENG 539: Milton
- ENG 632: Middle English Literature
- ENG 636: Seminar in Shakespeare
- ENG 640: Studies in English Literature 1660-1800

One course in British and/or Irish literature
- ENG 500: Old English
- ENG 530: Chaucer
- ENG 538: Studies in Seventeenth-Century English Literature
- ENG 539: Milton
- ENG 547: 19th Century British Women Writers
- ENG 548: Studies in British Literature 1950-Present
- ENG 549: Studies in Irish Literature
- ENG 632: Middle English Literature
- ENG 636: Seminar in Shakespeare
- ENG 640: Studies in English Literature 1660-1800
- ENG 645: Studies in the Romantic Era
- ENG 646: Studies in the Victorian Era
- ENG 677: Studies in Contemporary British Literature

One course in world literature with emphasis on women authors and authors of color
- ENG 618: Global Multicultural Literature
- ENG 678: World Drama
One course in literature for young adults with emphasis on women authors and authors of color
ENG 619: Seminar in Literature for Adolescence

One course in technology
ENG 506: Computers and the Study of English

Students who have met the content distribution may select additional courses from among the following electives
ENG 529, 629: Special Topics
ENG 601: History of the English Language
ENG 602: Rhetorical Tradition: Connecting Reading and Writing
ENG 699: Independent Study

TOTAL CREDIT HOURS REQUIRED: 48

Additional Requirements, mandated by the New York State Education Department

One of the following health courses:
HLH 110: Personal and Community Health
HLH 199: Critical School Health Issues
HLH 510: Proseminar in Health Foundations

Both of the following workshops:
Child Abuse Identification and Reporting workshop
School Violence Prevention and Intervention workshop

TOTAL CREDIT HOURS REQUIRED: 48-51

**Master of Science in Education**

**Adolescence Education: English (7-12) [AEN]**

The M.S.Ed. program is designed for individuals who hold an initial teaching certificate and are seeking a professional certificate in adolescence education: English (7-12). The M.S.Ed. program provides:
- the pedagogical course work necessary for the professional certificate;
- the opportunity for advanced study in English and the language arts; and
- the master's degree necessary for permanent certification.

A minimum of 30 credit hours of approved graduate study as described hereafter is required for the M.S.Ed. A minimum of nine credit hours must be taken in courses at the 600 level.

**ADMISSION REQUIREMENTS**

In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to a Master of Science in Education in adolescence education: English (7-12) should present the following:
1. At least a B average in undergraduate English courses.
2. A grade point average of at least 3.0 for all undergraduate courses.
3. One year of college-level study or the equivalent of a language other than English. If this requirement has not already been met, the candidate may take language courses concurrently with graduate study.
4. Two letters of reference. Letters from undergraduate professors teaching in the subject areas identified in number one are required.
5. A minimum of 33 hours of approved undergraduate courses in English, composition, or comparative literature.

**LANGUAGE REQUIREMENT**

Individuals making application for an initial certificate as a teacher of adolescence education: English (7-12) in New York State are required to complete one year of college-level study or the equivalent of a language other than English. If this requirement has not already been met, the candidate may take language courses concurrently with graduate study.

M.S. ED. PORTFOLIO

Students are required to submit a teaching portfolio that provides documentation of reflective practices and teaching and learning processes. The portfolio must be submitted at least two months prior to the date the student expects to receive the degree and may not be submitted before degree candidacy is established.

**COURSE OF STUDY**

A. Pedagogical Core: 12 credit hours

Students are required to take 12 credit hours of courses that link content and pedagogy:
- ENG 504: Seminar in the Composing Process: Rhetoric and Analysis
- AED 541: Teaching Literature and Critical Literacy
- AED 668: Language Development in Adolescence
- AED 663: Seminar in Research in the Teaching of English

B. Content Core: 18 credit hours

Students are required to take a minimum of six courses in literature and/or rhetoric. These courses are selected in consultation with the M.S.Ed. coordinator. Course selection is intended to increase knowledge of literature and to meet the content distribution required for a teacher of secondary English.

A minimum of nine credit hours must be taken in courses at the 600 level. Depending on their background, students may be required to take a minimum of one course from each of the following six categories:

One course in American literature with emphasis on women authors and authors of color
ENG 615: Studies in American Literature to 1900
ENG 616: Studies in American Literature 1900 to 1950
ENG 617: Studies in American Literature since 1950
ENG 622: Seminar in American Women Writers

One course in literature before 1800
ENG 500: Old English
ENG 530: Chaucer
ENG 538: Studies in Seventeenth Century-English Literature
ENG 539: Milton
ENG 632: Middle English Literature
ENG 636: Seminar in Shakespeare
ENG 640: Studies in English Literature 1660-1800

One course in British and/or Irish literature
ENG 500: Old English
ENG 530: Chaucer
ENG 538: Studies in Seventeenth Century-English Literature
ENG 539: Milton
ENG 547: 19th Century British Women Writers
ENG 548: Studies in British Literature 1950-Present
ENG 549: Studies in Irish Literature
ENG 632: Middle English Literature
ENG 636: Seminar in Shakespeare
ENG 640: Studies in English Literature 1660-1800

One course in world literature with emphasis on women authors and authors of color
ENG 618: Global Multicultural Literature
ENG 678: World Drama

One course in literature for young adults with emphasis on women authors and authors of color
ENG 619: Seminar in Literature for Adolescence
One course in technology
ENG 506: Computers and the Study of English
Students who have met the content distribution may select additional courses from among the following electives:
ENG 529, 629: Special Topics
ENG 601: History of the English Language
ENG 602: Rhetorical Tradition: Connecting Reading and Writing
ENG 699: Independent Study
TOTAL CREDIT HOURS REQUIRED: 30

Middle Childhood Extension (Grades 5-6)
Students electing to take the Middle Childhood Extension may do so by completing the following additional courses:
EDU 533: Introduction to Middle Childhood Education and PSY 533: Advanced Developmental Psychology.
Students with the extension are required to fulfill a minimum of 36 credit hours of graduate study.

Example of the M.A.T. in Adolescence Education: English (7-12) [AEN] over two years

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>AED 541</td>
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<tr>
<td>ENG 504</td>
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<td>ENG 505</td>
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<tr>
<td>(50 hours field experience)</td>
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<tr>
<td>ENG 618, 678 or elective*</td>
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<tr>
<td><strong>Total credit hours: 12</strong></td>
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</tbody>
</table>

| Spring |
| AED 663 |
| AED 668 |
| AED 669 |
| (50 hours of field experience) |
| ENG 619 or ENG elective* |
| HLH course |
| Child Abuse Identification and Reporting workshop |
| *See required content distribution list |
| **Total credit hours: 14-15** |

*The following required courses are offered only in the fall semester: ENG 504, 505 and AED 541.
*The following required courses are offered only in the spring semester: AED 663, 668 and 669.

| **Fall** |
| AED 541 |
| ENG 504 |
| ENG 505 |
| (50 hours of fieldwork) |
| School Violence Prevention and Intervention workshop |
| *See required content distribution list |
| **Total credit hours: 9** |

| Spring |
| AED 668 |
| AED 669 |
| (50 hours of fieldwork) |
| AED 663 |
| Child Abuse Identification and Reporting workshop |
| **Total credit hours: 9** |

| Summer |
| EDU 671 |
| **Total credit hours: 3** |

| Third Year |
| **Fall** |
| AED 576 |
| AED 577 |
| Complete student teaching portfolio |
| May degree |
| **Total credit hours: 12** |

Example of the M.S.Ed. in Adolescence Education: English (7-12) [AEN] over one year

| Fall |
| AED 541 |
| ENG 504 |
| ENG 506 or elective* |
| ENG 618, 678 or elective* |
| ENG elective* |
| *See required content distribution list |
| **Total credit hours: 15** |

| Spring |
| AED 668 |
| AED 663 |
| ENG 619 or elective* |
| ENG elective* |
| **Total credit hours: 15** |

August or December degree

Example of the M.A.T. in Adolescence Education: English (7-12) [AEN] over three years

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
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</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Spring</strong></td>
<td><strong>Fall</strong></td>
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<tr>
<td>AED 619</td>
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<tr>
<td>ENG elective*</td>
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<td><strong>Total credit hours: 6</strong></td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Third Year</th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Spring</strong></td>
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<tr>
<td>AED 541</td>
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<td>ENG 504</td>
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<td>ENG 505</td>
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<tr>
<td>(50 hours of field work)</td>
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<tr>
<td>School Violence Prevention and Intervention workshop</td>
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<tr>
<td>*See required content distribution list</td>
<td></td>
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<tr>
<td><strong>Total credit hours: 9</strong></td>
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</table>

| Spring |
| AED 576 |
| AED 577 |
| (50 hours of fieldwork) |
| Child Abuse Identification and Reporting workshop |
| **Total credit hours: 9** |

| Summer |
| EDU 671 |
| **Total credit hours: 3** |

December degree

*The following required courses are offered only in the fall semester: ENG 504, 505 and AED 541.
*The following required courses are offered only in the spring semester: AED 663, 668 and 669.
ENG 500: Old English
(O) Phonemic and grammatical structures of Old English; translation and analyses of selected West-Saxon texts; general background reading in history of English language, major trends in Old English literature. (3 cr. hr.)

ENG 504: Seminar in the Composing Process: Rhetoric and Analysis
(F) An experimental and theoretical approach to the teaching of writing, focusing on research, theory and practice. M.A.T. students must be concurrently enrolled in ENG 505. Prerequisite: 3.0 grade point average. (3 cr. hr.)

ENG 505: Participant-Observer Experience: Composing Process
(F) A 50-hour field experience supervised by the course instructor. Prerequisites: Graduate status, permission of the department, 3.0 grade point average. Corequisite: ENG 504. (3 cr. hr.)

ENG 506: Computers and the Study of English
(B) Introduces graduate students, particularly students who plan to teach or are currently teaching English at middle school, secondary school, or adult levels, to computer tools and environments that complement the study of literature, language, rhetoric, and composition. (3 cr. hr.)

ENG 529, 629: Special Topics in English
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.)

ENG 530: Chaucer
(O) Poetry of Chaucer in Middle English; emphasis upon literary rather than linguistic aspect of his work. (3 cr. hr.)

ENG 538: Studies in Seventeenth-Century English Literature
(O) Intensive study of a few authors or literary movement from roughly 1600 to 1660. May be repeated as subtitle changes. (3 cr. hr.)

ENG 539: Milton
(O) Poetry and prose. (3 cr. hr.)

ENG 547: 19th Century British Women Writers
(O) This course will focus on the British women writers of the nineteenth century, with attention to the various genres of the era — novel, poetry, essay. Prerequisites: The course is open to seniors in good academic standing, for undergraduate credit; credit at graduate level requires an undergraduate degree. (3 cr. hr.)

ENG 548: Studies in British Literature 1500-Present
(O) Study of selected author(s), theme, genre or movement of the period. (3 cr. hr.)

ENG 549: Studies in Irish Literature
(O) Intensive study of a few authors or of literary movements in Irish literature, such as Irish Renaissance. May be repeated as subtitle changes. (3 cr. hr.)

ENG 600: Advanced Grammar and Usage
(O) Historical, social elements behind conflicting usages of current American English; problems on language learning and application of modern linguistic principles with attention to structural generative language models. (3 cr. hr.)

ENG 601: History of the English Language
(O) Prehistory of English: reconstructed Indo-European, Germanic. Historical survey of sound, structural changes from 900 to present with some attention to lexical borrowings. (3 cr. hr.)

ENG 602: Rhetorical Tradition
(O) A survey of rhetorical theory from antiquity to the present, examining the applicability of rhetorical tradition for today’s writers, students and teachers. (3 cr. hr.)

ENG 615: Studies in American Literature to 1900
(O) Intensive study of a few authors or literary movement to 1900. May be repeated as subtitle changes. (3 cr. hr.)

ENG 616: Studies in American Literature From 1900 to 1950
(O) Intensive study of one or two authors or a literary movement from 1900 to 1950. May be repeated as subtitle changes. (3 cr. hr.)

ENG 617: Studies in American Literature Since 1950
(O) Intensive study of one or two authors or a literary movement since 1950. May be repeated as subtitle changes. (3 cr. hr.)

ENG 618: Global Multicultural Literature
(C) Close readings of representative texts by major contemporary writers of color from around the world. (3 cr. hr.)

ENG 619: Seminar in Literature for Adolescence
(S) Critical study, examination and evaluation of literature written specifically for adolescents and works written for an adult audience but incorporated into the canon of young adult literature. (3 cr. hr.)

ENG 622: Seminar in American Women Writers
(O) Intense examination of the literature of American Women writers with attention to literary history and criticism. (3 cr. hr.)

ENG 632: Middle English Literature
(O) Most significant works by English writers in periods 1200-1500, in Middle English. (3 cr. hr.)

ENG 636: Seminar in Shakespeare
(B) Representative problems in critical and scholarly examination of Shakespeare’s plays. (3 cr. hr.)

ENG 640: Studies in English Literature 1660-1800
(O) Two or three authors of Restoration Period, 18th century. (3 cr. hr.)

ENG 645: Studies in the Romantic Era
(O) Two or three major poets, essayists or novelists in English literature, 1780-1830. (3 cr. hr.)

ENG 646: Studies in the Victorian Era
(O) Two or three major writers in England and Ireland in the Victorian Age. (3 cr. hr.)

ENG 672: Seminar in Literary Criticism
(B) Study of examples of several contemporary approaches to literary analysis and interpretation. Use of one such approach in the writing of multiple drafts of a substantial paper which presents an original thesis and incorporates the most recent research on the topic (master’s paper). Fulfills old M.A. requirement for ENG 572. Course may be taken again for an additional three credits to complete the thesis. (3 cr. hr.)

ENG 677: Seminar in Contemporary British Literature
(O) Two or three major British writers of 20th century. (3 cr. hr.)

ENG 678: World Drama
(C) A survey of drama from a variety of cultures including Asian, African and aborigine Australian. (3 cr. hr.)
ENG 699: Independent Study
(O) Advanced study in language and literature open to graduate English students only. Reading, research, papers, examinations and credit hours (not more than six) to be arranged with instructor who directs study and approved by Graduate English Committee. Course may be repeated but for no more than total of six hours. (1-6 cr. hr.)

Related Education Courses

AED 541: Teaching Literature and Critical Literacy
(F) This course integrates the teaching of literature and critical literacy. Lesson planning, instructional strategies and teaching with English Language Arts standards are emphasized, as are theory and methods for helping students apply critical reading and writing skills to a range of genres and levels of interpretation. Prerequisite: 3.0 grade point average in the major. (3 cr. hr.)

AED 567: Practicum I: Student Teaching in the Middle School
(B) Supervised student teaching in a middle school for students enrolled in the M.A.T. in adolescence education: English (7-12) program. Prerequisites: ENG 504, 505, AED 541, 668, 669 and 3.0 grade point average. Corequisite: AED 577. S, U grades are assigned. (6 cr. hr.)

AED 577: Practicum II: Student Teaching in the High School
(B) Supervised student teaching in a high school for students enrolled in the M.A.T. in adolescence education: English (7-12) program. Prerequisites: ENG 504, 505, AED 541, 668, 669 and 3.0 grade point average. Corequisite: AED 576. S, U grades are assigned. (6 cr. hr.)

AED 585: Participant-Observer Experience:
(A) This course is designed to help candidates accumulate the additional 40 hours of pre-service fieldwork at their first student teaching placement. Students, acting as participant/observers for the eight days prior to their first practicum, will develop the reflective disposition needed to make wise instructional decisions. Prerequisites: ENG 502, AED 541 and 662. (1 cr. hr.)

AED 586: Practicum I: Student Teaching in the Middle School
(B) Supervised student teaching in a middle school for students enrolled in the M.A.T. in adolescence education: English (7-12) program. (7 cr. hr.)

AED 587: Practicum II: Student Teaching in the Secondary School
(B) Supervised student teaching in a high school for students enrolled in the M.A.T. in adolescence education: English (7-12) program. (7 cr. hr.)

AED 661: Language Development in Adolescence for Non-Literature Majors
(B) Combines models of first-language acquisition, the structure of the English language, cooperative learning, sentence combining and accelerated learning to develop an overall model for enhancing language development of all adolescents, regardless of dialect and socioeconomic standards. (3 cr. hr.)

AED 663: Seminar in Research in the Teaching of English
(S) This study of empirical investigations of the teaching of English will culminate in students writing a review of research in a particular aspect of teaching English or conducting an original research study. Prerequisites: Completion of 12 hours of graduate work in English and 12 in education. (3 cr. hr.)

AED 668: Language Development in Adolescence
(S) Combines models of first-language acquisition, the structure of the English language, cooperative learning, sentence combining, and accelerated learning to develop an overall model for enhancing development of all adolescents, regardless of dialect and socioeconomic standing. M.A.T. students must be concurrently enrolled in AED 669. Prerequisites: AED 541, 3.0 grade point average. (3 cr. hr.)

AED 669: Participant-Observer Experience: Language Development
(S) A 50-hour field experience supervised by the course instructor. M.A.T. students must be concurrently enrolled in AED 668. Prerequisites: AED 541, 3.0 grade point average, permission of the department. (3 cr. hr.)
Exercise Science and Sport Studies

DEPARTMENT

SCHOOL
Professional Studies

FACULTY
John Cortone (Chair), Jeff Bauer, Timothy Bryant, Phil Buckenmeyer, Sonya Comins, Alyson Dearie, Kristin Geidt, Joy Hendrick, Jim Hokanson, Wendy Hurley, Yomee Lee, Peter McGinnis, Steve Meyer, Katherine Polasek, Susan Rayl, Brian Richardson.

ADJUNCT FACULTY
For a listing of adjunct faculty see pages 132-135.

PROGRAMS OFFERED
Master of Science in Exercise Science

Master of Science
Exercise Science [EXSC]
This M.S. program is designed to provide the student with an in-depth study of the scientific aspects of exercise science and sport. It is intended to prepare individuals for careers or further graduate study in exercise and sport research and also in fitness, wellness and associated industries. The program is designed to be completed in two years.

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to the degree program on page 16 of this catalog, applicants for enrollment to the program leading to a Master of Science in Exercise Science should present the following:
1. Official transcripts documenting a bachelor’s degree from an accredited university or college.
2. A minimum overall undergraduate grade point average of 3.0 on a 4.0 scale.
3. A score of 1,000 or greater on the combined verbal and quantitative parts of the Graduate Record Examination (GRE) with a minimum score of 400 on each part.
4. Two letters of recommendation.
5. A statement describing professional and educational goals (250 words or less).

Exceptional applicants who do not meet all of the above requirements will be considered on an individual basis. Qualified applicants without strong preparation in the basic sciences and human movement science may be required to complete specific undergraduate course work within one year of their matriculation.

Once the Graduate Studies Office receives all of the required documents, the application will be forwarded to the Exercise Science Graduate Advisory Committee.

COURSE REQUIREMENTS
A minimum of 30 credit hours of approved graduate work as described below is required for the M.S. in Exercise Science. The program is designed to be completed in two years. If a student lacks substantial academic background in the basic sciences and human movement science, certain undergraduate courses may be required in addition to the degree requirements described herein.

A. Exercise Science Core: Nine credit hours
1. Sport Psychology/Motor Learning
   Select one of the following courses
   EXS 546: Behavior in Sport
   EXS 649: Motor Learning
2. Exercise Physiology
   EXS 555: Physiology of Exercise II
3. Biomechanics
   EXS 587: Advanced Biomechanics

B. Research Core: Six credit hours
1. Research Methods
   PED 611: Research in Physical Education and Recreation
2. Statistics
   Select one of the following courses
   MAT 558: Mathematical Statistics
   MAT 610: Statistical Tools
   PSY 508: Interpretation of Advanced Statistical Techniques
   EXS 511: Advanced Statistical Applications in Exercise Science

C. Electives: Nine credit hours
Choose from the list below
EXS 535: Neuromuscular Fitness Assessment and Programming
EXS 538: Cardiovascular Fitness Assessment and Programming
EXS 546: Behavior in Sport
EXS 558: Physiological Principles of Conditioning for Sports
EXS 565: Perceptual Motor Development
EXS 575: Nutritional Aspects of Physical Fitness and Athletic Performance
EXS 602: Research Project (approved by advisor)
Other graduate courses as approved by the advisor

D. Culminating Activity: Six credit hours
EXS 650: Master’s Thesis

TOTAL CREDIT HOURS REQUIRED: 30
Exercise Science and Sport Studies

Course Descriptions

Athletic Training

ATR 521: Contemporary Issues in Athletic Training
(O) Contemporary issues regarding the practice of athletic training will be investigated. Emphasis will be placed on the needs of coaches and athletic personnel who deal with athletes. Additional consideration also will be concerned with the prevention, risk management and the identification and treatment of sport-related injury and illness. (3 cr. hr.)

Exercise Science and Sport Studies

EXS 511: Advanced Statistical Applications in Exercise Science
(C) Advanced statistics with application to exercise science. Content includes a review of basic descriptive and inferential statistics, plus coverage of multiple-factor and repeated measures ANOVA, post-hoc tests, multivariate analysis of variance, analysis of covariance, multiple regression, canonical analysis and factor analysis. Computerized statistical analyses are imbedded throughout the course. Prerequisite: MAT 201, PSY 201, COM 230, ECO 221, HLH 299, PED 434 or equivalent. (3 cr. hr.)

EXS 522: Sport in Contemporary Society
(O) Study of sport from social perspective, investigating the interrelationship of sport to other institutions. Course offers opportunity for critical review of literature in area of sport in society. (3 cr. hr.)

EXS 529, 629: Special Topics in Exercise Science
(O) Selected Topics: May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-3 cr. hr.)

EXS 535: Neuromuscular Fitness Assessment and Programming
(F) Basic understanding of muscle structure, function and physiology as it applies to strength and power. Review of types of strength training programs and techniques for developing goal-specific programs will be included. Lectures and laboratory. Not open to students having credit for EXS 435. (3 cr. hr.)

EXS 538: Cardio-Respiratory Fitness Assessment and Programming
(S) Integration of cardiorespiratory physiological concepts into the assessment of an individual’s aerobic capacity and the application of these data in designing an effective aerobic exercise program. American College of Sports Medicine (ACSM) guidelines will be followed. Lectures and laboratory. Not open to students having credit for EXS 438. (3 cr. hr.)

EXS 546: Behavior in Sport
(O) Study psychological factors which influence behavior of men and women as they participate in physical activity and sport. (3 cr. hr.)

EXS 551: Philosophy of Sports and Physical Education
(O) Background, development of modern physical education; formulation of scientific principles which foster biological, sociological and psychological benefits of physical education. (3 cr. hr.)

EXS 555: Physiology of Exercise II
(O) Physiological adaptations, mechanisms of change of function taking place as result of physical exercise. Physiological factors influencing human performance; environmental factors of altitude, space, temperature extremes; drugs and doping; age and gender; related problems in sport medicine. Prior knowledge of exercise physiology is expected. (3 cr. hr.)

EXS 558: Physiological Principles of Conditioning for Sports
(O) Application of physiological principles to development of specific conditioning components. Analysis of research implications and critical evaluation of current practices emphasized. Prerequisites: EXS 397. (3 cr. hr.)

EXS 565: Perceptual Motor Development
(O) Developmental processes from prenatal period to adolescence, with emphasis for elementary physical education. (3 cr. hr.)

EXS 575: Nutritional Aspects of Physical Fitness and Athletic Performance
(O) Application of metabolic and nutritional principles to performance patterns of athletes and individuals desiring to increase their physical fitness capacity. Includes role of carbohydrates, fats, proteins, vitamins, minerals and water in exercise. Effects of dietary manipulation, fad diets, body composition and ergogenic aids will be investigated. Prerequisite: EXS 397 or consent of instructor. (3 cr. hr.)

EXS 587: Advanced Biomechanics
(O) Application of fundamental laws of physics. Techniques of physical activities, sports in terms of mechanical principles. Available research reviewed. Prior knowledge of biomechanics is expected. (3 cr. hr.)

EXS 602: Research Project
(S, M) Guidance, direction in conducting individual research project. Prerequisite: PED 611, consent of advisor. Also listed as PED 602. (3 cr. hr.)

EXS 620: History of Sport and Physical Education
(O) Examination of effect selected societies had upon sport and/or physical education from beginning of Western Civilization. (3 cr. hr.)

EXS 622: Seminar in Sociology of Sport
(O) Critical consideration of research, literature and theoretical positions in sociology of sport. Directed student research. Prerequisite: EXS 522. (3 cr. hr.)

EXS 649: Motor Learning
(O) Critical scholarly examination of individual’s acquisition of skill in sports. Extensive review of motor learning; research related to skill learning. Application of theoretical areas. (3 cr. hr.)

EXS 650: Master’s Thesis
(A, M) Exercise science research. (6 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
School
Education

Faculty
Joseph Rayle (Chair), Judy Bentley, Janet Duncan, William Griffen, Michelle Kelly, Ji-Ryun Kim, Cynthia Moriarity, Stephanie Urso Spina, Harry Sydow, Anne Burns Thomas, Mary Ware

Adjunct Faculty
For a listing of adjunct faculty see pages 132-135.

Programs Offered
Master of Science in Education Teaching Students with Disabilities [TSD]

This program is intended for students who have a bachelor's degree in childhood/elementary education. It requires a minimum of 36 credit hours of approved graduate course work including student internship and a culminating experience. Students may elect to take an additional six credit hours in approved course work to receive an annotation in teaching students with severe and/or multiple disabilities.

Career Potential
• Special Education Teacher, Grade 1-6
• Childhood/Elementary Education Teacher, Grade 1-6
• Resource Room Teacher, Grade 1-6
• Committee on Special Education (CSE) Chair
• Community College/College Instructor
• Developmental Disabilities Specialist

Admission Requirements
In addition to meeting the requirements for admission to a degree program stated in this catalog, applicants for enrollment in the program leading to a Master of Science in Teaching Students with Disabilities (Grades 1-6) should present the following:
1. Official transcripts documenting a B.S. or B.A. in childhood (elementary) education from a regionally accredited college or university.
2. New York State Initial Certification in Childhood Education — pending or awarded.
3. A minimum undergraduate grade point average of 2.8
Note: applicants who graduated more than 10 years prior to application, may be required to provide additional evidence of more recent academic competence, such as continuing education courses, CEUs, or other appropriate documentation.
4. Submission of a personal statement indicating
• reasons for wanting to work with students with disabilities, including personal experiences which have influenced this decision,
• reasons for selecting SUNY Cortland for graduate studies and this program specifically,
• discussion of long-term professional goals and view of how this program will support achieving them, and
• any other information deemed relevant.
5. Three letters of reference detailing the ability to meet the rigors of graduate study and the commitment to, and competence in, working with students with disabilities.
6. An interview with the TSD program coordinator or designee.

Applications will be accepted for fall admission only. Applications must be received by May 1 for fall admission. Advisement will be provided by the department chair and/or the graduate program coordinator.

Additional Requirements
Candidates for the degree must meet any additional undergraduate or graduate requirements for the award of the degree established by the Foundations and Social Advocacy Department. Such additional requirements must be ascertained by the student in consultation with the department.

Specific information regarding requirements (state examinations, identification and reporting of child abuse and maltreatment, alcohol and drug abuse education, school violence prevention training and foreign language requirements) for New York State teaching certification can be found on pages 108-109 of this catalog.

More detailed information is found in the Graduate Advisement Manual, available at the department office. For a copy, call (607) 753-2447.

A. Required Courses: 16 credit hours
EDU 671: Foundations in Education
LIT 680: Assessment and Instruction of Learners Experiencing Literacy Difficulties
SPE 651: Research Methods
SPE 652: Master's Project
SPE 683: Administration of Special Education

B. Required Core Courses: 20 credit hours
SPE 510: Teaching the Special Education Learner in the General Classroom
SPE 610: Advanced Assessment, Curriculum and Instruction of Students with Disabilities
SPE 620: Discipline and Social Skill Development for Students with Disabilities
SPE 630: Students with Disabilities in Context
SPE 690: Internship: Teaching Students with Disabilities
SPE 691: Seminar: Teaching Students with Disabilities (1-6)

Total Credit Hours: 36

Note: Annotation Courses: Six credit hours
Annotation in Severe/Multiple Disabilities: 6 credit hours
SPE 640: Teaching Students with Severe/Multiple Disabilities
SPE 650: Autism Spectrum Disorders
Foundations and Social Advocacy

COURSE DESCRIPTIONS

FSA 525: Teaching the Inner City Child
(A) Issues related to teaching in high-need urban schools: roles of culture and context in teacher-student relationships; impact of social structures such as race and class on student achievement; how teaching in urban contexts is different; and effective practices in urban schools. Also listed as AAS 552. (3 cr. hr.)

EDU 552: Gender Issues in Education
(F) Seminar integrating recent scholarship on women and women’s ways of knowing into a broader study of gender issues in education including socialization of men and women through education; socialization of women and men teachers and administrators and the costs and benefits of these structures for men and women. The course will focus upon application of these issues to policy and practice in education today. Prerequisites: Junior, senior or graduate level; education methods course. Also listed as WST 552. (3 cr. hr.)

EDU 670: Foundations of Education
(B) This course will focus on the historical, philosophical, political-economic and social foundations of education, with an investigation of the basic purposes or ends of American schooling since the rise of the Common School in the 19th century. Topics will be examined in relation to current scholarship, the links between educational thought and practice as reflected in students’ observations during the practicum, and the thematic threads in the M.S.T. Program. Prerequisites: EDU 516 and 650. (3 cr. hr.)

EDU 671: Issues in Foundations of Education
(A) EDU 671 presents historical, philosophical, political-economic and social foundations of education interpreted through seminal and contemporary research on issues of American schooling. Inquiry, critical thinking and writing will be focused on the thinking about and practices of education and schooling regarding diversity, equity, professionalism, leadership, public access and political control. (3 cr. hr.)

EDU 672: The History of Western Education
(O) Educational thought, practice in Western civilization from prehistoric times to twentieth century. (3 cr. hr.)

EDU 673: Social Foundations of Education
(O) Role, basic issues of education in contemporary American society. (3 cr. hr.)

EDU 674: History of American Education
(O) Development of educational institutions, thought, and practice in the United States from the colonial period to the present, including minority schooling, higher education, and teaching, in the context of American culture and economics. (3 cr. hr.)

EDU 675: Philosophical Issues in Education
(O) A study of issues in education in relation to broader philosophical conceptions of nature, knowledge, the individual and society. Topics include role of education for social structure, individual freedom and development, empowerment, social progress. Philosophers studied include Plato, Rousseau, Dewey, Freire. (3 cr. hr.)

Special Education

SPE 510: Teaching the Special Education Learner in the General Education Classroom
(A) This course provides a knowledge of special education to teachers who are seeking to accommodate students with disabilities more effectively in their classrooms and schools. (3 cr. hr.)

SPE 529: Special Topics in Special Education
(O) Special topics of interest to graduate students enrolled in the M.S.Ed. Teaching Students with Disabilities program. (1-3 cr. hr.)

SPE 610: Advanced Assessment, Curriculum and Instruction of Students with Disabilities (4), Math, Science and Social Studies
(B) This advanced course provides theoretical and practical applications of assessment (formal and informal) and pedagogy within the general education elementary curriculum for students with disabilities. The course covers the content areas of mathematics, science and social studies for students with disabilities. Students will become familiar with a variety of commercial and teacher-made packages, in order to develop and select instructional content, resources and strategies that respond to cultural, linguistic, gender and ability differences among children with disabilities. A 50-hour field component is included in this course. (4 cr. hr.)

SPE 620: Discipline and Social Skill Development for Students with Disabilities
(B) This course will provide instruction on educational terminology, assessment and diagnoses, research-based theory and application strategies for classroom management, discipline and social skill development for students with disabilities, especially individuals with behavioral and/or emotional challenges. Students will learn how to identify appropriate prevention and intervention strategies, including functional analysis, applied behavioral analysis, positive behavioral supports and other research-based approaches. In addition, students will learn how to apply these models, using research-supported strategies and practices. Students will learn the legal protections afforded students presenting emotional/behavioral characteristics. Prerequisite: SPE 510. (3 cr. hr.)

SPE 629: Special Topics in Special Education
(O) Advanced topics of interest to graduate students enrolled in the M.S.Ed. Teaching Students with Disabilities program. (3 cr. hr.)

SPE 630: Students with Disabilities in Context
(B) Within the contexts of home, school and community, students will learn about the multicultural and personal characteristics of elementary age children who have disabilities, including psychological and social-emotional characteristics, academic and family needs. From historical and contemporary study, students will learn about normalization, impact of medical complications, nature of developmental delays, Committee on Special Education procedures, planning and managing the school and home environment, functional analysis and related topics. This course includes a 75-hour practicum (minimum), 50 hours of which must be spent in a school setting with children with disabilities, 25 hours of which must be spent with a family whose child has a disability. Students seeking the extension in severe and/or multiple disabilities, will be placed accordingly. Prerequisite: SPE 510. (4 cr. hr.)
SPE 640: Teaching Students with Severe/Multiple Disabilities
(O) This course is designed to inform the student about the nature and characteristics of students with severe and/or multiple disabilities, including mental retardation, autism, pervasive developmental delay and other severe disabilities, as defined by federal and state statute and as considered in various theoretical frameworks. In addition, the student will learn about strategies, models of instruction and the nature of different types of supports to enable elementary school students with severe and/or multiple disabilities to successfully participate in the general education classroom. The role of the special educator will be described and defined. Prerequisite: SPE 510. (3 cr. hr.)

SPE 650: Autism Spectrum Disorders
(B) This course will explore the core characteristics of autism spectrum disorders and pervasive developmental delays, including social interaction disruptions, communication disturbances (verbal and nonverbal), movement and sensory impairments (including restricted and repetitive behavior patterns). Based upon a thorough understanding of the complexities of these, the course will address effective strategies for successful educational, social, family and community interactions. Prerequisite: SPE 510 or PSY 605. (3 cr. hr.)

SPE 651: Understanding and Conducting Educational Research
(A) An initial course in the reading, analysis and design of research in education and special education, SPE 651 is intended to provide graduate students with basic understanding of text, information and methodology to be applied throughout the master’s program. (3 cr. hr.)

SPE 652: Master’s Project
(A) The Master’s Project is a culminating experience in the master of education programs, building on work begun in SPE 651 and resulting in extensive research and writing on a topic appropriate to a student’s program, under direction of a project advisor. Candidates’ projects demonstrate comprehensive understandings of the knowledge and practices of their selected field of study and evidence that they have met all College criteria for the master’s degree and New York State Education Department criteria for the initial or professional certification sought. S, U grades are assigned. Prerequisites: SPE 510, 610, 620, 630, 651, 671, 683, 690, 691.

SPE 683: Administration of Special Education
(O) CSE, placement, preschool, curriculum, law, finance, supervision. Also listed as EDA 683. (3 cr. hr.)

SPE 690: Internship: Teaching Students with Disabilities
(B) This is the culminating experience in the Teaching Students with Disabilities Masters program. This is a faculty-supervised teaching experience in an inclusive classroom where interns will be expected to apply the theoretical, pedagogical and practical knowledge they have gained during their course of study. This is a six-week, one-quarter experience. For students seeking the annotation in severe and/or multiple disabilities, this experience must be in a comparable classroom where these students are being educated — grades 1-6. (5 cr. hr.)

SPE 691: Seminar: Teaching Students with Disabilities
(B) This course is designed to bring together all the themes in research, philosophy, theory and practice that have been addressed in previous courses in the graduate degree program of Teaching Students with Disabilities. The intent of this course is to enable the graduate student to develop a thoughtful, comprehensive, research based approach to his/her teaching and professional development. Issues presented will relate directly to the graduate student’s experiences throughout the course of study. (1 cr. hr.)

Annotation in Severe and/or Multiple Disabilities
SPE 640: Teaching Students with Severe/Multiple Disabilities
(O) This course is designed to inform the student about the nature and characteristics of students with severe and/or multiple disabilities, including mental retardation, autism, pervasive developmental delay and other severe disabilities, as defined by federal and state statute and as considered in various theoretical frameworks. In addition, the student will learn about techniques, strategies, models of instruction and the nature of different types of supports to enable elementary school students with severe and/or multiple disabilities to successfully participate in the general education classroom. The role of the special educator will be described and defined. Prerequisite: SPE 510. (3 cr. hr.)

SPE 650: Autism Spectrum Disorders
(B) This course will explore the core characteristics of autism spectrum disorders and pervasive developmental delays, including social interaction disruptions, communication disturbances (verbal and nonverbal), movement and sensory impairments (including restricted and repetitive behavior patterns). Based upon a thorough understanding of the complexities of these, the course will address effective strategies for successful educational, social, family and community interactions. Prerequisite: SPE 510. (3 cr. hr.)
SCIENCE
Arts and Sciences

FACULTY
David L. Miller (Chair), Scott Anderson, James W. Darlington, Elizabeth A. Fraser, Ibiop Johnston-Anuomwo, Robert Pierce

ADJUNCT FACULTY
For a listing of adjunct faculty see pages 132-135.

PROGRAMS OFFERED
Master of Science in Education in Adolescence Education:
Social Studies (7-12)
with a concentration in either geography or history

DESCRIPTION
The Master of Science in Education in Adolescence Education:
Social Studies is intended primarily for social studies teachers
in grades 7-12 seeking professional or permanent certification.
Since substantial graduate-level work is done either in geography
or history, students may also want to use their degree for careers
relevant to those academic fields.

Master of Science in Education
Adolescence Education: Social Studies (7-12) [SSA]

Students must choose a concentration of at least 18 credit hours
in either geography or history and must take six hours of a cognate
social science and six hours of professional education. In addition
to the program requirements stated below, students must either
write a master's thesis or take a written comprehensive exam based
on work taken in the concentration and in professional education.

FACULTY
Scott Anderson (Geography Advisor)
William Sharp (History Advisor)

CAREER POTENTIAL
• Secondary social studies teacher
• Graduate schools
• Public historian (museum, archives)
• Business positions
• Urban planning departments
• Careers appropriate to geography or political science

SPECIAL FEATURES
• Small graduate reading and writing seminars
• Preponderance of work in subject matter areas

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a degree
program stated in this catalog, the applicant for enrollment in the
program leading to a M.S.Ed. in adolescence education: social
studies (7-12) should present the following:
1. A resume
2. A letter stating educational and professional goals.
3. Official transcripts documenting a bachelor's degree from a
regionally accredited college or university.
4. Documentation of an initial/provisional certificate, or a certifi-
cate of qualification for initial or provisional certification, in
adolescence/secondary or elementary social studies issued by
the New York State Education Department.
5. A minimum of 18 credit hours in geography or history and a mini-
mum of 21 credit hours combined in geography and history.
Under special circumstances this requirement may be reduced.
6. At least a 2.7 grade point average in the undergraduate social
science major and at least a 2.5 cumulative grade point average.
7. Two letters of recommendation with at least one from an
instructor in the student's undergraduate social science
major or concentration.
8. Approval of the Social Studies Graduate Committee.
Note: Students must have at least a B average in their first six hours
of course work in order to be admitted to candidacy for the degree.

PROGRAM REQUIREMENTS
A. Geography or History Concentration: 18 credit hours

The geography concentration must include:
1. Research and writing seminar: Three credit hours of
geography at the 600 level.
2. Trends in discipline course: Three credit hours of geography
at the 600 level
3. Courses combining content and pedagogy within the
geography concentration: Nine credit hours of
geography courses at the 500 level.
4. Elective course in concentration: Three credit hours of
geography at the 500 or 600 level.
5. Proof of completion of state-mandated workshops.

The history concentration must include:
1. Research and writing seminar: Three credit hours from
HIS 660, 661, 662, 663, 664
2. Trends in discipline course: Three credit hours
(Any 600-level course except HIS 650, 660, 661, 662,
663, 664)
3. Courses combining content and pedagogy within the
history concentration: Nine credit hours
(Any history course at the 500 level except directed study)
4. Elective course in concentration: Three credit hours at
the 500 or 600 level.
5. Proof of completion of state-mandated workshops.

B. Cognate Social Science: Six credit hours, which must include
A history course combining content and pedagogy at the 500
level and an elective course in history at the 500 or 600 level.

C. Professional Education: Six credit hours, which must include:
a. one of the following: EDU 644, 670, 671
b. education elective (with consent of advisor)
Note: It is best to check with the History Department for changes
to the requirements stated above.

ADDITIONAL REQUIREMENTS
Other requirements for the award of the degree may be deter-
mined by the Geography Department and must be ascertained by
the student in consultation with a department graduate advisor.

TOTAL CREDIT HOURS REQUIRED: 30
Geography

COURSE DESCRIPTIONS

GRY 516: Tourism Planning and Development
(O) 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. Not open to students with credit for REC/GRY 415. Also listed as REC 516. (3 cr. hr.)

GRY 520: Maps in the Classroom
(B) Classroom-laboratory approach to map use for students and teachers. Formal study of map elements. Map reading, interpretation. Classroom map exercises, their design, use. (3 cr. hr.)

GRY 529: Special Topics in Geography
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.)

GRY 524: GIS in the K-12 Classroom
(B) Introduction to Geographic Information Systems (GIS) technology as a medium for delivering instruction and a tool for enhancing the analysis of geographic information in the K-12 classroom. Use of ArcView software. Creation of learning modules that address New York State learning standards. (3 cr. hr.)

GRY 580: Historical Geography of North America
(B) This course takes an interdisciplinary approach in examining 500 years of geographical history on the North American continent. Using secondary and primary source materials, it looks at the evolving human and cultural geography of North America from the first few insecure European "points of attachment" to permanent colonies, expanding empires, transcontinental nations and finally a macroculture of global impact in the 21st century. It examines the changing economic and technological conditions, the clash of cultures (European, Native American and African) and the historical and geographical processes of environmental and landscape change that accompanied these transformations. (3 cr. hr.)

GRY 595: Independent Study in Geography
(O) Independent research in selected geographic problems. Prerequisite: Consent of instructor. (3 cr. hr.)

GRY 640: Seminar in Geographic Techniques
(O) Intensive work in geographic techniques. Prerequisite: Nine hours of geography. May be repeated for credit with departmental approval. (3 cr. hr.)

GRY 668: Integrative Teaching with Technology
(O) Focuses on preparing teachers to innovatively address learning standards for mathematics, science and technology, and to integrate subjects across the school curriculum using current technologies, e.g., Geographic Information System mapping software, Global Position System, Internet sources. Team problem solving, the scientific method, field-based experiments and lesson construction are applied in a variety of methods to implement math/science/technology learning standards. Also listed as EDU 668. (3 cr. hr.)

Related Education Course
EDU 644: Seminar in Teaching of Secondary Social Studies
(S-M) Selected problems in curriculum, methodology; research based upon individual needs, interests. Not credited as basic methods course for certification. Prerequisite: One year teaching experience and undergraduate course in secondary social studies. (3 cr. hr.)
SCHOOL
Professional Studies

FACULTY
Bonni Hodges (Chair), Sarah Beshers, Kathryn Coffey, Jena N. Curtis, John Forster, Joseph F. Governali, John Leary, Jill Murphy, Corey Ryon, Alan Sofalvi, Tony Trunfio, Donna M. Videto, Ben Wodi

ADJUNCT FACULTY
For a listing of adjunct faculty see pages 132-135.

PROGRAMS OFFERED
Master of Science in Education in Health Education
Master of Science in Teaching in Health Education

The Health Department offers two graduate programs for students interested in pursuing initial or professional New York State Teacher certification. The programs are based on well-developed philosophical and theoretical foundations, reflect national level professional preparation standards, and focus on the development of background, skills and competencies related to sound health education practice. The programs have been designed to meet the needs of students who have undergraduate preparation in health education (M.S. Ed.), for students with a degree in another teacher certification area (M.S.T. tracks A and C), and for students who possess an undergraduate degree outside of teacher education and would like to become certified in health education (M.S.T. track B)

CAREER POTENTIAL
• School health educator
• Health educator in community agencies
• Health educator at college or university level
• Prevention specialist in school and community agencies
• School district health education coordinator
• Public health educator

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a graduate degree program, the applicant for enrollment in the Master of Science in Education in Health Education and Master of Science in Teaching in Health Education programs should present the following:
1. Completion of an undergraduate bachelor's degree.
2. A minimum undergraduate cumulative grade point average of 2.8.
3. Names, addresses and telephone numbers of three references.

Applicants for the M.S.Ed. program should present a copy of current teacher certification in health or documentation that certification requirements have been met.

Entry into the Health Department graduate programs is very competitive, with more eligible applicants than can be accommodated. The 2.8 cumulative undergraduate grade point average criterion is the minimal acceptable grade point average, but does not guarantee admission into a degree program.

Master of Science in Education
Health Education [HEC]
This program is designed for students who have completed an undergraduate degree in health education and who hold an initial teaching certificate in health.

Professional education courses: Six credit hours
EDU 631: Curriculum Construction in Health Education
EDU 632: Seminar in Health Education

Health courses: 24 credit hours
HLH 601: Research Methods in Health Education
HLH 635: School Health Program
HLH 694: Assessment and Evaluation in Health Education and Health Promotion
Health free elective (6 cr. hr.)
Health and Pedagogy electives (9 cr. hr.)

The following courses have been identified and/or specifically designed to link health content and pedagogy:
HLH 509, 510, 511, 513, 530, 535, 550, 555, 565, 573, 590, 603, 630 and 635

Culminating activity: 0-6 credit hours
Oral comprehensive exam (0 cr. hr.)
Master’s project (2-3 cr. hr.)
Thesis (5-6 cr. hr.)

Note: Health free electives may be used to meet all of master’s project credit hours or three credit hours of thesis requirements.

TOTAL CREDIT HOURS REQUIRED: 30-36

Master of Science in Teaching
Health Education
The Master of Science in Teaching program is designed for those who do not hold a teaching certificate in health. The three tracks within the degree are designed to allow those with and without teacher certification to pursue health certification.

Depending on the academic background of the applicants, there may be additional requirements for the award of the degree, such as anatomy and physiology, and other health content background course work. Any additional requirements are determined on an individual basis after a review of previous course work. This information must be ascertained by the students in consultation with the Health Department’s coordinator of graduate studies. It is expected that students will initiate this consultation early in the program, before the completion of 15 credit hours.

Track A [HEA_CRT]
This program is for those individuals holding an initial teaching certificate in an area other than health education.

Professional education courses: Seven credit hours
EDU 631: Curriculum Construction in Health Education
EDU 632: Seminar in Health Education
EDU 664: Advanced Field Experience in Health Education
Health courses: 27 credit hours
- HLH 510: Proseminar in Health Foundations
- HLH 530: Family Life Education for the Classroom Teacher or HLH 630: Human Sexuality *
- HLH 601: Research Methods in Health Education
- HLH 635: School Health Program
- HLH 694: Assessment and Evaluation in Health Education and Health Promotion

Culminating activity: 0-6 credit hours
- Oral comprehensive exam (0 cr. hr.)
- Master’s project (2-3 cr. hr.)
- Thesis (5-6 cr. hr.)

Note: Health free electives may be used to meet all of master’s project or thesis credit-hour requirements.

Additional course work:
Students must have completed, as graduates or undergraduates, the following prior to the culminating activity:
• a total of 36 credit hours of health content course work across undergraduate and graduate courses
• anatomy and physiology, which may be a part of the 36 credit hours
• a three-credit-hour course in dealing with alcohol, tobacco and other drugs, which may be a part of the 36 credit hours
• Child Abuse Identification and Reporting workshop
• School Violence Prevention and Intervention workshop
• PSY 331: Psychology of Exceptional Children or equivalent
• General Education requirements

TOTAL CREDIT HOURS REQUIRED: 49-55

Track C [HEA_PCRT]
This program is for selected physical education students who have an initial certificate and who were accepted into the 4+1 Health Education M.S.T. program as undergraduate students. This is a selective program.

ADMISSION TO THE 4+1 M.S.T. HEALTH EDUCATION PROGRAM

1. Students may apply for this track after they have been accepted into the physical education undergraduate program and have achieved at least sophomore but not more than junior status at the College. At the point of application to the special 4+1 program, students must have an undergraduate cumulative grade point average of at least 2.7 in order to be accepted.

2. Students accepted into the 4+1 M.S.T. program need to successfully complete the designated health education undergraduate courses and complete their bachelor’s degree with a minimum 2.8 cumulative grade point average.

Students accepted into the 4+1 program who graduate from the undergraduate physical education program, who complete the required health course work, and who meet the grade point average criteria will be accepted automatically into the M.S.T. health education program.

Professional education and field experience courses:

Seven credit hours
- EDU 631: Curriculum Construction in Health Education
- EDU 632: Seminar in Health Education
- EDU 664: Advanced Field Experience in Health Education

Health courses: 23 credit hours
- HLH 509: Drug Education for Teachers
- HLH 530: Family Life Education for the Classroom Teacher or HLH 630: Human Sexuality *
- HLH 601: Research Methods in Health Education
- HLH 635: School Health Program
- HLH 641: Graduate Readings in Health
- HLH 694: Assessment and Evaluation in Health Education and Health Promotion

Culminating activity: 0-6 credit hours
- Oral comprehensive exam (0 cr. hr.)
- Master’s project (2-3 cr. hr.)
- Thesis (5-6 cr. hr.)

Note: Health free electives may be used to meet all of master’s project or thesis credit-hour requirements.

TOTAL CREDIT HOURS REQUIRED: 30-36
Undergraduate 4+1 health requirements completed as an undergraduate:

- HLH 110: Personal and Community Health
- HLH 120: Responding to Emergencies or
- HLH 220: Safety Education and Emergency Response
- HLH 232: Nutrition
- HLH 302: Human Sexuality Education or
- HLH 345: Parenting Education
- HLH 314: Mental Health and Counseling

Health

COURSE DESCRIPTIONS

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/arson 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/ prevention programs (3 cr. hr.)

This course meets all health-related SED requirements except for S.A.V.E. and 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 credit hours each. (2 cr. hr.)

HLH 529, 629: 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 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 PHI 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. Prerequisites/corequisites: Child abuse certification course; or consent of instructor. (3 cr. hr.) ■

HLH 544: Alternative Medicine
(O) 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
(O) 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
(O) 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
(O) 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
(O) 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
(O) 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 discussed, using the public health model. Not open to students with credit for HLH 390. (3 cr. hr.)

HLH 591: Health, Illness and Sick-role Behaviors
(O) 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 593: Methods and Practices in Community Health Education
(B) The course explores child and adolescent development, including a focus on psychosocial development; an examination of status and trends regarding sexual values, attitudes and behavior patterns in society; issues and approaches related to parenting education and sexuality education. (3 cr. hr.)

HLH 594: Assessment and evaluation in Health education and Health Promotion
(B) Strategies and techniques for conducting needs assessments and evaluations as part of planning and implementing effective health education and health promotion programs. Grant writing techniques to seek support for conducting needs assessment, program planning and evaluation activities. (3 cr. hr.)

Related Education Courses

EDU 575: Teaching Health Education
(B) The goal of this course is to prepare the advanced pre-service 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 education majors only. (3 cr. hr.)
EDU 631: Curriculum Construction in Health Education
(B) Based upon current theories of education applied to school health education. Opportunities to work on individual curriculum problems at any school level. (3 cr. hr.)

EDU 632: Seminar in Health Education
(B) Historical philosophical development of health education with emphasis on status, trends. Theory, methodology utilized in instruction process for behavior development, change investigated. (3 cr. hr.)

EDU 664: Advanced Field Experience in Health Education
(A) A seminar-based course for the graduate student seeking initial and professional certification in health education. Observations and assisting in school health education at grades pre-K-6 and 7-12 are included. S, U grades are assigned. Prerequisite: Overall grade point average of 3.0 and permission of department (1 cr. hr.)

EDU 688: Graduate Health Education Seminar
(A) A two-week supervised seminar-based field experience for the graduate student in health education. Involves conducting observations; integrating graduate-level course concepts and understandings; and applying health education curriculum development skills. An overall grade point average of 3.0, completion of health and education course work and consent of department required. Must be taken in conjunction with EDU 689. (1 cr. hr.)

EDU 689: Graduate Student Teaching in Health Education
(A) Upon successful completion of the one-credit, graduate-level seminar session, the student moves into the college-supervised student teaching experience of 14 weeks. S, U grades are assigned. Prerequisites: Completion of all health and education course work, 3.0 grade point average and permission of department. (14 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
History
DEPARTMENT

SCHOOL
Arts and Sciences

FACULTY
Sanford Gutman (Chair and M.A. advisor), William Sharp (Graduate Coordinator and M.S.Ed. advisor, history), Girish Bhat, Marica Cassis, Francis Czerwinski, Scott Moranda, Gigi Peterson, Rachel Reinhard, John Shedd, Kevin Sheets, Randi Storch, Brett Troyan, Judith Van Buskirk, Donald Wright, Luo Xu

ADJUNCT FACULTY
For a listing of adjunct faculty see pages 132-135.

PROGRAMS OFFERED
Master of Arts in History
with a concentration in either United States, European or non-Western history

Master of Science in Education in Adolescence Education:
Social Studies (7-12)
with a concentration in either history or geography

DESCRIPTION
The Masters of Arts in History serves students whose career goals will benefit by a terminal M.A. degree and by those who intend to go on for a Ph.D. in history at another institution. Many students who have an initial certificate in teaching secondary social studies also use the M.A. in history to gain professional or permanent certification, and those with provisional licenses to gain permanent certification.

The Master of Science in Education in Adolescence Education: Social Studies (7-12) seeks professional certificates or permanent certification. Since substantial graduate-level work is done either in history or geography, students may also want to use their degree for careers relevant to those academic fields.

SPECIAL FEATURES
• History Honor Society
• History Club
• Small graduate reading and writing seminars

Master of Arts
History [HIS]

CAREER POTENTIAL
• Public historian (museum, archives)
• Librarian
• History teacher
• Business positions
• Graduate or law schools

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a degree program as stated in this catalog, the applicant for enrollment in the program leading to a Master of Arts in History should present the following:
1. A resume.
2. A letter of application including educational and professional goals.

3. Intermediate competency in a foreign language. This requirement may be met concurrently with graduate study.
4. A minimum of 24 hours of approved undergraduate history courses. Under special conditions this requirement may be reduced.
5. At least a 3.0 grade point average, on a 4.0 scale, in undergraduate history courses.
6. At least a 2.75 grade point average in all undergraduate courses.
7. Satisfactory scores on the Graduate Record Examination (GRE).
8. Two letters of recommendation, at least one from a history instructor.
9. Approval by the History Department's Graduate Committee.

PROGRAM REQUIREMENTS
Students must take a concentration of at least nine hours in United States history, European history, or non-Western history (Asia, Africa, the Middle East, Latin America).

The department also requires six hours of course work outside the concentration. In addition to the program requirements stated below, students must either write a master's thesis or take a written comprehensive exam based on course work and mastery of the content and historical literature in the concentration or in a combination of the concentration and a secondary field.

Other requirements for the award of the degree may be determined by the History Department and must be ascertained by the student in consultation with a department graduate advisor.

COURSE REQUIREMENTS
A. Historiography: Any 600-level course except HIS 650, 660, 661, 662, 663, 664
B. Approved courses in concentration: Nine credit hours and
Approved courses outside concentration: Six credit hours
Choose from:
United States: HIS 509, 524, 528, 530, 545, 550, 621, 646
European: HIS 532, 538, 640, 645, 648
Non-Western: HIS 531, 533, 630
Appropriate special topics courses – 529 and 629 – may be included under U.S., Europe or non-Western
C. Research Seminar in area of concentration: Three credit hours and
Research Seminar outside area of concentration: Three credit hours
Select from the following: HIS 660, 661, 662, 663, 664
D. Approved electives in history or related field: Six credit hours
HIS or other advisor-approved courses at the 500 and 600 level

TOTAL CREDIT HOURS REQUIRED: 30

Master of Science in Education
Adolescence Education: Social Studies (7-12) [SSA]

Students must choose a concentration of at least 18 credit hours in either history or geography and must take six hours of a cognate social science and six hours of professional education. In addition to the program requirements stated below, students must either write a master’s thesis or take a written comprehensive exam based on work taken in the concentration and in professional education.
FACULTY
William Sharp (History Advisor)
Scott Anderson (Geography Advisor)

CAREER POTENTIAL
• Secondary social studies teacher
• Public historian (museum, archives)
• Business positions
• Graduate or law schools
• Careers appropriate to history or geography

SPECIAL FEATURES
• Small graduate reading and writing seminars
• Preponderance of work in subject matter areas

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to a M.S.Ed. in adolescence education: social studies (7-12) should present the following:
1. A resume.
2. A letter stating educational and professional goals.
3. Official transcripts documenting a bachelor's degree from a regionally accredited college or university.
4. Documentation of an initial/provisional certificate, or a certificate of qualification for initial or provisional certification, in adolescence/secondary or elementary social studies issued by the New York State Education Department.
5. A minimum of 18 credit hours in history or geography and a minimum of 21 credit hours combined in history and geography. Under special circumstances this requirement may be reduced.
6. At least a 2.7 grade point average in the undergraduate social science major and at least a 2.5 cumulative grade point average.
7. Two letters of recommendation with at least one from an instructor in the student's undergraduate social science major or concentration.
8. Approval of the Social Studies Graduate Committee.

Note: Students must have at least a B average in their first six hours of coursework in order to be admitted to candidacy for the degree.

PROGRAM REQUIREMENTS
A. History or Geography Concentration: 18 credit hours
The history concentration must include:
1. Research and writing seminar: Three credit hours from HIS 660, 661, 662, 663, 664
2. Trends in discipline course: Three credit hours (Any 600-level course except HIS 650, 660, 661, 662, 663, 664)
3. Courses combining content and pedagogy within the history concentration: Nine credit hours of history courses at the 500 level, except directed study
4. Elective course in concentration: Three credit hours of history courses at the 500 or 600 level.
5. Proof of completion of state-mandated workshops.

B. Cognate Social Science: Six credit hours in history at the 500 or 600 level.

Note: At least one of the cognate social science courses must be a geography course if the concentration is history and two history courses if the concentration is geography.

C. Professional Education: Six credit hours, which must include:
   a. one of the following: EDU 644, 670, 671
   b. education elective, with consent of advisor

Note: It is best to check with the Geography Department for changes to the requirements stated above.

ADDITIONAL REQUIREMENTS
Other requirements for the award of the degree may be determined by the History Department and must be ascertained by the student in consultation with a department graduate advisor.

TOTAL CREDIT HOURS REQUIRED: 30

History

COURSE DESCRIPTIONS

HIS 509: Issues in New York State History
(O) New York State history examined through themes of ethnicity, class and political development using historiography provided by a range of readings and discussion. Senior status for undergraduate history, adolescence education: social studies and childhood education/history majors; M.A./history, M.S.Ed. in adolescence education: social studies, M.S.Ed. in childhood education. (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, urban ghettos, civil rights movement. Special attention to teaching materials and methods. Prerequisites: Twelve 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 534: 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.)

HIS 550: Issues in Early-American History
(C) Major issues in early-American history from European/Indian contact to Jacksonian America. Discussion of teaching strategies for these topics. Senior status for undergraduate history, adolescence education: social studies and childhood education/history majors; M.A./history, M.S.Ed. in adolescence education: social studies, M.S.Ed. in childhood education. (3 cr. hr.)

Note: Prerequisites for all history courses at the 600 level are 12 credit hours in history above the 200 level or consent of the department.

HIS 621: Historiography of U.S. Women
(O) Introduction to the rich historiography of women and gender in the United States. The course will move chronologically from the colonial period through the present, highlighting particular issues and themes from the field. (3 cr. hr.)

HIS 630: Colloquium on Modern China
(C) History and historiography of major issues in Modern China, especially the Western scholarship on political developments, social changes, cultural-intellectual trends and China’s interactions with the world during the 19th and 20th centuries. Open only to students in the M.A. history and M.S.Ed. adolescence social studies and M.S.Ed. childhood education programs. (3 cr. hr.)

HIS 640: Historiography of the French Revolution
(O) History and historiographical debates surrounding the French Revolution. (3 cr. hr.)

HIS 645: Law and Society in Russia and the Soviet Union
(C) History and historiography of major issues in Russia and Soviet Union: An intensive examination of how law and social development have interacted historically in Russia and the U.S.S.R. Prerequisite: bachelor’s degree in history/social studies. (3 cr. hr.)

HIS 646: Issues in American Labor and Working-Class History
(C) This course is designed to introduce graduate students to the historiography of American working-class history, which is broadly defined as the historical experience of wage-earning people. Although the course will move chronologically, it is not meant to be a survey but rather to highlight particular issues in the field. (3 cr. hr.)

Related Education Course
EDU 644: Seminar in Teaching of Secondary Social Studies
(S-M) Selected problems in curriculum, methodology; research based upon individual needs, interests. Not credited as basic methods course for certification. Prerequisite: One year teaching experience and undergraduate course in secondary social studies. (3 cr. hr.)
International Communications and Culture

Department

School
Arts and Sciences

Faculty
Norma Helsper (Chair), Catherine Baranello, Mark Cerosaletti, Tina Christodoulou, Hongli Fan, Christopher Gascon, Timothy Gerhard, Susan Kather, Colleen Kattau, Jean LeLoup, Arnold Levine, Patricia Martinez de la Vega, Glen McNeal, Marie Ponterio, Robert Ponterio, Paulo Quaglio, Wes Weaver, Donna West

Adjunct Faculty
For a listing of adjunct faculty see pages 132-135.

Programs Offered
Master of Science in Education in Second Language Education
Bilingual Education Extension

Master of Science in Education
Second Language Education: Certification
English as a Second Language (K-12) [SLED_ESL]
French (7-12) [SLED_FRE]
Spanish (7-12) [SLED_SPA]

Admission Requirements
In addition to meeting the requirements for admission to a graduate degree program stated in this catalog, the applicant for enrollment in the program leading to a M.S.Ed. in Second Language Education: English as a Second Language (K-12), French (7-12), or Spanish (7-12) must present the following:
1. Undergraduate grade point average of 2.5 or higher.
2. Passing score on the Liberal Arts and Sciences Test (LAST) and the Assessment of Teaching Skills – Written (ATS-W).
3. Provisional or initial certification in the following:
   - French or Spanish at the secondary level for those candidates choosing either of those concentrations,
   - Languages Other Than English (LOTE), English or a related liberal arts major at the secondary level, or elementary education with a concentration in LOTE or an approved related field (for those specifically choosing the ESL concentration).

Language Requirement
Candidates for the M.S.Ed. in Second Language Education: English as a Second Language (K-12) must demonstrate competency in a foreign language by completing 12 credit hours or the equivalent of study of a language other than English.

Program Requirements
A. Core courses for all programs: 15 credit hours
   EDU 637: Seminar in the Teaching of Secondary Foreign Languages
   EDU 671: Issues in Foundations of Education
   ICC 523: Integrating Technology in the Foreign Language Classroom
   ICC 623: Second Language Acquisition
   ICC 621: Linguistics for Foreign Language Educators

B. Specialized courses depending on program
1. English as a Second Language (K-12): 15-27 credit hours
   AED 661: Language Development in Adolescents for Non-Literature Majors, or
   ENG 601: History of the English Language
   ICC 620: Materials and Techniques for Teachers of ESL for Mathematics, Science and Social Science (25 hours of field observation)
   ICC 622: Theory and Practice of Bilingual/Multicultural Education
   ICC 624: Methods of Teaching English to Speakers of Other Languages (25 hours of field observation)
   Program-related elective
   ICC 626: ESL Student Teaching (where necessary)

2. French (7-12): 15 credit hours
   FRE 504: Teaching French Civilization
   FRE 506: Teaching French Literature
   Two graduate-level courses in French literature:
   FRE 515, 601, 602, 603
   Program-related elective:
   FRE 515, 601, 602, 603, 529, 629

3. Spanish (7-12): 15 credit hours
   SPA 604: Teaching Hispanic Civilization
   SPA 606: Teaching Hispanic Literature
   One graduate-level course in Spanish Peninsular literature:
   SPA 615
   One graduate-level course in Latin American literature:
   SPA 616
   Program-related elective:
   SPA 615, 616

C. Other Requirements:
   Graduate grade point average of 3.0 in the program
   Passing score on Content Specialty Test (CST) for ESOL, French or Spanish
   Passing score on a comprehensive examination (local or state mandated)

Total Credit Hours Required: 30-42
Master of Science in Education
Second Language Education: Non-certification
English as a Second Language [SLED_NCT]

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a graduate degree program stated in this catalog, the applicant for enrollment in the program leading to an M.S.Ed. in Second Language Education: English as a Second Language (Non-certification) must present:
1. Undergraduate grade point average of 2.5 or higher.
2. Recommendation of an undergraduate degree/major in one of the following areas: a foreign language, English, linguistics, anthropology/sociology, education, speech or a related area.

LANGUAGE REQUIREMENT
Candidates for the M.S.Ed. in Second Language Education: English as Second Language (Non-certification) must demonstrate competency in a foreign language by completing 12 semester hours or the equivalent of study of a language other than English.

Core Courses: 15 credit hours
- EDU 637: Seminar in the Teaching of Secondary Foreign Languages
- EDU 671: Issues in Foundations of Education
- ICC 523: Integrating Technology in the Foreign Language Classroom
- ICC 623: Second Language Acquisition
- ICC 621: Linguistics for Foreign Language Educators

Specialized Courses – English as a Second Language: 15 credit hours
- AED 661: Language Development in Adolescents for Non-Literature Majors, or
- ENG 601: History of the English Language
- ICC 620: Materials and Techniques for Teachers of ESL for Mathematics, Science and Social Science
- ICC 622: Theory and Practice of Bilingual/Multicultural Education
- ICC 624: Methods of Teaching English to Speakers of Other Languages

Program-related elective

Bilingual Education Extension [BIL]
The extension to authorize bilingual education is meant as an addition to a graduate program leading to the permanent or professional certificate in New York State. This extension must be attached to a master's degree.

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a graduate program stated in this catalog, the applicant for enrollment in the program leading to an extension in bilingual education should contact the International Communications and Culture Department graduate coordinator for further information.

PROGRAM REQUIREMENTS
Fifteen credit hours of approved course work at the graduate level is required. In addition, candidates must complete college-supervised field experiences of at least 50 clock hours in providing bilingual education, as appropriate to the teaching certificate.

Core Courses: 15 credit hours
- ICC 620: Materials and Techniques for Teachers of ESL for Mathematics, Science and Social Studies (25 hours of field observation)
- ICC 622: Theory and Practice of Bilingual/Multicultural Education
- ICC 623: Second Language Acquisition: Theory and Research
- ICC 624: Methods of Teaching English to Speakers of Other Languages (25 hours of field observation)
- ICC 627: Teaching Reading in the Second Language Context

TOTAL CREDIT HOURS REQUIRED: 15

Additional Program Requirements
All students in the M.S.Ed. programs must pass a comprehensive examination based on required course work. In addition, students in the M.S.Ed. certification programs must pass the New York State required examinations not already taken for the initial or provisional certification: for French and Spanish, the Content Specialty Test (CST); for ESL, the CST-ESOL. Other requirements for the M.S.Ed. may be determined by the International Communications and Culture Department and must be ascertained by students in consultation with the department's graduate coordinator.

Students in the Bilingual Extension program must pass the New York required examination: Bilingual Education Assessment (BEA) in the target language of bilingualism. If the candidates have already passed the CST in the target language, the BEA in this language is not required.

International Communications and Culture

COURSE DESCRIPTIONS

General Courses

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. Prerequisites: Graduate status. (3 cr. hr.)

ICC 529, 629: 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 620: Materials and Techniques for Teachers of English as a Second Language Through Mathematics, Science and Social Studies Content Areas
(C) Materials and techniques for the teaching of English to speakers of other languages through mathematics, science and social studies content areas. Application of theories of second-language acquisition and pedagogy to the teaching of English as a second language in these areas. (3 cr. hr.)
ICC 621: Linguistics for Second Language Educators  
(C) Overview of the study of linguistics. Focus on descriptive linguistics (phonetics, phonology, syntax, and semantics) and the study of language use as a social and symbolic action. Prerequisite: Graduate status. (3 cr. hr.)

ICC 622: Theory and Practice of Bilingual/Multicultural Education  
(C) Provides a foundation in the historical, sociopolitical, linguistic, and educational issues related to bilingual and multicultural education. Students develop a basic understanding of language and cultural diversity including aspects of sociolinguistics and multicultural education and learn specifically about social and pedagogical issues regarding bilingual and total immersion curricula in the United States. (3 cr. hr.)

ICC 623: Second Language Acquisition: Theory and Research  
(C) Examination of theories of second language acquisition (SLA): their definitions and how they attempt to describe and explain learner language. Investigation of research of the relationship between theory of SLA and foreign language classroom instruction. Explanation of research methodologies employed in SLA. (3 cr. hr.)

ICC 624: Methods of Teaching English to Speakers of Other Languages  
(C) Methods of teaching reading, writing, speaking, and communicating in English to speakers of other languages. Application of theories of second language acquisition and pedagogy to the teaching of English as a second language. Prerequisite: Graduate status. (3 cr. hr.)

ICC 625: The Teaching of Foreign Languages in the Elementary School  
(O) Appropriate psychology, rationale, current research and statistics as well as methodologies in order to create successful foreign language teaching/learning experiences in the elementary school. Course is approved by the New York State Education Department for extension of foreign language 7-12 certification to foreign language K-12. Prerequisites: One year of full-time teaching of foreign languages, provisional certification. (3 cr. hr.)

ICC 626: Student Teaching, K-12, English as a Second Language  
(A) Full-time supervised student teaching in an approved elementary and secondary placement for students in the Master’s of Science in Second Language Education. Prerequisite: Graduate standing and permission of department. (12 cr. hr.)

ICC 627: Teaching Reading in the Second Language Context  
(C) Provides a theoretical and practical grasp of several current views of first and second language reading; investigates diagnostic techniques which can be used to identify strategies of non-native readers, and examines materials, teaching methods, and testing procedures used in foreign language and ESL classrooms. Prerequisite: Graduate status. (3 cr. hr.)

French Courses

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-orientated 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. Prerequisites: 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. Prerequisite: Two semesters from FRE 310, 315, 316, 318. (3 cr. hr.)

FRE 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, consent of department. (1-3 cr. hr.)

FRE 529, 629: 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 601: French Poetry  
(O) Significant author or movement. May be repeated as subtitle changes. (3 cr. hr.)

FRE 602: French Fiction  
(O) Significant author or school. May be repeated as subtitle changes. (3 cr. hr.)

FRE 603: French Theatre  
(O) Specific dramatic author or theatre movement. May be repeated as subtitle changes. (3 cr. hr.)

FRE 609: Independent Study  
(O) Independent work under direction of student’s major advisor. May be repeated as subtitle changes. (3 cr. hr.)

Spanish Courses

SPA 529, 629: 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 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.)

SPA 604: Teaching Hispanic Civilization  
(C) Spain and Spanish America. In-depth study of various aspects of Spanish and Spanish American civilization, with particular focus on the development and integration of materials for use in the public school classroom. Prerequisite: Competency in Spanish. (3 cr. hr.)

SPA 606: Teaching Spanish Literature  
(O) Study of second language reading research and extensive attention to pedagogical framework of teaching reading in a second language. Particular emphasis on the development of materials for classroom use by focusing on selected texts from Spanish and Spanish American literature. Prerequisite: Competency in Spanish. (3 cr. hr.)
SPA 615: Seminar in Spanish Peninsular Literature
(C) Topics in Spanish peninsular literature defined by subtitle. Knowledge of Spanish required. Major texts read in Spanish. May be retaken as subtitle changes. Prerequisite: Competency in Spanish. (3 cr. hr.)

SPA 616: Seminar in Latin American Literature
(C) Topics in Latin/Spanish American literature defined by subtitle. Knowledge of Spanish required. Major texts read in Spanish. May be retaken as subtitles change. (3 cr. hr.)

Education Courses

EDU 637: Seminar in Methods of Second Language Teaching
(C) Methods of teaching all skill areas in second languages (reading, writing, speaking, listening, culture); curriculum patterns, practices, research in second language teaching. Prerequisite: One year of full-time teaching of foreign languages, provisional or initial certification. (3 cr. hr.)

EDU 671: Issues in Foundations of Education
(A) EDU 671 presents historical, philosophical, political-economic and social foundations of education interpreted through seminal and contemporary research on issues of American schooling. Inquiry, critical thinking and writing will be focused on the thinking about and practices of education and schooling regarding diversity, equity, professionalism, leadership, public access and political control. (3 cr. hr.)
Certificate in the Teaching of Literacy Grades 5-12

Before beginning course work, students must select from the following tracks:

Track 1: Study leading to the initial and professional certificate in the Teaching of Literacy Birth to Grade 6

Track 2: Study leading to the initial and professional certificate in the Teaching of Literacy Grades 5-12

Track 3: Study leading to the initial and professional certificates in both the Teaching of Literacy Birth to Grade 6 and the initial and professional certificates in the Teaching of Literacy Grades 5-12.

Students should matriculate (be accepted and enrolled in the program) before beginning course work and must establish candidacy for the degree between their sixth and 15th hour of course work.

According to College policy, no more than six graduate credit hours may be transferred from another college. In addition, only course work completed in five years prior to completion of the graduate program may be included in the degree program.

Additional Requirements

Candidates for the degree must meet any additional undergraduate and graduate requirements for the award of the degree established by the department. Such additional requirements must be ascertained by the student in consultation with the department’s chair.

Specific information regarding requirements (state examinations, identification and reporting of child abuse and maltreatment, alcohol and drug abuse education, fingerprinting, violence prevention and foreign language requirements) for New York State teaching certification can be found on pages 108-109 of this catalog.


A. Required courses for Track 1: Study leading to the certificate in the Teaching of Literacy Birth-Grade 6

LIT 528: Language and Literacy Development
LIT 540: Current Issues in Assessment and Instruction Birth to Grade 6
LIT 669: The Literacy Specialist and The Literacy Program
LIT 698: The Master’s Project in Literacy Education

B. Required courses for Track 2: Study leading to the certificate in the Teaching of Literacy Grades 5-12

LIT 528: Language and Literacy Development
LIT 550: Current Issues in Assessment and Instruction: 5-12
LIT 570: Young Adult Literature
LIT 610: Seminar in Literary History, Instruction and Research
LIT 630: Literacy and Society
LIT 669: The Literacy Specialist and The Literacy Program
LIT 680: Assessment and Instruction of Learners Experiencing Literacy Difficulties Birth to Grade 6
LIT 693: The Literacy Practicum
LIT 698: The Master’s Project in Literacy Education

One from the following:

FSA 525: Teaching the Inner City Child
SPE 510: Teaching the Special Education Learner in the General Education Classroom
EDU/WST 552: Gender Issues in Education

TOTAL CREDIT HOURS REQUIRED: 33

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
Lit 550: Current Issues in Assessment and Instruction: 5-12
(A) Understanding the role of comprehension for all middle and secondary students will be emphasized through research, strategies, and integrating content areas. In addition, students will investigate philosophy of literacy, related research, students with special needs, multicultural issues, the use of technology in tutoring, and assessing needs, multicultural issues, the use of technology in tutoring, and integrating content areas. Prerequisite: Admission to the M.S.T. Program. Undergraduates restricted. (3 cr. hr.)

Lit 549: Literacy in the Middle and Secondary School
(A, M) Problems, learning theories related to reading and adolescence, causes of reading disabilities, diagnostic procedures, organizing developmental reading program. (3 cr. hr.)

Lit 540: Current Issues in Assessment and Instruction Birth to Grade 6
(A) This course will explore developmental reading concepts. Students will explore trends and research in the field of literacy. A field experience equal to one credit hour is required. (4 cr. hr.)

Lit 539: Reading and Writing Across the Curriculum
(A) This course is intended to provide graduate students with a firm understanding of how reading and writing can be developed through content area subjects. (3 cr. hr.)

Lit 528: Language and Literacy Development
(A) Explores connections between overall language development and the specific development of print literacy. Studies theoretical perspectives of language development and examines how they are applied to learning environments. (3 cr. hr.)

Lit 516: Teaching Literacy in the Intermediate Grades
(B) The purpose of this course is to emphasize reading, writing, listening, and speaking at the intermediate school level. Students will learn to assess and instruct intermediate grade students through class and tutoring sessions. In addition, students will examine their philosophy of reading, related research, special needs, multicultural issues, the use of technology in tutoring, and integrating content areas. Prerequisite: EDU 514. (3 cr. hr.)

Lit 515: Teaching Literacy in the Primary Grades
(B) The purpose of this course is to emphasize reading, writing, listening, and speaking at the primary school level. Students will learn to assess and instruct primary grade students through class and tutoring sessions. In addition, students will investigate philosophy of literacy, related research, students with special needs, multicultural issues, the use of technology in tutoring, and integrating content areas. (3 cr. hr.)

Lit 514: Understanding the role of comprehension for all middle and secondary students will be emphasized through research, strategies, metacognition, and assessment. Topics include background, vocabulary, graphic organizers, purposes, questioning, study skills, and writing. Evaluating, selecting, and using textbooks will also be examined. A field experience equal to one credit hour is required. (4 cr. hr.)

Lit 560: Children's Literature in the Curriculum
(A) The use of children's literature for helping children demonstrate an understanding and respect for cultural, linguistic, and ethnic diversity: stimulating interest, promoting reading growth, and increasing the motivation of learners to read widely and independently for knowledge, pleasure, personal growth, and social understandings. (3 cr. hr.)

Lit 570: Young Adult Literature
(B) Investigations of literature written for young adults, grades 5-12 with emphasis placed on reader response theory. (3 cr. hr.)

Lit 610: Seminar in Literacy History, Instruction and Research
(A) The history of literacy, literacy instruction in the United States and literacy research. (3 cr. hr.)

Lit 680: Assessment and Instruction of Learners Experiencing Literacy Difficulties, Birth to Grade 6
(A) Explores assessment and instruction, materials, theory and research surrounding the literacy difficulties experienced by learners from birth-grade 6. A field experience equal to one credit hour is required. (4 cr. hr.)

Lit 681: Assessment and Instruction of Learners Experiencing Literacy Difficulties, Grades 5-12
(A) Explores assessment and instruction, materials, theory and research surrounding literacy difficulties experienced by learners in grades 5-12. A field experience equal to one credit hour is required. (4 cr. hr.)

Lit 669: The Literacy Specialist and The Literacy Program
(A) Seminar format encourages students to begin synthesizing information from previous courses into coherent literacy programs in schools. Examines different approaches to reading from policy and programmatic perspectives. Emphasis is given to the concept of literacy specialists as both initiators and implementers of literacy programs. Prerequisites: Lit 528, 540 or 550. (3 cr. hr.)

Lit 693: Literacy Practicum
(A) The history of literacy, literacy instruction in the United States and literacy research. (3 cr. hr.)

Lit 698: The Master's Project in Literacy Education
(A) The Master's Project is the culminating experience in the Literacy Education program and results in a Literacy Professional Practicum. Through the portfolio preparation and presentation, candidates demonstrate comprehensive understandings of knowledge and practices in the teaching of literacy as well as an ability to apply these understandings in a variety of instructional settings. Candidates must also provide evidence that they have met all college criteria for the master's degree and the New York State Education Department criteria for certification sought. S, U grades are assigned. The grade of E (failure) automatically is assigned for an incomplete at the end of one year. Prerequisites: All literacy courses; completion of 30-hour master's program. (3 cr. hr.)
Mathematics

DEPARTMENT

SCHOOL
Arts and Sciences

FACULTY
R. Bruce Mattingly (Chair), Abolghassem Alemzadeh, Carol J. Bell, John D. Best, Cecile Dore, Daniel L. Driscoll, George F. Feisner, Yusuf Gurtas, Ter-Jenq Huang, Isa S. Jubran, Joanne Redden, Mahdi H. Rubaii

ADJUNCT FACULTY
For a listing of adjunct faculty see pages 132-135.

PROGRAMS OFFERED
Master of Arts in Teaching in Adolescence Education: Mathematics
Master of Science in Education in Adolescence Education: Mathematics
Master of Science in Education in Adolescence Education: Physics and Mathematics

Master of Arts in Teaching
Adolescence Education: Mathematics (7-12) [AEM]

This program leads to the M.A.T. degree as well as initial or provisional certification for teaching adolescence mathematics. The focus of the program is to provide a pedagogical foundation that complements a solid mathematical background.

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

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a degree program stated in this catalog, applicants for enrollment in the program leading to a M.A.T. adolescence education: mathematics (7-12) should present the following:
1. Official transcripts documenting a bachelor’s degree from an accredited college or university.
2. A minimum of 30 credit hours of approved mathematics courses including the following:
   a) at least 12 credit hours of calculus, analysis or differential equations,
   b) at least three credit hours each in the following six areas: discrete mathematics, linear algebra, abstract algebra, geometry, probability and statistics, and history of mathematics.
3. An overall undergraduate grade point average of at least 2.5.
4. Two letters of recommendation from professors or professional colleagues that address the prospective students’ suitability for adolescence school teaching.
5. Application to the SUNY Cortland Teacher Education Program.
6. Demonstrated proficiency equivalent to successful completion of the second semester (102) of a college-level foreign language sequence.
7. An undergraduate course in either educational psychology or adolescent psychology, such as PSY 232 or 332.
8. A health education course that fulfills NYSED mandates for teacher education programs — currently approved courses include HLH 110, 199 or 510.

PROGRAM REQUIREMENTS
A. Required Core in Mathematics: 12 credit hours
   * MAT 501: Fundamental Concepts of Mathematics
   * MAT 502: Applied Concepts in Adolescence Mathematics
   MAT 603: Real Analysis and Concepts of Calculus
   MAT 604: Algebraic Structures II
B. Required Core in Professional Preparation: 36 credit hours
   * AED 540: Technologies in the Adolescence Mathematics Classroom
   * AED 600: Introduction to Adolescence Education
   * AED 601: Teaching Adolescence Mathematics
   * AED 602: Methods II: Field Experiences in Adolescence Mathematics
   * LIT 549: Literacy in the Middle and Secondary School
   * AED 661: Language Development in Adolescents for Non-Literature Majors
   EDU 671: Issues in Foundations of Education
One of the following two courses:
   PSY 501: Advanced Educational Psychology or
   PSY 533: Advanced Developmental Psychology
   AED 693: Student Teaching – Adolescence Mathematics I
   AED 694: Student Teaching – Adolescence Mathematics II
   * Must be taken prior to student teaching.

C. Additional Requirements
1. Successful completion of either a comprehensive examination covering the material from the required core in mathematics or a graduate project that contributes to the value of mathematics or mathematics education.
2. Specific requirements for New York State teaching certification (state examinations, identification and reporting of child abuse and maltreatment, alcohol and drug abuse education, school violence prevention education, fingerprinting and foreign language requirements) can be found on pages 108-109 in this catalog.
3. Teacher candidates must submit a professional portfolio prior to graduation. Specific requirements for the portfolio may be obtained from the academic advisor.
4. Additional requirements for the M.A.T. may be determined by the Mathematics Department and must be ascertained by the students in consultation with the department’s graduate coordinator.

TOTAL CREDIT HOURS REQUIRED: 48
Master of Science in Education
Adolescence Education: Mathematics (7-12) [AEM]

This program leads to the M.S.Ed. and is intended for in-service teachers seeking a professional certificate in adolescence mathematics. The focus of the program is to provide greater subject depth and additional instructional methodologies.

CAREER POTENTIAL

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

ADMISSION REQUIREMENTS

In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to a Master of Science in Education in Adolescence Education: Mathematics (7-12) should present the following:

1. Documentation of an initial/provisional certificate or a certificate of qualification for initial or provisional certification in adolescence/secondary mathematics education issued by the New York State Education Department.
2. An overall undergraduate grade point average of at least 2.5 in mathematics.
3. An overall undergraduate grade point average of at least 2.5.
4. Two letters of recommendation from former professors or professional colleagues that address the prospective student's suitability for adolescence school teaching.

PROGRAM REQUIREMENTS

A. Required Core in Mathematics: 12 credit hours
   MAT 501: Fundamental Concepts of Mathematics
   MAT 502: Applied Concepts in Adolescence Mathematics
   MAT 603: Real Analysis and Concepts of Calculus
   MAT 604: Algebraic Structures II

B. Required Core in Professional Preparation: 12 credit hours
   AED 540: Technologies in the Adolescence Mathematics Classroom
   EDU 671: Issues in Foundations of Education
   Complete one of the following:
   PSY 501: Advanced Educational Psychology
   PSY 533: Advanced Developmental Psychology

Note: Students who desire middle school extension certification must complete PSY 533: Advanced Developmental Psychology.

C. Electives: Six credit hours
   1. Students elect three credit hours from MAT 500- or MAT 600-numbered courses.
   2. Students elect three credit hours from other mathematics, education, or psychology graduate courses.

Note: Students who desire middle school extension certification must complete EDU 533: Introduction to Middle Childhood Education.

D. Additional Requirements
   1. Successful completion of either a comprehensive examination covering the material from the required core in mathematics or a graduate project that contributes to the value of mathematics or mathematics education.

TOTAL CREDIT HOURS REQUIRED: 30-33

Master of Science in Education
Adolescence Education: Physics and Mathematics (7-12) [APM]

CAREER POTENTIAL

• Teacher: physics and mathematics (grades 7-12)
• Science department chair

ADMISSION REQUIREMENTS

In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to a M.S.Ed. in Adolescence Education: Physics and Mathematics (7-12) should present the following:

1. All undergraduate transcripts which reflect evidence of completion of a bachelor's degree in physics/mathematics or functionally related subject area. The transcript needs to show at least 30 credit hours of course work in physics and at least 30 credit hours of course work in mathematics.
2. Documentation of an initial/provisional certificate or a certificate of qualification for initial or provisional certification in physics and mathematics issued by the New York State Education Department.
3. An overall undergraduate grade point average of at least 2.5.
4. Three letters of recommendation from former professors or professional colleagues who can speak to the candidate's preparation and competence for teaching physics/mathematics in grades 7-12.
5. Interview with the coordinator of adolescence education: science (7-12).

PROGRAM REQUIREMENTS

A. Content: 24 credit hours in physics and mathematics
   12 credit hours in graduate physics
   12 credit hours in graduate mathematics

B. Pedagogy: 3-6 credit hours

Option I: Without middle childhood extension
   AED 540: Technologies in the Adolescence Mathematics Classroom

Option II: Leads to a middle childhood extension of certificate for grades 5-6
   EDU 533: Introduction to Middle Childhood Education
   PSY 533: Advanced Developmental Psychology

C. Culminating Master's Project: Three credit hours
   SCI 690: Independent Study in Science/Mathematics Education

TOTAL CREDIT HOURS REQUIRED: 30-33

Middle Childhood Extension (Grades 5-6)
[AEM_MCHD] [APM_MCHD]

Students electing to take the Middle Childhood Extension may do so by completing the following additional courses:

PSY 533: Advanced Developmental Psychology and
EDU 533: Introduction to Middle Childhood Education
Mathematics

COURSE DESCRIPTIONS

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.)

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 511: Chaos, Fractals and Dynamics
(O) Applications of advanced calculus to chaotic dynamical systems. Orbit analysis bifurcations, symbolic dynamics, quadratic systems, Devaney’s definition of chaos, Sarkovskii’s Theorem, fractals, Julia and Mandelbrot sets. Prerequisite: MAT 501 or consent of department. (3 cr. hr.)

MAT 529, 629: Special Topics in Mathematics
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.)

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. Prerequisite: MAT 501. (3 cr. hr.)

MAT 568: Mathematical Statistics
(O) Properties of functions of a real variable that relate to fundamental concepts of differential and integral calculus. Prerequisite: MAT 501. (3 cr. hr.)

MAT 601: Methods I: Teaching Adolescence Mathematics
(B) Students complete modules that are structured learning experiences related to teaching mathematics in grades 7-12. The course includes 50 hours of directed field experiences at the junior and senior high school level. Class meetings focus on discussion and assessment of individual field experiences. Prerequisite: AED 601. (3 cr. hr.)

MAT 602: Methods II: Field Experiences in Adolescence Mathematics
(B) Developing practical materials for use in the mathematics classroom, aligning lesson plans with state and national learning standards, developing strategies for motivating students with diverse needs and learning styles, understanding how and when to use different teaching styles, and understanding the uses of technology in the classroom. The course includes 25 hours of field experience. Prerequisite: AED 600. (3 cr. hr.)

MAT 611: Chaos, Fractals and Dynamics
(O) Group theory. Permutation groups, cyclic groups, sets of generators, subgroups, cosets, normal subgroups quotient groups, commutator groups, direct products, centers, normalizers. Prerequisite: MAT 604. (3 cr. hr.)

Related Education Courses

AED 540: Technologies in the Adolescence Mathematics Classroom
(B) 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.)

AED 601: Methods I: Teaching Adolescence Mathematics
(B) Developing practical materials for use in the mathematics classroom, aligning lesson plans with state and national learning standards, developing strategies for motivating students with diverse needs and learning styles, understanding how and when to use different teaching styles, and understanding the uses of technology in the classroom. The course includes 25 hours of field experience. Prerequisite: AED 600. (3 cr. hr.)

AED 602: Methods II: Field Experiences in Adolescence Mathematics
(B) Students complete modules that are structured learning experiences related to teaching mathematics in grades 7-12. The course includes 50 hours of directed field experiences at the junior and senior high school level. Class meetings focus on discussion and assessment of individual field experiences. Prerequisite: AED 601. (3 cr. hr.)

AED 604: Technologies in the Adolescence Mathematics Classroom
(B) 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.)
**SCHOOL**
Professional Studies

**FACULTY**
Jerry Casciani (Chair), JoEllen Bailey, Colleen Buchanan, Shirley Cahill, Diane Craft, Tim Davis, Maha Ebeid, John Foley, Tom Fuchs, Kiah Howarth, Mike Kniffin, Eric Malmberg, Steve Patrick, Tom Quinn, Jeff Walkuski, William Williams, Virginia Wright, Stephen Yang

**ADJUNCT FACULTY**
For a listing of adjunct faculty see pages 132-135.

**PROGRAM OFFERED**
Master of Science in Education in Physical Education

**CONCENTRATIONS OFFERED**
Curriculum and Instruction
Adapted Physical Education
Coaching Pedagogy

**Master of Science in Education**

**Physical Education [PEC]**
Students must take PED 610 and PED 611 before applying for candidacy and should apply for candidacy as soon as they are eligible. Application for the degree should be at the beginning of the final course requirements. A maximum of six approved graduate credit hours may be transferred. Students may take up to nine credit hours of electives outside of physical education. All electives must be approved by the coordinator of graduate programs in physical education.

**ADMISSION REQUIREMENTS**
In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to a M.S.Ed. in Physical Education should present the following:

1. Official transcripts documenting a bachelor’s degree from an accredited college or university in a physical education teacher certification program.
2. A minimum of a 2.5 overall undergraduate grade-point average or a 2.8 grade-point average in the physical education major.
3. Submission of a Graduate Record Exam score (General Test).

**PROGRAM REQUIREMENTS**
A. All students must take the physical education degree core of six credit hours:
   - PED 610: Readings in Physical Education
   - PED 611: Research Methods in Physical Education

*Note: Students electing the coaching pedagogy concentration will be taking these courses via the Web-based/Web-assisted format.*

B. Students must choose to take the concentration in curriculum and instruction, the concentration in adapted physical education or the concentration in coaching pedagogy.

C. Curriculum and Instruction Concentration [CURR]
The purpose of this concentration is to prepare master teachers who have the corresponding awareness, knowledge and skills required to create curricula that meet current New York State and national standards and with the ability to assess these standards.

**Curriculum and Instruction Core:** Nine credit hours
- PED 621: Curriculum Construction in Physical Education
- PED 622: Research On Teaching Effectiveness in Physical Education
- PED 623: Assessment of Curricula and Instruction in Physical Education

**Specialty Electives:** Minimum of six credit hours
- PED 624: Elementary School Physical Education Programs
- PED 625: Lifespan Motor Development
- PED 626: Fitness Programming and Curriculum for Schools
- PED 627: Models and Theories of Adventure Learning
- PED 691: Administration of Physical Education

D. Adapted Physical Education Concentration [ADPE]
The purpose of this concentration is to prepare master teachers with special expertise in adapted physical education consistent with curricula that meet current New York State and national standards and with the ability to assess these standards.

**Adapted Physical Education Core:** 12 credit hours
- PED 530: Introduction to Adapted Physical Education
- PED 635: Instructional Strategies in Adapted Physical Education
- PED 636: Curriculum and Measurement in Adapted Physical Education

**Adapted Specialty Electives:** Minimum of three credit hours
- PED 531: Inclusive Outdoor Education
- PED 637: Preschool Movement Programs
- PED 638: Positive Behavior Management and Discipline

E. Coaching Pedagogy Concentration [COAP]
*This program of study is pending SUNY and NYSED approval.*
The purpose of this concentration is to provide graduate students with abilities and knowledge that apply especially to coaching but also to teaching physical education. An emphasis is placed on applying current technology to coaching, teaching and research methodologies. This program is offered over three summer sessions as a residency-based online program that includes online preparation followed by nine days of in-class course work on campus.

**Summer I:**
- PED 610: Readings in Physical Education
- PED 611: Research Methods in Physical Education and Recreation
- PED 625: Lifespan Motor Development
- SPM 526: Digital Video Analysis
Physical Education

COURSE DESCRIPTIONS

PED 530: Introduction to Adapted Physical Education
(F) This course provides the students with knowledge required to meet the professional and legal mandates of Public Law 105-17 Individuals with Disabilities Act (IDEA) 1997 and amendments as they pertain to physical education for students with disabilities. The course is presented through a theoretical motor development perspective as it applies to the development of children with disabilities. Students will be required to complete a series of observations and labs with children with disability as it relates to typical motor development. Prerequisite: PED 336 or 356. (4 cr. hr.)

PED 531: Inclusive Outdoor Education
(B) This course is designed to address issues, models and strategies pertaining to the development of inclusive outdoor education programs that address all ability levels including those with physical and developmental disabilities. Not open to students who have taken REC 531. Also listed as REC 531. (3 cr. hr.)

PED 600: Individual Physical Education Problems
(A) Individual study project permitting teachers with unique problems to consult with specialists in their field. Hours, credit to be arranged. (1-3 cr. hr.)

PED 602: Research Project
(A, M) Guidance, direction in conducting individual research project. Prerequisite: PED 601, consent of advisor. Also listed as EXS 602. (3 cr. hr.)

PED 610: Readings in Physical Education
(A) This course consists of a comprehensive, but foundational, investigation of recent literature and research in the various areas of study which directly influence the field of physical education. (3 cr. hr.)

PED 611: Research in Physical Education and Recreation
(A, M) Nature, scope, methodology; emphasizing fields of physical education and recreation. Prerequisite: PED 610, which may be taken concurrently. (3 cr. hr.)

PED 613: Philosophy and Principles of Coaching
(M) An inquiry into the philosophical and ethical bases of athletics and coaching resulting in the development of an applied personal philosophy of coaching. (3 cr. hr.)

PED 621: Curriculum Construction In Physical Education
(O) Program planning applicable to student's local situation. Generally accepted educational aims, objectives, philosophies, principles of curriculum construction. Prerequisite: PED 610. (3 cr. hr.)

PED 622: Research on Teaching Effectiveness in Physical Education
(O) Course designed for teachers who want to be informed about teacher effectiveness research findings and improve own teaching practices. Participation in microteaching and reflective teaching featured. Prerequisites: PED 610 and graduate standing with teaching experience. (3 cr. hr.)

PED 623: Assessment of Curricula and Instruction in Physical Education
(B) Course will cover issues relating to assessment for the physical education teacher. Current issues such as the integration of New York State Learning Standards into unit planning will be a major focus. Authentic assessment techniques, assessment in the affective domain, development of cognitive tests and the development of grading systems will be addressed. Prerequisites: PED 621 and PED 622. (3 cr. hr.)

PED 624: Elementary School Physical Education Programs
(O) Trends in philosophy, content, methods, evaluation. Curriculum organization, integration of physical education and elementary education. Research evaluated; implications determined for use in planning conducting programs. (3 cr. hr.)

PED 625: Lifespan Motor Development
(F) The course is designed to provide students with an opportunity to acquire knowledge, insights and skills germane to the study of human growth and motor development over the life span. The course content focuses on movement changes throughout the life-span and their implications for the curriculum in physical education. (3 cr. hr.)

PED 626: Fitness Programming and Curriculum for Schools
(C) This course is designed for students who desire to expand their knowledge base on how to create and implement developmentally appropriate fitness oriented curricula for school-aged children. Topics include: aspects of developmental physiology, children’s responses to exercise, maturational changes, changes in health related fitness throughout childhood, introduction to the Physical Best Program and other fitness programs for children, nutrition, activity planning, fitness assessment and behavior modification. (3 cr. hr.)

PED 627: Models and Theories of Adventure Learning
(S) This course is devoted to the study of adventure education as it relates to Physical Education learning standards using current models and theories. Topics include discussions on current models of participation and levels of engagement, learning and teaching styles and relevant historical developments. Students also study the relationships of adventure education goals and objectives to current National and State educational objectives. (3 cr. hr.)
PED 633: Inclusive Coaching Methods and Programs  
(M) Addresses effective coaching methods for an inclusive environment along with the development of athletic programs as they relate to diverse athletes. Diversity in this course is broadly defined as the understanding of gender, ethnic and racial considerations; development and ability-level differences; variations in learning styles; and a variety of physical, mental and emotional disabilities. This course also focuses on the promotion of interpersonal skills and the understanding of individual differences. (3 cr. hr.)

PED 634: Knowledge Test Construction  
(O) In-depth coverage of knowledge test construction including test planning and organization, subjective test items, objective test items, test analysis and computer-assisted programs. Lecture and workshop format. Not open to students with credit for EDU 650. (3 cr. hr.)

PED 635: Instructional Strategies in Adapted Physical Education  
(S) This course provides students with an understanding of instructional strategies using theoretical learning models from kinesiology for individuals with disabilities. The lab experience will be focused on developing an individualized educational program incorporating curricular modifications and present level of performance. (4 cr. hr.)

PED 636: Curriculum and Measurement in Adapted Physical Education  
(S) This course provides students with an understanding of the comprehensive service delivery model and factors that contribute to curricular development as well as knowledge related to assessment and evaluation. The lab experience will be focused on developing a “top down plan” for an individual with a disability. (4 cr. hr.)

PED 637: Preschool Movement Programs  
(S) This course is designed to provide students opportunities to learn and apply basic principles of Developmentally Appropriate Practice (DAP) framework and child centered preschool curricula in teaching movement to young children. (3 cr. hr.)

PED 638: Positive Behavior Management and Discipline in Physical Education  
(M) This course is designed to address issues, models and strategies when dealing with behavior management and discipline in physical education. The Behavioralist Model, the Psychoanalytical Model and the Teaching Personal and Social Responsibility Model (TPSR) will provide the basic learning framework for the course. (3 cr. hr.)

PED 641: Graduate Readings in Physical Education  
(A, M) In-depth reading, study, discussion in one or more areas. Prerequisite: Acceptance as candidate for degree. Also listed as EXS 641. (3 cr. hr.)

PED 650: Master’s Thesis  
(A, M) Physical education research. Also listed as EXS 650. (6 cr. hr.)

PED 651: Comprehensive Examination Seminar  
(A) Students will synthesize knowledge and understanding gained in the core program and make connections across all areas of the master’s program in preparation for the comprehensive examination. Prerequisites: PED 610, 611, 621, 622, and 623 for students following the curriculum and instruction concentration; PED 530, 610, 611, 635, and 636 for students following the adapted physical education concentration; PED 610, 611, 613, 625, 633, AFR 521, EXS 558, SPM 536, 537 and 538 for students following the coaching pedagogy concentration. (3 cr. hr.)

PED 691: Administration of Physical Education  
(O) Basic concepts, theories of organization, administration; application to physical education, athletics. Persistent administration problems in the field. (3 cr. hr.)
Recreation and Leisure Studies

Department

School
Professional Studies

Faculty
Lynn Anderson (Chair), Dale Anderson, Kenneth Cohen, Wayne Stormann, Sharon Todd, Vicki Wilkins, Susan Wilson, Anderson Young

Adjunct Faculty
For a listing of adjunct faculty see pages 132-135.

Programs Offered
Master of Science in Recreation
Master of Science in Education in Recreation Education

Majors Offered
Recreation
Recreation Education

Concentrations Offered
Management of Leisure Services
Outdoor and Environmental Education
Therapeutic Recreation

Departmental Information
The Recreation and Leisure Studies Department at SUNY Cortland is the most comprehensive professional preparation program of its kind in New York State. Established in 1948, SUNY Cortland's department is also one of the oldest and most highly respected programs in the United States. Many of the most distinguished scholars and professionals in the recreation field began their careers by studying here. The curriculum further prepares students for a wide variety of career opportunities in outdoor recreation, therapeutic recreation and recreation management in a wide variety of settings and agencies.

Special Features
- Very bright job market for recreation graduates, as predicted by the U.S. Department of Labor and as evidenced by the high employment rate (over 95 percent) of our graduates
- Nationally and internationally recognized faculty committed to students
- Opportunities for research, in a wide array of areas including outdoor recreation, therapeutic recreation and management
- Internship experience
- The Annual Cortland Recreation Conference — one of the premier recreation conferences in the northeast
- Outdoor Education Center in the Adirondacks
- Opportunities for international study
- Graduate assistantships, available on a competitive basis

Master of Science
Recreation [REC]

Admission Requirements
In addition to meeting the requirements for admission to a degree program stated in this catalog, the applicant for enrollment in the program leading to a Master of Science in Recreation should present the following:

1. Official transcripts documenting a bachelor's degree from an accredited college or university.
2. Applicants are generally required to have an undergraduate cumulative grade point average of 2.8 on a 4.0 scale. However, circumstances including, but not limited to, endeavors following completion of a bachelor's degree and performance in the last two years of a bachelor's degree program will be considered in reviewing applications from students with lower grade point averages. Students who feel they are qualified in spite of an undergraduate grade point average below a 2.8 are encouraged to contact the department before applying for admission.
3. A resume.
4. A one- to two-page statement of educational and professional goals.
5. Names, addresses and phone numbers of three references.
6. Applicants who lack substantial academic background in recreation may be required to complete three to 12 credit hours of course work in addition to the degree requirements.

Program Requirements
A minimum of 33-34 credit hours of approved graduate work as described below is required for the M.S. in recreation.

A. Recreation: 21 credit hours
   REC 601: Recreation Research and Evaluation I
   REC 602: Recreation Research and Evaluation II
   REC 603: Historical, Philosophical and Theoretical Perspectives of Recreation and Leisure
   A supervision or administration course (3 cr. hr.)
   Nine credit hours in one of the following concentrations:
   Outdoor and Environmental Education (EOE)
   Management of Leisure Services (MGLS)
   Therapeutic Recreation (TR)

B. Supporting Area: Six credit hours
   Additional courses in recreation or in areas closely related to recreation such as health, political science, sociology, physical education, etc.

C. Electives: Six credit hours
   Behavioral, natural, or social sciences

D. Culminating Activity: 1-6 credits
   M.S. degree candidates must successfully complete a culminating activity from the three following options:
   1. REC 683: Comprehensive Examination in Recreation and Leisure Studies
   2. REC 684: Thesis
   3. REC 685: Master’s Project
Normally students earn up to six credit hours for completion of a thesis, or project in lieu of a thesis, which is substituted for course work from the requirements, upon advisement.

For each concentration — therapeutic recreation, management and outdoor/environmental education — the department requires or recommends specific courses and supporting courses. These curriculum guidelines are available from the department or its Web site.

Other requirements for the award of the M.S. may be determined by the department and must be ascertained by students in consultation with a department graduate advisor.

TOTAL CREDIT HOURS REQUIRED: 33-34

Master of Science in Education
Recreation Education [RED]

ADMISSION REQUIREMENTS
In addition to meeting the requirements for admission to a degree program stated in this catalog, applicants for admission to the M.S.Ed. in Recreation Education must meet the following requirements:

1. Official transcripts documenting a bachelor's degree from an accredited college or university.
2. Documentation of an initial/provisional certificate or a certificate of qualification for initial or provisional certification in any subject area issued by the New York State Education Department.
3. Applicants are generally required to have an undergraduate cumulative grade point average of 2.8 (on a 4.0 scale). However, circumstances including, but not limited to, endeavors following completion of a bachelor's degree and performance in the last two years of a bachelor's degree program will be considered in reviewing applications from students with lower grade point averages. Students who feel they are qualified in spite of an undergraduate grade point average below a 2.8 are encouraged to contact the department before applying for admission.
4. A resume.
5. A one- or two-page statement of the applicant's educational and professional goals.
6. Names, addresses and phone numbers of three references.
7. Applicants who lack substantial academic background in recreation may be required to complete three to 12 credit hours of course work in addition to the degree requirements described herein.

PROGRAM REQUIREMENTS
A minimum of 33-34 credit hours of approved graduate work as described below is required for the M.S.Ed.

A. Professional Education: 15 hours
   REC 601: Recreation Research and Evaluation I
   REC 602: Recreation Research and Evaluation II
   REC 603: Historical, Philosophical and Theoretical Perspectives of Recreation and Leisure
   An education elective, by advisement
   A course in curriculum development

B. Recreation Education Concentration: 12 credit hours
   The recreation education concentration may be taken in one of the following areas:
   - Outdoor and Environmental Education (EOE)
   - Management of Leisure Services (MGLS)
   - Therapeutic Recreation (TR)
   - Therapeutic Recreation (TR)
   - Recreation and Leisure Studies
   - Management of Leisure Services (MGLS)

C. Electives: Six credit hours (selected under advisement)

D. Culminating Activity: 1-6 credit hours
   Normally students earn up to six hours of credit for completion of a thesis, or project in lieu of a thesis, which is substituted for course work from the requirements, upon advisement.

   For each concentration (therapeutic recreation, management and outdoor/environmental education), the department requires or recommends specific courses and supporting courses. These curriculum guidelines are available from the department or its Web site.

   Other requirements for the award of the M.S.Ed. may be determined by the Recreation and Leisure Studies Department and must be ascertained by students in consultation with a department graduate advisor.

TOTAL CREDIT HOURS REQUIRED: 33-34

Recreation and Leisure Studies

COURSE DESCRIPTIONS

REC 503: Campus Recreation Programming and Administration
   (O) Design, coordination, delivery and management of leisure, arts and recreation programs and services for the campus community. Topics include programming principles, types of programs, interoffice/provider coordination, publicity, budgeting, supervision, evaluation, facilities, equipment management and auxiliary services. (3 cr. hr.)

REC 508: Leisure Services for Older Adults
   (C) Intensive study of problems associated with aging; implications for health, recreation. Recreational needs, programs; physical and emotional health; sociological, psychological, educational, economic factors pertinent to aging. (3 cr. hr.)

REC 509: Human Resource Management in Leisure Services
   (S) Contemporary issues and related administrative practices associated with managing human resources in leisure services. Examining concepts, principles and objectives of personnel supervision, including functions, processes, identification and application of methods and techniques. Not open to students with credit for REC 409. (3 cr. hr.)

REC 516: Tourism Planning and Development
   (O) 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

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
environmental impact on a location as a result of marketing those resources. Not open to students with credit for REC/GRY 415. Also listed as GRY 516. (3 cr. hr.)

**REC 529, 629: Special Topics in Recreation and Leisure Studies**
Selected topics. May be taken more than once as substantive changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

**REC 530: The Therapeutic Recreation Process**
(S) In-depth examination of the therapeutic recreation process, including assessment, planning, implementation, documentation, and evaluation. Additional topics include working with other health and human service professionals on interdisciplinary or transdisciplinary teams, activity analysis and adaptations, and principles and best practices in applying the therapeutic recreation process in a variety of health and human service settings. Lab is required. Prerequisite: REC 330 or equivalent or consent of department. Corequisite: REC 535. Not open to students with credit for REC 430. (3 cr. hr.)

**REC 531: Inclusive Outdoor Education**
(O) This course is designed to address the issues, models and strategies pertaining to the development of inclusive outdoor education programs that address all ability levels including those with physical and developmental disabilities. Also listed as PED 531. Not open to students with credit for PED 531. (3 cr. hr.)

**REC 532: Therapeutic Recreation in the Schools**
(O) This course prepares students to provide therapeutic recreation services to students with disabilities in public school systems, as mandated by the Individuals With Disabilities Education Act. Participants will learn to apply the therapeutic recreation process in a school setting and develop appropriate recreation goals for Individualized Educational Plans. Curricula to support therapeutic recreation in the schools will be identified, as well as the roles therapeutic recreation specialists can play to advocate for and deliver recreation as a related service in the schools. Prerequisites: REC 330 or department consent. (3 cr. hr.)

**REC 535: Therapeutic Recreation Interventions**
(S) In-depth examination of individual and group techniques used in therapeutic recreation practice, including therapeutic interventions, modalities, instruction, leadership, supervision, and counseling techniques. Prerequisite: REC 330 or equivalent or consent of department. Corequisite: REC 535. Not open to students with credit for REC 435. (3 cr. hr.)

**REC 538: Design and Administration of Therapeutic Recreation Services**
(F) In-depth examination of the design and administration of therapeutic recreation services delivered in health and human service settings. Focus on planning, organizing, funding, and managing therapeutic recreation services. Analysis of standards, legislation, policies, issues, and trends that affect service delivery. Prerequisite: REC 535. Not open to students with credit for REC 438. (3 cr. hr.)

**REC 541: Site and Facilities Planning**
(O) Design of recreation areas and facilities; feasibility studies, site selection, environmental impact, accessibility, planning and development. Not open to students with credit for REC 441. (3 cr. hr.)

**REC 544: Commercial Recreation Management**
(B) The study of commercial recreation as a major component of understanding leisure service delivery systems. Analysis of the development potential of different types of recreation enterprises, including resources, location, risks, sources of financing, pricing, managerial requirements, marketing and sources of technical assistance. (3 cr. hr.)

**REC 545: Adirondack Park Policies and Issues**
(O) Analysis of environmental and land-use policies in the largest park in the contiguous United States. Often taught at Cortland’s Outdoor Education Center at Raquette Lake in the Adirondack Park. When taught at the Outdoor Education Center, students are assessed a fee for room and board. Not open to students with credit for REC 345. (3 cr. hr.)

**REC 546: Legal Aspects of Recreation and Park Service**
(F) Study of the body of law governing recreation and park management. (3 cr. hr.)

**REC 549: Natural Resource Recreation Policy and Management**
(C) History and processes of natural resources law and policy development. Contemporary issues in human dimensions of natural resource management. Case studies in recreation resource management. Prerequisites: REC 310 and 402 or 610 and 640. Not open to students with credit for REC 449. (3 cr. hr.)

**REC 560: Camp and Outdoor Program Administration**
(F) Detailed analysis of administrative problems in the establishment, operation of resident and day camps and other outdoor, challenge or environmental education programs and centers. Research literature, current problems for camp, program and center directors. Prerequisite: REC 360 or 370 or graduate status, or consent of the department. Not open to students with credit for REC 460. (3 cr. hr.)

**REC 569: Environmental and Cultural Interpretation**
(C) Investigation of concepts and principles of environmental and cultural interpretation. Methods, techniques, resources used to design and prepare interpretive media, such as displays, materials, multimedia productions, trails and facilities in an increasingly multicultural society. Field trips and outdoor laboratory experiences. Not open to students with credit for REC 469. (3 cr. hr.)

**REC 574: Outdoor Pursuits Education and Leadership**
(F) The understanding and application of the process of teaching, learning and leading outdoor pursuits. Program theory, instructional design, leadership techniques and safety management principles associated with the conduct of outdoor pursuits and adventure education programs. Prerequisite: REC 370, 379 or PED 308 or graduate status. Not open to students with credit for REC 474. (3 cr. hr.)

**REC 600: Survey of the Recreation and Leisure Profession**
(B) This course is designed for graduate students who are new to the field of recreation, leisure and park services. The course introduces the student to the plethora of professional sectors within the delivery of recreation, leisure and park services. The nature, scope and objectives of each of the professional areas will be examined in order to provide the student with a comprehensive knowledge base of the recreation and leisure services profession (2 cr. hr.)

**REC 601: Recreation Research and Evaluation I**
(F) This is the first course in the recreation research and evaluation sequence in the master’s program. In-depth coverage of systematic inquiry, including the nature, scope, methodology, analysis and presentation of results in research and evaluation in recreation and leisure studies, with particular focus on the recreation research literature. Students will learn and apply the research process, both through experiential learning and preparation of a research proposal. (3 cr. hr.)

**REC 602: Recreation Research and Evaluation II**
(S) This is the second course in the recreation research and evaluation sequence in the master’s program. In-depth coverage
of systematic inquiry, including the nature, scope, methodology, analysis and presentation of results in research and evaluation in recreation and leisure studies, with particular focus on the recreation research literature. Students will learn and apply the research process, both through experiential learning and preparation of a research proposal. Prerequisite: REC 601. (3 cr. hr.) ■

REC 603: Historical, Philosophical and Theoretical Perspectives of Recreation and Leisure
(B) An in-depth analysis of the historical, philosophical and theoretical perspectives of leisure, recreation and play from ancient cultures to modern-day concepts. This foundation course focuses on historical and theoretical perspectives of leisure, the role of leisure and recreation throughout history in various cultures, and the evolution of leisure to its modern-day construct. (3 cr. hr.) ■

REC 605: Fieldwork in Recreation
(A) Supervised professional experience in the recreation and leisure studies field. Prerequisite: REC 600, consent of instructor. S, U grades are assigned. (1-3 cr. hr.)

REC 606: Recreation Internship
(A) Supervised internship in agency cooperating with the Recreation and Leisure Studies Department. Capstone experience that integrates theory with practice, for a minimum of eight weeks and 320 hours. Prerequisites: Approval of advisor; majority of course work completed. Consult department graduate advisement manual for specific prerequisites and policies. S, U grades are assigned. (3 cr. hr.) ■

REC 610: Wilderness and American Culture
(F) History of ideas and attitudes about wilderness as expressed in the art, literature, philosophy and politics of American culture. Emphasis on developing views of wilderness, nature and environment that are historically and philosophically grounded. (3 cr. hr.) ■

REC 611: Background Readings in Outdoor Education
(F) This course is designed for graduate students who are new to the study of outdoor education, environmental education and interpretation, outdoor pursuits, and organized camping. Students will learn definitions, philosophies and historical development of these fields and related areas. Following this course, students can study these topics in-depth with a cognizance of their relationship to one another. (1 cr. hr.)

REC 630: Advanced Methods in Therapeutic Recreation
(O) In-depth investigation of techniques and procedures basic to the therapeutic recreation process, including activity analysis, assessment and documentation. Lab is required. (3 cr. hr.)

REC 635: Advanced Program Design in Therapeutic Recreation
(O) In-depth investigation into design of comprehensive and specific programs; therapeutic approaches and facilitation techniques; related issues and trends. Prerequisite: REC 630. (3 cr. hr.)

REC 640: Outdoor Recreation Resource Management
(S) Planning, design, management and maintenance of recreation resources ranging from small multipurpose urban parks to large forest recreation and wilderness areas. (3 cr. hr.)

REC 676: Wilderness Leadership Education
(O) Affiliate program with the National Outdoor Leadership School (NOLS) for domestic programs (NOLS fee required). Field studies and practice of wilderness expedition skills, leadership, group dynamics, safety, judgement and environmental studies. Research component is an integral part of the course. Credit value depends on the length of the NOLS course and can range from a minimum of two weeks to a full semester course (1-3 cr. hr.). Repeatable up to three graduate credit hours. Maximum number of graduate credit hours allowable between REC 676 and SAB 676 may not exceed three. Consent of the department. (1-3 cr. hr.)

REC 682: Administration of Community Recreation
(O) Problems in organization, administration of community recreation; recognized best practices in meeting them. Administrative problems experienced by individual class members. Conferences, reports, outside presentation, field trips. (3 cr. hr.)

REC 683: Comprehensive Examination in Recreation and Leisure Studies
(A) This course is designed to assist those graduate students who are preparing to take the graduate comprehensive examination. The first half of the semester will focus on preparing students for the exam. The exam itself will be administered approximately mid-semester, and the time remaining in the course will allow for remedial work, if needed. Only students who have completed at least 18 credit hours are eligible to enroll in this course. Prerequisite: REC 601. (1 cr. hr.)

REC 684: Thesis
(A) Prerequisite: Candidate for master of science degree in recreation, consent of Thesis Committee. A maximum of six credit hours of credit may count toward a degree. S/U grading. Prerequisites: REC 601 and 602. (1-6 cr. hr.)

REC 685: Master’s Project
(A) This course is designed for graduate students who would prefer to investigate an area of their concentration in lieu of the graduate comprehensive examination. A maximum of six hours of credit may count toward a degree. S, U grades are assigned. Prerequisites: Candidate for M.S. or M.S.Ed. in recreation, REC 601, 602 and consent of academic advisor. (1-6 cr. hr.)

REC 699: Independent Study or Research in Recreation
(A) Supervised independent study of topic approved by study supervisor, advisor and department chair. May be repeated. (1-3 cr. hr.)

Related Courses

EDU 515: Leisure Education
(B) Introduction to philosophy, principles and techniques of leisure education. Implications for curriculum development in various settings and leisure service delivery systems. Not open to students with credit for REC 425. (3 cr. hr.) ■

EDU 568: Environmental and Outdoor Education
(S) Development of program material for various age, grade levels in public schools. Policies, procedures, practices in supervision, administration of outdoor education. (3 cr. hr.)

SAB 676: International Wilderness Leadership Education
(O) Affiliate program with the National Outdoor Leadership School (NOLS) for International programs (NOLS fee required). Field studies and practice of wilderness expedition skills, leadership, group dynamics, safety, judgement and environmental studies. Research component is an integral part of the course. Prerequisites: Acceptance by the International Programs Office, consent of the department. Credit value depends on the length of the NOLS course and can range from a minimum of two weeks to a full semester course (1-3 credit hours). Repeatable up to three graduate credit hours. Maximum number of graduate credit hours allowable between SAB 676 and REC 676 may not exceed three. (1-3 cr. hr.)
Sport Management

DEPARTMENT

SCHOOL
Professional Studies

FACULTY
David Snyder (Interim Chair), Daniel DePerno, Ted Fay, James Reese, Lisa Scherer, Matthew Seyfried

ADJUNCT FACULTY
For a listing of adjunct faculty see pages 132-135.

PROGRAMS OFFERED
Master of Science in Sport Management

Master of Science
Sport Management [SPMG]
The Master of Science in Sport Management is a comprehensive business and management program that is designed as a full-time, 30 credit-hour program. This program is designed to directly meet the growing needs and demands of national sport organizations and multi-national corporations and businesses that are seeking to hire an educated and culturally aware workforce that is prepared to work in a diverse and rapidly changing sport economy. The M.S. in Sport Management is designed to allow for validation with the appropriate academic accrediting body in North America, the Sport Management Program Review Council, a joint council created by the North American Society for Sport Management, and the National Association for Sport and Physical Education.

ADMISSION REQUIREMENTS
1. A minimum overall undergraduate grade point average of 2.8 is preferred. Students with an undergraduate grade point average below 2.8 will be reviewed for admission on a case-by-case basis, taking into consideration standardized test scores, the personal statement, and letters of recommendation.
2. Completion and submission of Cortland’s Graduate Studies Application with the appropriate application fee.
3. Official transcripts from all institutions of higher learning attended to be forwarded directly to SUNY Cortland.
4. Either the Graduate Management Admission Test (GMAT) or Graduate Record Exam scores to be sent to SUNY Cortland by ETS.
5. A personal statement containing the applicants’ professional and educational goals in 250 words or less.
6. A minimum of two letters of recommendation to be sent directly to SUNY Cortland.

PROGRAM REQUIREMENTS
The Master of Science in Sport Management is designed as a full-time, 30 credit-hour program, requiring a core of six specific courses, two elective courses and a six-credit-hour culminating experience offered in the Sport Management Department.

A. Required Core Courses: 18 credit hours
   - SPM 510: The Sport Enterprise
   - SPM 566: Business and Finance of Sport *
   - SPM 635: Information Technology In Sport
   - SPM 660: Sport Marketing
   - SPM 670: Sport Law
   - SPM 680: Policy and Strategic Management in Sport Organizations

B. Elective Courses: Six credit hours
   - SPM 515: Sport, Culture and Society
   - SPM 525: Sport History and Governance
   - SPM 536: Digital Video Analysis
   - SPM 537: Advanced Digital Video Analysis
   - SPM 538: Applied Digital Video Analysis
   - SPM 540: International Sport Enterprise
   - SPM 547: Intercollegiate Athletics Management
   - SPM 630: Sport Media Management
   - SPM 650: Research Methods in Sport Management **
   - SPM 655: Sport Event Management
   - SPM 665: Applied Sport Marketing Research
   - SPM 675: International Sport Law
   - SPM 678: Sport Arbitration
   - SPM 682: Independent Study in Sport Management

C. Required Culminating Experience: Six credit hours
   - SPM 685: Internship / Master’s Project or
   - SPM 686: Thesis in Sport Management

**Students must complete SPM 650: Research in Sport Management as a prerequisite for thesis option.

TOTAL CREDIT HOURS REQUIRED: 30
Example of the recommended course sequence for the M.S. in Sport Management

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
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<tbody>
<tr>
<td><strong>Fall (Semester I)</strong></td>
<td><strong>Semesters III and IV</strong></td>
</tr>
<tr>
<td>SPM 510</td>
<td>Culminating Activity: SPM 685 or SPM 686</td>
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<tr>
<td>SPM 566</td>
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<td>SPM 660</td>
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<td>SPM 670</td>
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<td>Total credit hours: 9-12</td>
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<td><strong>Spring (Semester II)</strong></td>
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<td>SPM 635</td>
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<td>Total credit hours: 9-12</td>
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<td><strong>Summer</strong></td>
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<td>SPM 6 elective</td>
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<td>Total credit hours: 0-6</td>
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### Sport Management

#### Course Descriptions

**SPM 510: Sport Enterprise**
(F) An overview of the sport management field, investigating the structure of sport in North America including contemporary and future issues of sport. Students will conduct a career analysis as a major project and presentation. This course covers both a macro and micro perspective regarding management theory and organizational behavior as applied specifically to sport organizations. (3 cr. hr.)

**SPM 515: Sport, Culture and Society**
(S) Study of critical issues in contemporary sport as framed from a sociological and ethical perspective. Emphasis is placed on the social, political and economic factors and values associated with the role and importance of sport as it is practiced and developed in national and global contexts. (3 cr. hr.)

**SPM 525: International Sport History and Governance**
(S) Examination of the historical foundations of sport throughout the world from the earliest of times to the contemporary period. Topics include the evolution of the Olympic and Paralympic Games, the effects of sport development in the aftermath of 19th and 20th century colonialism, and the impacts of technology and mass globalization. (3 cr. hr.)

**SPM 536: Digital Video Analysis**
(B) A research-based analysis into the methods used and the software and hardware utilized to efficiently integrate digital video analysis into research, training, management and teaching strategies. Theory of digital imaging and its application into the digital video imaging technology seen today will be presented. There will be an inquiry of digital video analysis in fields such as coaching, athletic administration, exercise science, physical education and sport management. (1 cr. hr.)

**SPM 537: Advanced Digital Video Analysis**
(B) A research-intensive course in a digital video analysis software system. Students will engage in applied strategies for the shooting, capture, analysis and distribution of digital video related to their discipline. Advanced use of digital video analysis software and hardware will involve a course-long research project in the student’s field of study. Students will work on capturing video relevant to the research question posed in SPM 536. Prerequisite: SPM 536. (1 cr. hr.)

**SPM 538: Applied Digital Video Analysis**
(B) Students will complete applied field research using a digital video analysis system. Students will collect and analyze data. Students will proactively shoot, capture, analyze and distribute discipline-specific digital video and present a research project at the end of the course. Prerequisite: SPM 537. (1 cr. hr.)

**SPM 540: International Sport Enterprise**
(S) Focus on the globalization of sport with an emphasis on the organization, governance and management of international sport including the Olympic and Paralympic Games, the FIFA World Cup, professional team sport leagues, golf, tennis and ski racing. A comprehensive investigation of the structural and cultural environments that North American sport organizations, leagues and corporations must consider in conducting business in foreign markets. A major semester-long project includes the development of a bid document for a city/region to host a major international sports event. (3 cr. hr.)

**SPM 547: Intercollegiate Athletics Management**
(S) The study of intercollegiate athletics in the United States as a unique sport enterprise. An analysis of the management of intercollegiate athletic departments at the Division I, II and III levels, plus a review of the organizational structure in regard to the NCAA, conferences, and institutional athletic departments. Particular focus and discussion centers on the prevailing contemporary issues in college athletics including financial trends, legislation, conference alignment, reform, Title IX - Gender Equity, graduation rates, gambling, violence, and diversity issues in coaching and management hiring. (3 cr. hr.)

**SPM 566: Business and Finance of Sport**
(S) Focus on business topics as they relate to the fiscal and budgetary control of public and private sport organizations, leagues, and facilities. Aspects include forms of ownership, taxation, financial analysis, feasibility studies, economic impact studies and insurance considerations. An in-depth look at cases of organizations involved in professional, intercollegiate and Olympic/international sports. (3 cr. hr.)

**SPM 568: Sport Media Management**
(S) An introduction to the structure, function, role and effects of the mass media within the sport industry. Prime consideration is given to the study of the principles and fundamentals involved in the practical applications of sport media relations, public relations, and sports information. A survey of historic, economic, legal and technical aspects of sport broadcasting will also be conducted including an investigation of audience research, selection of events, networks, and rights fees associated with sports events. Course requires the development and production of promotional, informational and news-oriented media material. (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
SPM 635: Information Technology in Sport
(F) A comprehensive investigation of the current applications of information and communication technology and database management utilized in sport organizations within the intercollegiate, professional, and international segments of the sport industry. Students will use common database, spreadsheet and proprietary software used within the industry to analyze and solve management problems. (3 cr. hr.)

SPM 650: Research Methods in Sport Management
(F) A review of the major considerations and tasks involved in designing and conducting a thesis or research project. The goal for students who successfully complete this course is to be able to produce and defend the methodology of their proposed research, be prepared to carry out the various tasks involved in doing research, and to find the resources to guide them through their research. The theme throughout this course will be on comparing and/or combining qualitative and quantitative approaches to social science and management research. (3 cr. hr.)

SPM 655: Sport Event Management
(S) An overview of all the theoretical and practical elements involved in planning, organizing, staffing, marketing and implementing a sports event. Particular attention is focused on human resources, fiscal and risk management including security and insurance. Examination of cases of different types of events that occur in different environments under variable financial constraints. (3 cr. hr.)

SPM 660: Sport Marketing
(F) Compares and contrasts the field of sport and lifestyle marketing with the practices and applications of mainstream marketing. Course work includes a historical overview of sport marketing and examines the application of marketing principles to North American-based collegiate and professional sport organizations and events, international sport organizations and events, commercial and public organizations, sporting good manufacturing and the sport enterprise in general. (3 cr. hr.)

SPM 665: Applied Sport Marketing Research
(S) Compares and contrasts the various research methodologies utilized in marketing research and most commonly practiced in sport marketing settings. Students are assigned a sport research project and are responsible for selecting the appropriate research design for implementing the research, analyzing and interpreting data, and publishing the results. In many cases, students will work as consultants to a specific sport organization or league. Prerequisite: SPM 660. (3 cr. hr.)

SPM 670: Sport Law
(F) Examination of the law as it applies to professional and amateur sport organizations including contract law, tort law, constitutional law and administrative law. Particular emphasis is placed on antitrust law, labor law, collective bargaining and arbitration as they relate to sport and sport organizations. Students learn how to identify, analyze and understand legal issues and the ramifications of those issues using a case method approach to problem solving. (3 cr. hr.)

SPM 675: International Sport Law
(B) Explores the legal aspects pertaining to the governing bodies of international sport in both Olympic and non-Olympic contexts. Topics include: individual athlete eligibility and player transfers; drug use and testing; intellectual property including copyright and trademark protection; contractual issues related to bidding on events, sponsorship, endorsements, and agreements for competition; dispute resolution between governing entities; global media contracts including television and new media; and the interface between state, national and global government agencies and organizations with sport. Prerequisite: SPM 670. (3 cr. hr.)

SPM 678: Sport Arbitration
(B) An in-depth examination of the role of arbitration in the sport industry. The use of arbitration to resolve salary disputes and disciplinary grievances within major U.S. sport leagues. The growing role and function of arbitration in the settlement of disputes involving international sport governing bodies and professional leagues (e.g., the Olympic and Paralympic Games) including the role and function of the International Court of Arbitration for Sport. Prerequisite: SPM 670. (3 cr. hr.)

SPM 680: Policy and Strategic Management in Sport Organizations
(S) A capstone course exploring the development of sport management policy through a strategic management framework and process. Students are expected to integrate material and information presented in other courses as a foundation and means to prepare a major policy paper in the student’s area of specialty or interest. This seminar-style course requires students to analyze specific issues and problems through case study and class presentations. Prerequisite: Successful completion of 12 graduate credit hours in the major, with a minimum 3.0 grade point average. (3 cr. hr.)

SPM 682: Independent Study in Sport Management
(A) Special projects, studies, and/or research related to a student’s special interest. This three-credit-hour experience must be approved by a sport management faculty member in conjunction with the graduate program coordinator. Prerequisite: Successful completion of 12 graduate credit hours. (3 cr. hr.)

SPM 685: Internship/Master's Project
(A) Intensive practicum in a cooperating sport organization under the joint supervision of the sport management internship advisor and a professional assigned within the sport organization. Students are required to conduct a research project on a topic appropriate to their program culminating in an extensive final written report. The internship/master’s project is done in lieu of the thesis option and a maximum of six credit hours may count toward the degree. Prerequisite: Successful completion of all required and elective course work (24 cr. hr.) and approval of faculty advisor. (6 cr. hr.)

SPM 686: Thesis in Sport Management
(A) A six-credit hour experience designed to support the completion of a thesis or capstone research-based project. Students work under the supervision of a faculty advisor to develop an acceptable proposal and to complete the thesis or project within an acceptable timeframe. The thesis is done in lieu of the internship/master's project option, and a maximum of six credit hours may count toward the degree. Prerequisite: Successful completion of all required and elective course work (24 cr. hr.) and approval of faculty advisor. (6 cr. hr.)
Liberal Arts

**COURSE DESCRIPTIONS**

SEE OTHER GRADUATE COURSE LISTINGS WITH MASTER’S DEGREE PROGRAMS

African American Studies

AAS 529: Special Topics in African American 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.)

AAS 581: Teaching the Inner City Child
(A) Issues related to teaching in high-need urban schools: roles of culture and context in teacher-student relationships; impact of social structures such as race and class on student achievement; how teaching in urban contexts is different; and effective practices in urban schools. Also listed as FSA 525. (3 cr. hr.)

AAS 590: Seminar in African Politics and Society
(O) Comparative, analytical study of African sociocultural and political systems, governmental processes of new African nations. Open to seniors with six hours of appropriate course work or graduate students. (3 cr. hr.)

AAS 591: Current Issues and Problems in African American Politics
(O) Emphasis on African American opinion leaders and process of articulating, aggregating, implementing African American sociopolitical opinions and issues into public policy. Examples, comparisons drawn from African, other African American World situations. Open to seniors with six hours of appropriate course work or graduate students. (3 cr. hr.)

Anthropology

ANT 529, 629: Special Topics in Anthropology
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.)

ANT 550: Independent Study in Anthropology
(A) Prerequisites: Twelve hours of general anthropology including ANT 102 and 300, consent of department, junior or senior standing. (3 cr. hr.)

ANT 600: Field Work in Archeology
(O) Combination field and laboratory study of one or more archaeological sites. Prerequisite: Permission of department chair or director of archaeological program. (3-6 cr. hr.)

Art and Art History

ATH 529, 629: Special Topics in Art and Art History
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.)

ATT 529, 629: Special Topics in Art Theory
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.)

Communication Studies

COM 529, 629: Special Topics in Communication 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.)

COM 590: Advanced Independent Study in Communication Studies
(O) Faculty-supervised individual study of a specific topic in any communication studies area. May be taken more than once for a maximum of six hours. Prerequisite: COM 100, consent of department. (1-6 cr. hr.)

Computer Applications

CAP 529, 629: Special Topics in Computer Applications
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.)

Computer Science/Mathematics

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.)

Economics

ECO 501: Workshop in Economics
(O) Discussion of economic problems with special attention to needs of social science teachers. Prerequisite: Consent of department. (3 cr. hr.)

Environmental Studies

EST 529: Special Topics in Environmental 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.)

International Studies

IST 529, 629: 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.)

Performing Arts

MUS 529, 629: Special Topics in Music
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.)

MUS 521: Music in Western Civilization
(O) Historical perspective from Ancient Greece to modern times; relationship to other fine arts and interpreted within framework of cultural, intellectual history. Prerequisite: MUS 100, 221, 222, or 223. (3 cr. hr.)

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MUS 522: Music in the United States
(O) Pilgrim times to present, emphasizing development of distinctive American tradition in music. Prerequisite: MUS 100, 221, 222, or 223. (3 cr. hr.) ■

MUS 523: Traditions and Trends in African American Music
(O) A general survey of African American Music, tracing the origin from colonial music of the 17th Century to rap music of the present. (3 cr. hr.)

THT 529, 629: Special Topics in Theatre
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.)

THT 542: Puppetry For Educators
(M, O) A survey of the history and techniques of puppet performance which emphasizes the cross cultural relevance of puppets and the status of puppetry as a performing art, as well as its relationship to various narrative traditions. Individual (graduate level) research projects will examine puppetry within a pedagogical frame that targets specific content areas and suggests strategies for using puppets in a variety of ways with particular grade levels. Practicum. (3 cr. hr.) ■

Philosophy

PHI 529, 629: Special Topics in Philosophy
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.)

Political Science

POL 500: Seminar in American Government and Politics
(O) Selected legislative, administrative, judicial aspects of public policy. May be repeated for credit when topic changes. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 523: The United States Constitution and Its Interpretation
(F) Structure, historical development of United States Constitution: currently discussed constitutional interpretations, controversies arising from such discussion. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 524: Courts, Judges and Politics
(O) Judicial interpretation as policy formulation in context of political process. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 526: Seminar in State and Local Government
(O) Selected problems, topics in state and local government. May be repeated with change of subtitle. Prerequisites: Nine hours of social science, consent of department. (3 cr. hr.)

POL 529, 629: Special Topics in Political Science
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.)

POL 530: American Political Parties and Pressure Groups
(O) Organization, tactics, dynamics and roles. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 550: Seminar in International Relations
(O) Selected problems in international relations. May be repeated for credit when topic changes. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 560: Seminar in Comparative Politics
(O) Selected problems of comparative politics. May be repeated for credit when topic changes. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 570: Seminar in Political Theory
(O) Selected topics in political science. May be repeated for credit when topic changes. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 592: Seminar in Politics
(O) Selected problems in politics. May be repeated for credit with change of subtitle. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 593: Readings in Political Science
(O) Individual readings in selected topics. May be repeated for credit with change in topic. Prerequisites: Nine hours of social science, consent of department. (3 cr. hr.)

Psychology

PSY 500: Advanced Child Psychology
(O) Advanced study of principles of child behavior, development. Prerequisite: PSY 231, 232, 332 or 333. (3 cr. hr.)

PSY 501: Advanced Educational Psychology
(B) Advanced study of psychological principles, theories related to education. Prerequisite: PSY 231, 232, 332 or 333. (3 cr. hr.)

PSY 505: History and Systems of Psychology
(O) Historical evaluation of theoretical concepts, issues in systematic psychology from 1700 to 1950. Prerequisites: Twelve hours in psychology, consent of department. (3 cr. hr.)

PSY 507: Statistical Designs for Experimentation
(O) Advanced statistical methods, experimental designs appropriate to univariate, multivariate problems. Prerequisite: PSY 201. (3 cr. hr.)

PSY 508: Interpretation of Advanced Statistical Techniques
(O) Interpretation of univariate and multivariate statistical techniques used in applied research; analysis of variance, multivariate analyses, nonparametric tests and test construction included. Prerequisite: PSY 507. (3 cr. hr.)

PSY 509: Advanced Laboratory Methods
(O) Laboratory experience in conducting research; experimental design, apparatus construction, data analysis, reporting of results. Prerequisites: PSY 202 or 203. (3 cr. hr.)

PSY 510: Applied Research Methods
(O) Methods of empirical research for applied settings, including hypothesis formation, data collection, data interpretation and reporting of results. Prerequisite: PSY 202. (3 cr. hr.)

PSY 511: Advanced Motivation
(O) Advanced study of motivation as psychological construct in contemporary theories. Prerequisite: PSY 311. (3 cr. hr.)

PSY 512: Advanced Learning
(O) Advanced study of post-1950 theoretical, methodological approaches to learning emphasizing operant conditioning, mathematical models, hypothetico-deductive systems. Prerequisite: PSY 312. (3 cr. hr.)

PSY 513: Advanced Theories of Sensory and Perceptual Processes
(O) Advanced study of contemporary issues, theories related to sensory, perceptual processes. Prerequisite: PSY 412. (3 cr. hr.)

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PSY 514: Advanced Physiological Psychology
(O) Detailed analysis of anatomical, neurophysiological, biochemical correlates of selected behavior. Prerequisite: PSY 411. (3 cr. hr.)

PSY 516: Psychological Foundations of Education
(O) Theories, data, principles of psychology applied to classroom. Open only to graduate students not having child, adolescent, developmental or educational psychology. Prerequisite: Three hours of psychology. (3 cr. hr.)

PSY 520: Psychopharmacology
(O) The study of the biological bases of major psychiatric disorders and the medications used to treat these disorders. Special attention will be paid to neurochemical and neurological mechanisms involved in the disorders and the biochemical mechanisms affected by psychopharmacological medications. Prerequisite: PSY 101 or PSY 421 or consent of department. (3 cr. hr.)

PSY 529, 629: Special Topics in Psychology
(O) 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.)

PSY 532: Advanced Adolescent Psychology
(O) Advanced study of adolescent behavior, development. Prerequisite: PSY 231 or 232 or 332 or 333 or 516. (3 cr. hr.)

PSY 533: Advanced Developmental Psychology
(B) Advanced study of the developmental processes from childhood through adulthood. Emphasis on developmental changes in cognitive, personality and social processes. Prerequisites: PSY 101 and at least one of PSY 231, 232, 332, 333 or 334. (3 cr. hr.)

PSY 535: Health Psychology
(O) An overview of the main topics in health psychology, including an introduction to the research, theory and methods of health psychology. This course addresses the contributions of the field to the understanding of the antecedents of health, illness, such as heart disease, cancer, AIDS, and related dysfunctions, such as substance abuse, the determinants of health promotion and maintenance, the prevention and treatment of illness, coping and to the psychology of major health problems. Prerequisite: PSY 101 or consent of department. (3 cr. hr.)

PSY 605: The Exceptional Child
(O) Examination of current research literature, selected psychological theories related to exceptional children. Prerequisites: PSY 500 or 532. (3 cr. hr.)

PSY 682: Seminar in Experimental Psychology
(O) Critical review of literature on current theoretical issues in experimental psychology. Prerequisites: PSY 507 and 511, 512, or 513. (3 cr. hr.)

PSY 683: Seminar in Contemporary Psychology
(O) Critical review of literature on theoretical issues, problems in selected area of contemporary psychology: developmental, educational, clinical or social psychology. Prerequisite: Six hours of psychology at graduate level. (3 cr. hr.)

PSY 690: Independent Study in Psychology
(O) Individual study and/or research. Written report required. May be repeated under different title. Maximum of three credit hours may be applied as elective credit in the M.A. or M.S. program in psychology. Prerequisites: Six graduate credit hours in psychology, consent of department. (1-3 cr. hr.)

PSY 695: Master's Thesis in Psychology
(A) Investigation, under supervision of a member of department, of significant problem in contemporary psychology. Final written report to be submitted to Division of Graduate and Continuing Education. Prerequisite: Consent of department. (6 cr. hr.)

Sociology

SOC 529, 629: Special Topics in Sociology
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.)

SOC 596: Independent Study in Sociology
(A) Individual study in selected areas. Prerequisites: Fifteen hours of sociology, consent of department, junior or senior standing. (3-8 cr. hr.)

SOC 601: Issues in Criminology
(O) Selected topics in criminology. May be repeated as subtitle changes. Prerequisite: Three hours of sociology. (3 cr. hr.)

SOC 602: Studies in Community
(O) Selected topics in community. May be repeated as subtitle changes. Prerequisite: Three hours of sociology. (3 cr. hr.)

Speech Pathology and Audiology

SHH 529: Special Topics in Speech Pathology and Audiology
(O) 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.)

Women's Studies

WST 552: Gender Issues in Education
(F) Seminar integrating recent scholarship on women and women’s ways of knowing into a broader study of gender issues in education including socialization of men and women through education; socialization of women and men teachers and administrators and the costs and benefits of these structures for men and women. The course will focus upon application of these issues to policy and practice in education today. Prerequisites: junior, senior or graduate standing, education methods course, consent of instructor. Also listed as EDU 552. (3 cr. hr.)
International Programs/
Study Abroad
SUNY Cortland strives to emphasize international dimensions in every field of study, principally through the International Programs Office. Students also are eligible to participate in other international study programs offered through other campuses of the State University of New York as well as through accredited non-SUNY tertiary institutions.

Before enrolling in any study abroad program, students should speak to their academic advisor to learn how the credits earned abroad will fit into their particular graduate degree program. Students are governed by the Study Abroad Academic Policies that appear on page 105.

**Summer Art in Ireland Program**

The Dingle Peninsula, on the southwest coast of County Kerry, is world famous for its magnificent scenery: mountains cascading into the ocean, lush green farmland and charming fishing villages. The town of Dingle is colorful and lively, with sandy beaches, seafood restaurants, art galleries, craft shops, summer theater, and music pubs. Visit www.dingle-region.com/ on the Web for more information on the Dingle Peninsula.

The Summer Art in Ireland program will concentrate on the landscape and will require a great deal of intensity and focus. Monday through Friday will begin with a brief lecture before working out of doors. Students of drawing will spend additional time working closely with the instructor before traveling to a location to work. Most evenings from Monday through Thursday there will be critiques of the day's work as well as talks by local artists, poets or historians. Friday evenings and weekends will be free for independent work or travel.

Participants earn six credit hours. Departure from the U.S. is available at the end of May. Participants will stay at a hostel.

**London Summer Teacher Institute**

Six graduate credit hours are earned in this program that takes place during the month of July in one of the most cosmopolitan cities in the world. This four-week program offered jointly by SUNY Cortland and London Metropolitan University offers immersion in the culture of London as well as classroom study with considerable experiential learning. Participants visit museums and historical sites. Visits to British schools allow participants to bring back practical lessons and explore the arts and sciences from a new perspective. The curriculum is suited to both elementary and secondary teachers as well as graduate students in education.

Classes will generally meet at the university. Some days will be devoted entirely to school visits or trips to cultural attractions. The first part of the curriculum will be devoted to learning about the British education system, including the National Curriculum, strategies for teaching math and reading, and assessment. In the second two weeks participants will focus on the teaching of the arts and social sciences. This will include theater, music, history and geography. Concerts and theater visits will be integrated into the program as well.

Participants reside in the James Leicester Halls of Residence at London Metropolitan University in north central London.

**The Summer Institute for Teachers of Spanish**

In this graduate-level program, participants will spend two weeks living with local families, attending classes and visiting sites of cultural and historic significance. Participants earn six credit hours at the graduate level from SUNY Cortland. Three credit hours are earned during the component of the course that takes place overseas. Students earn an additional three credit hours after returning to the U.S. upon satisfactory completion of the second half of the course, conducted via the Internet using WebCT software. The location of the program varies from year to year.

The 2006 program comprises two courses:

Connecting Cultures IV: Perspectives of Costa Rican Culture

This advanced methods course conducted in Spanish. It enables participants to explore in depth the products, practices and perspectives components of the Culture Standards area. Costa Rican culture will be the primary focus of a culminating project that includes the use of authentic materials and the integration of technology to meet the Culture Standards for Foreign Language Learning. An additional three credit hours will be earned by participating in an extension of the methods course once participants are home. This extension course will be conducted on the Web using WebCT software; students need only have Internet access and a Web browser to participate.

Advanced Spanish Grammar and Conversation for Teachers

This course is designed to increase vocabulary, improve pronunciation, and improve overall proficiency in the Spanish language. Cross cultural themes will be discussed in the conversation portion of this class, which is taught by Costa Rican professors.

Due to the intense nature of the program, enrollment is limited to 15 participants.

**Summer Teacher Institute in Environmental Studies and Culture in Belize, Central America**

The Belize Summer Teacher Institute in Environmental Studies and Culture is a nine-day experience commencing in mid-July that is designed to enhance understanding of a variety of concepts and issues in environmental education through participation in a cross-cultural learning experience. Learning occurs through an array of hands-on experiences, active participation in field research, and ongoing collaboration with individuals in the educational field. This unique professional development opportunity brings together educators from both the U.S. and Belize who work on the understanding and development of a curriculum guide in environmental studies. Learning focuses on Ancient Maya civilization; understanding archeology, ecotourism, conservation; and acquiring an understanding and appreciation of the rainforest. The program is further enhanced by related excursions, presentations by local experts in the environmental field, and cultural events.
The institute is designed for individuals currently in teaching professions, as well as those who are working toward a master's degree in the field of education. Enrollment is limited to 10 participants.

Participants in the Summer 2006 Institute resided in casitas at the Macal River Camp, located at The Lodge at Chaa Creek. Each casita has a private sheltered porch and cot beds for quiet relaxation and peaceful views into the undisturbed jungle habitat. Visit Web More information on the Macal River Camp at Chaa Creek is available at www.belizecamp.com/home.html.

Scholarships
Six $750 scholarships are awarded for summer study abroad. An additional 20 or more scholarships of $1,000 to $1,500 are awarded for semester-long study.

Traditional scholarships offered through SUNY Cortland’s Financial Advisement Office or the Cortland College Foundation also may be applicable to study abroad in certain cases.

Financial Aid
In most situations, financial aid may be applied to study abroad with the appropriate prior processing. More information is available at the Financial Advisement Office at (607) 753-4718.

Study Abroad Academic Policies
Policy Regarding Early Departure, Early Exams, Pass/Fail and Incomplete Grades Abroad
Students participating in SUNY Cortland programs abroad are prohibited from requesting early departure, early exams, pass/fail or incomplete grades. In extraordinary circumstances, a request for special arrangements such as early exams or incomplete grades must be submitted in writing first to the Study Abroad Office at the host institution. The reason for the request must be documented. If the host institution approves the request, it will then be forwarded to the International Programs Office at SUNY Cortland for final approval. The International Programs Office in Cortland will advise the Study Abroad Office overseas and the students of its decision. If the request is approved, the Study Abroad Office overseas will advise students whether it will make the arrangements on their behalf or whether the students are expected to make the arrangements.

Any special arrangements agreed upon (including remaining work and deadlines) should be documented in writing by instructors and by the Study Abroad Office overseas. Copies should be sent to the International Programs Office in Cortland.

Failure to follow these procedures may result in students receiving no credit or a failing grade. Students may appeal SUNY Cortland’s decision within five days by contacting their dean at Cortland and requesting a review.

Changes to Courses Made After Student’s Arrival at Site Abroad
SUNY Cortland students must request changes to course selections and equivalencies after their arrival at the site abroad directly through the appropriate associate dean at Cortland by the end of the first full week of classes. The associate dean will secure the consent of both the advisor and the international coordinator. Copies of all changes will be sent by the Associate Dean’s Office to the International Programs Office in Cortland to ensure that the course equivalencies are posted correctly upon the students’ return.

Students from other colleges should be sure to follow the approved procedure at their home institutions in order to change classes.

Failure to comply with this procedure may jeopardize the fulfillment of degree requirements.

Grades Earned Abroad
SUNY Cortland students should be aware that grades earned overseas will be treated as grades earned on campus and will be factored into their cumulative grade point average. Students from other colleges should check with their registrar concerning the treatment of grades from abroad at their home institutions.

International Student Services
The International Student Advisor is the College’s principal designated school official for F-1 visas to the Department of Homeland Security’s United States Citizenship and Immigration Service. As such, the international student advisor maintains SEVIS records to ensure the College’s compliance with federal immigration regulations. The advisor processes all immigration paperwork for students and scholars admitted to SUNY Cortland on F visas.

The international student advisor is the liaison between the College community and the international students. The advisor provides an orientation and immigration counseling to all international students and scholars. The international student advisor coordinates with support service offices on campus, including housing, dining, student health, student accounts, student activities, as well as academic and administrative departments to ensure that the needs of international students and exchange faculty are met.

For students and scholars with J visas, the advisor coordinates with other campuses and international agencies on processing immigration.
Teacher Certification Information
Completion of All Degree and Certification Requirements Prior to Graduation

The graduate degree may not be posted nor an official transcript produced without the completion of the relevant teacher certification requirements for the applicable graduate degree program. These requirements include, but are not limited to:

- completion of all degree requirements for an approved teacher certification program at SUNY Cortland
- completion of a workshop of three clock hours on the identification and reporting of child abuse and maltreatment
- completion of a workshop of two clock hours on school violence prevention training

Information about the three-hour workshop is available through the Center for Educational Exchange.

Information about the two-hour workshop is available through the Center for Educational Exchange.

Please consult your department with regard to additional specific certification requirements for your program.

Upon completion of all the degree requirements, the two workshops, and any departmental requirements, the graduate will be recommended by SUNY Cortland for certification to the New York State Education Department.

The New York State Education Department requires the following prior to actually awarding the teaching certificate:

- an application for certification to the New York State Education Department
- the payment of the certification application fee to the New York State Education Department
- a criminal background check and fingerprinting

Information about fingerprinting requirements is available at Career Services.

- passing scores on the Liberal Arts and Sciences Test (LAST), Assessment of Teaching Skills-Written (ATS-W), respective Content Specialty Test (CST), and other appropriate tests in the New York State Teacher Certification Examinations program

Information about and the registration booklet for the NYSTCE are available at Career Services as well as at the Counseling Center.

Criteria for Admission to the Teacher Education Program

Specific criteria exist for admission to each teacher education program. Minimum undergraduate cumulative grade point average for admission into graduate-level teacher education programs is 2.5 on a 4.0 scale; however, some programs require a higher undergraduate grade point average. Letters of recommendation, interviews and test scores also may be required. The specific program as listed in the catalog should be consulted for details. In addition, all applicants for teacher education programs are required to file an Application to the Teacher Education Program.

Examinations for Teacher Certificates

Persons making application for a New York State teaching certificate will be required to achieve a passing score on the appropriate tests in the New York State Teacher Certification Examinations (NYSTCE) Program. The department should be consulted for details. The NYSTCE information and registration booklet is available at the Counseling Center and Career Services.

Identification and Reporting of Child Abuse and Maltreatment

All candidates seeking teacher certification must complete a minimum of three clock hours of instruction regarding the identification and reporting of child abuse and maltreatment. This degree and certification requirement can be met by taking designated workshops on child abuse at SUNY Cortland, and completion of the workshop will appear on the transcript. This State Education Department mandate can also be met by completing a designated workshop through another New York State Education Department approved provider.

School Violence Prevention Training

All candidates seeking teacher certification must complete a minimum of two clock hours of instruction regarding school violence prevention training. This degree and certification requirement can be met by taking designated workshops on school violence prevention training at SUNY Cortland. This requirement is mandated as part of the NYS Save Legislation.

The Child Abuse Identification and Reporting and School Violence Prevention and Intervention (SAVE) workshops must be completed prior to graduation. Workshop dates may be accessed at the www.cortland.edu/ncate and www.cortland.edu/ccf Web sites.

Health and Human Development

All students seeking teaching certification must complete a course that includes “human developmental processes and variations, including but not limited to: the impact of culture, heritage, socioeconomic level, personal health and safety, nutrition, past or present abusive or dangerous environment, and factors in the home, school and community on students’ readiness to learn — and skill in applying that understanding to create a safe and nurturing learning environment that is free of alcohol, tobacco and other drugs and that fosters the health and learning of all students and the development of a sense of community and respect for one another.” (New York State Department of Education Teacher Education Program Registry, 2000.)

This requirement may be met by taking one of the following courses: HLH 110, 199, 265 or 510. Students should consult their academic program/advisor regarding appropriate course selection.

Fingerprinting

All candidates, certified and non-certified, who wish to work in schools in New York State will be subject to fingerprinting regulations and background check prior to employment. Contact the Career Services Office for additional information and a fingerprinting packet.
Foreign Language Requirement
All candidates making application for an initial New York State certificate in early childhood, childhood, special education or adolescence education programs are required to demonstrate foreign language proficiency by successfully completing the second semester (102) of a college-level foreign language sequence or the equivalent.

The foreign language requirement can be met by:
• Successfully completing the second semester (102) of a college-level foreign language sequence; or
• Earning CLEP or AP credits through the 102 level; or
• Confirming proficiency equivalent to successful completion of the second semester (102) of a college foreign language sequence, through a testing program approved by the International Communications and Culture Department.

Completion of All Degree and Certification Requirements Prior to Graduation
The graduate degree may not be posted nor an official transcript produced without the completion of the relevant teacher certification requirements for the applicable graduate degree program.

Teaching Certificates
The Initial Certificate for teaching will be issued to candidates who complete the requirements of a teacher education program leading to the initial teaching certificate.

In addition to completing program requirements, applicants for an Initial Certificate must successfully pass three New York State Teacher Certification Examinations (NYSTCE): Liberal Arts and Sciences Test (LAST); Assessment of Teaching Skills-Written (ATS-W); and Content Specialty Test (CST.)

The professional certificate will be issued to candidates who complete the requirements of a graduate-level teacher education program. Candidates will have five years to complete the master’s degree leading to the professional certificate. The academic department should be consulted for additional certification changes after Feb. 2, 2004.

Field Experience in Teaching
All teacher education candidates seeking the Initial Certificate are required to successfully complete a minimum of 100 hours of field experience in K-12 schools as part of their professional preparation program prior to student teaching. Arrangements for housing and transportation during all field experiences and student teaching are the responsibility of the candidate.

Job Placement Availability
The New York State Education Department requires publication of statistics regarding labor market and job availability for teachers. Information may be accessed by visiting the following Web sites: www.aaee.org for national statistics, and www.highered.nysed.gov/tcert/sup&dem.html for statewide statistics. In addition, specific departments should be contacted for information regarding Cortland graduates.
SUNY Cortland Teacher Certification Exam Pass-Rates

All graduates of teacher preparation programs must pass a New York State teacher certification exam in order to be granted Initial Certification in Teacher Education to teach in New York State. The following table presents the pass rates by 2005 SUNY Cortland graduates on the New York State Teacher Certification Examination (NYSTCE).

**Professional Knowledge/Pedagogy** is assessed by the NYSTCE Assessment of Teaching Skills-Written (ATS-W).

**Content Knowledge** is assessed by the NYSTCE Liberal Arts and Sciences Test (LAST).

SUNY Cortland's pass rates for these exams are among the highest in New York State. The exceptional pass rates by Cortland graduates on the state exams demonstrate that the College has maintained the highest standards while attracting large numbers of students to outstanding teacher education programs. In fact, SUNY Cortland has the largest teacher education program on the East Coast and the ninth largest teacher education program in the United States.

The College's traditional programs in childhood and physical education are long standing and highly recognized throughout the nation. Through its conceptual framework and placement of student teachers, SUNY Cortland is committed to preparing teachers to meet statewide demands within urban and rural areas.

Within SUNY, Cortland is the only college or university that provides disabilities education in five distinct areas: therapeutic recreation, special education, speech pathology and audiology, adapted physical education, and psychology of exceptionality (learning disabilities, mental retardation, ABA and behavior disorders). The Disability Studies Institute provides faculty and students across the three schools with an opportunity to work directly in the community to support children and adults with disabilities. The Institute encourages the work of advocacy in numerous ways on a local, state and national level.

SUNY Cortland supports the fourth largest Migrant Education Outreach Program in New York, which provides educational, health and social services advocacy and academic support to school-aged children of migrant workers and their families in the schools, after school, at their homes and in the camps.

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<th>Test Field/Category</th>
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*These data are presented in compliance with Section 207 of the Higher Education Act Title II. Program completers in this table are defined as undergraduate and graduate students receiving a degree between July 1, 2004 and June 30, 2005 and who have taken the NYSTCE exams. While most of the graduates take one of these exams, it is not a graduation requirement at SUNY Cortland.

* In accordance with reporting guidelines.