SCHOOL OF EDUCATION AND PROFESSIONAL STUDIES

Graduate Programs of Study

Conceptual Framework
The conceptual framework of the SUNY Potsdam Education unit is organized around the vision statement A Tradition of Excellence: Preparing Creative and Reflective Educators. The three major strands in the framework are Well-Educated Citizen, Reflective Practitioner and Principled Educator.

Well-Educated Citizen.
• critically analyzes and solves problems
• organizes thought and communicates effectively
• understands history and our social and political institutions
• understands and respects other cultures and our intercultural world
• understands the impact of science and technology on our lives
• appropriately uses technology
• has experience creating and appreciating the arts
• has a broad and deep understanding of the subject matter one teaches
• models the skills, attitudes, and values of inquiry appropriate to one’s discipline

Reflective Practitioner.
• models inquiry, practice, and reflection
• effectively uses research-based models of curriculum, instruction and assessment
• meets the diverse learning needs of students
• applies knowledge of local, state, and national standards
• effectively uses instructional and assistive technology
• promotes inquiry, critical thinking, and problem solving
• creates positive learning environments for all students
• uses research, reflection and discourse throughout one’s career
• prepares to become an instructional leader

Principled Educator.
• behaves in a professional manner
• maintains a high level of competence and integrity in one’s practice
• willing to take risks, be flexible, and show comfort with uncertainty
• works well with others
• takes responsibility for one’s own actions
• recognizes and respects one’s own diversity and that of others
• fosters positive relationships with students, parents, administrators, colleagues, and agencies in the community to support student learning and well being

Special Programs

Academy for Leadership in Literacy Education
The Academy for Leadership in Literacy Education (ALLE) provides current and future educators with the opportunity to explore topics in literacy education. In association with the Sheard Literacy Center, College Writing Center, Teacher Opportunity Corps and Learning Communities program, ALLE sponsors the Write Well, Teach Well and Best Practices Seminar series, the School and Community residential Freshman Interest Group (FIG), Teacher Study Groups and the Practicum and Student Teaching Sponsors programs.

All education students and inservice teachers from partner districts attend ALLE programs for free. Preference for registration and supplementary materials is given to ALLE members who commit to 40 hours of professional development within one year. To complete their commitment, participants attend ALLE events, research and inquiry related to literacy education, and present at a culminating colloquium. ALLE members are also eligible for funding to attend professional
Teacher Opportunity Corps

The Teacher Opportunity Corps (TOC) seeks to enhance the preparation of teachers and prospective teachers in addressing the learning needs of students at risk of truancy, academic failure, or dropping out of school; and to increase the participation rate of historically underrepresented and economically disadvantaged individuals in teaching careers. TOC is funded by the New York State Education Department, Office of K-16 Initiatives and Access Programs, Teacher Development Programs Unit.

TOC works closely with SUNY Potsdam's School of Education and Professional Studies and the Teacher/Leader Quality Partnerships Program (TLQP), supporting education majors with field-based learning experiences in the Salmon River Central School District on the St. Regis Mohawk Akwesasne Reservation and the Gouverneur Central School District.

TOC student members are provided enrichment activities that include financial support for review books and payment of New York State Teacher Certification Examination fees; educational programs on methods and strategies to teach at-risk students; opportunities to attend educational conferences; portfolio development; and academic and personal counseling. TOC graduates are also provided mentoring by master teachers during their first year of teaching.

TOC serves full-time undergraduate/graduate students, or part-time graduate students completing the requirements for initial/provisional/permanent certification.

Students eligible for TOC must be New York State residents and fall within one of the following priority groups:

1. Individuals who have been historically underrepresented and underserved in the teaching professions – African Americans, Hispanic Americans, Native Americans or Alaskan Natives; or
2. Individuals who are economically disadvantaged (in accordance with the criteria established in statute for the TOC program); or
3. Individuals not from historically underrepresented or economically disadvantaged groups, but who plan to teach in school districts where there are a large number of at-risk students.

Eligible individuals must achieve at minimum the following GPAs—sophomores, 2.5; juniors and seniors, 2.75; and graduate students, 3.0.

For further information about TOC membership, please contact the TOC Director, Sisson Hall 119, 315-267-2745 or e-mail fisherdg@potsdam.edu.

Curriculum and Instruction

Master of Science in Education (MSED)

The Master of Science in Education in Curriculum and Instruction has been designed to meet the needs of three groups of candidates: 1) professionals with provisional or initial certification in early childhood education or childhood education, 2) candidates holding initial certification in one of the special-subject areas (including, but not limited to, physical education, business education, home economics, industrial arts and foreign language); and 3) international students who wish to develop their English-language skills and learn about teaching in United States schools but who do not desire New York certification.

Each candidate will develop an individualized program of study in collaboration with the candidate's advisor. This program of study will be designed to be functionally relevant to their certification area.

Requirements for Admission

General Graduate Admission Requirements (see page 9)

Additional Admission Requirements

1. Submission of a copy of a current teaching certificate.
2. A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study.
3. Submission of three letters of recommendation from persons who can provide information about the academic and teaching potential of the applicant (e.g., former or current professors, school administrators).

Additional Degree Information

Candidates are strongly encouraged to review the section on Policies and Procedures, focusing on the specific information related to education programs.

All degree candidates are required to successfully complete a thesis designed to synthesize their academic experiences. Candidates holding certification in areas other than childhood and early childhood education must consult with the department chair prior to enrollment to discuss the feasibility of completing this program. Candidates must be able to include 12 credits of content courses related to their certification (such as music, art, physical education, health, vocational education, foreign languages) for program completion. This program will provide the academic background required for Professional certification, but such candidates must apply for that certification directly.
through the New York State Education Department once they have completed their programs of study.
A minimum of 33-34 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Education degree in Curriculum and Instruction.
Students progress is carefully monitored throughout the program based on demonstration of appropriate knowledge, skills, and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

Course Requirements

A. Concentration for Candidates holding Initial Certification in Childhood or Early Childhood Education*

Core Requirements .......................................................... 12
GRED 634  Philosophical Foundations of Curriculum and Instruction .................................................. 3
GRED 616  Curriculum and Evaluation .................................. 3
GRED 635  Educational Research in Curriculum and Instruction .................................................. 3
GRED 699  Thesis Research .................................................. 3

Content or Content Linking Courses ....................................... 12
Content or content linking courses are selected in consultation with the advisor and in relation to the candidate's initial certification area. Candidates holding early childhood or childhood certification should include study in a range of the core academic disciplines found in elementary school curriculum. Content courses are graduate courses offered by Arts and Sciences Departments; content linking courses are graduate courses developed jointly by faculty in the content areas and education faculty (see list of possible content-linking courses below).

GRED 504  Using Spreadsheets in Teaching School Mathematics .................................................. 3
GRED 505  Topics in Mathematics for Elementary Teachers .................................................. 3
GRED 516  Multicultural Education .................................................. 3
GRED 517  Integrating the Arts into the Elementary Curriculum .................................................. 3
GRED 531  Creative Problem Solving .................................................. 3
GRED 534  Teaching Mathematics in a Technological World .................................................. 3
GRED 548  Literacy & Literature for Young Children .................................................. 3
GRED 549  Adolescent Literature & the Teaching of Literacy .................................................. 3
GRED 552  Teaching Vietnam: The Cultural/Historical Travel Program .................................................. 3
GRED 574  Navajo Cultural Exchange Program .................................................. 3
GRED 595A  Science & Literature: An Interdisciplinary Model .................................................. 3
GRED 595S  Perspectives in Schooling, Culture and Ethnicity: A Caribbean Experience .................................................. 3
GRED 690  Special Social Studies Education
Content Topic .......................................................... 3
GRDG 615  Literacy/Family/School/Community Collaboration .................................................. 3
GRDG 620  Literacy & Linguistically Diverse Learners .................................................. 3

Graduate Education Electives .................................................. 9
Three graduate courses in education (selected with prior approval of the advisor)

Total required credit hours .................................................. 33

* Candidates holding certification in areas other than childhood and early childhood education must consult with the department chair prior to enrollment to discuss the feasibility of completing this program.

B. Concentration in Language Acquisition for International Students (Non-certification Program)

This program does not lead to a teaching certificate in New York State and is not a TESOL program. It is specifically designed for international students who desire to improve their own language skills as they acquire a background in American education. The program involves placement in an elementary or middle school at least one day a week throughout the spring semester.

Core Requirements .......................................................... 22
GRED 634  Philosophical Foundations of Curriculum and Instruction .................................................. 3
GRED 660  Educational Research in Curriculum and Instruction .................................................. 3
GRED 665  Language & Culture (ESL/EFL strategies) .................................................. 3
GREG 558  Literacy I: Methods-Childhood .................................................. 3
GREG 559  Literacy II: Methods-Childhood .................................................. 3
GRED 576  Practicum I (Immersion in English language usage) .................................................. 1
GRED 586  Practicum II (Formal Observation & Participation) .................................................. 3
GRED 699  Thesis Research .................................................. 3

Education Electives .......................................................... 12
Four graduate education courses selected with prior advisor approval

Total required credit hours .................................................. 34

Candidates may select the following additional optional courses (in addition to the 34 credits needed for graduation) to develop their written language skills further:
GRED 595C  The Development of Writing .................................................. 1
GRED 595C  The Development of Writing II .................................................. 1
Information and Communication Technology

Master of Science in Education (MSED)

SUNY Potsdam’s Department of Information and Communication Technology offers five master’s degree options:

- **Educational Technology Specialist (Pre-K to Grade 12)**
  This concentration leads to a New York State Educational Technology Specialist certificate (Pre K–12). This program also meets the professional standards established by The New York State Education Department (NYSED) and is nationally recognized by the Association for Educational Communications and Technology (AECT). Upon completion, candidates will have satisfied the academic requirements for Professional certification in their initial certification area as well as being eligible for recommendation for the Educational Technology Specialist certification. (Note: Although there are no examination requirements for program completion and graduation, candidates seeking certification as an Educational Technology Specialist will be required to pass all applicable New York State Teaching Examinations, including the Educational Technology Specialist CST, and satisfy all New York State Teaching regulations to be eligible for this certification.)

- **Human Performance Technology**
  This concentration is intended to prepare students for careers in human performance improvement, training and organizational development. This concentration does not lead to an Initial or Professional New York State teaching certificate.

- **Organizational Leadership**
  This concentration is intended for individuals seeking employment in leadership or management positions in organizations such as higher education, social service agencies and the military. This concentration does not lead to an Initial or Professional New York State teaching certificate.

- **Information Technology Specialist**
  This concentration is intended for individuals seeking employment in media and product development. Candidates can focus their program through our networking, web development, media production, or game development tracks. This concentration does not lead to an Initial or Professional New York State teaching certificate.

- **Technology Educator**
  This program is intended for candidates with existing New York State Teaching Certificates who wish to become better technology-using teachers. This program allows candidates to satisfy the academic requirements for Professional certification in their Initial certification area but does not lead to an additional area of certification.

**Requirements for Admission**

**General Graduate Admission Requirements** (see page 9)

**Additional Requirements for Admission**

1. **Educational Technology Specialist**: A minimum grade point average of 3.0 (A=4.0) in the most recent 60 semester hours of undergraduate study is required for full admission. Applicants with a minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study may be provisionally admitted. Applicants for the Educational Technology Specialist program must have completed an undergraduate degree from a college or university whose programs meet the New York State Education Department regulations and must hold a current New York State teaching certificate. Submission of a copy of the teaching certificate is required for admission. Applicants must also submit at least two letters of recommendation that speak to the applicant’s readiness for graduate work and potential for being a technology leader in a school system.

2. **Technology Educator**: A minimum grade point average of 3.0 (A=4.0) in the most recent 60 semester hours of undergraduate study is required for full admission. Applicants with a minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study may be provisionally admitted. Applicants for the Technology Educator program must have completed an undergraduate degree from a college or university whose programs meet the New York State Education Department regulations and must hold a current New York State teaching certificate. Submission of a copy of the teaching certificate is required for admission. Applicants must also submit at least two letters of recommendation that speak to the applicant’s readiness for graduate work and potential for being a technology leader in a school system.

3. **Human Performance Technology**: A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study is required for full admission. Applicants must also submit at least two letters of recommendation that speak to the applicant’s readiness for graduate work.

4. **Organizational Leadership**: A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study is required for full admission. Applicants must submit also at least two letters of recommendation that speak to the applicant’s leadership potential and readiness for graduate work.

5. **Information Technology**: A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study is required for full admission. Applicants must also submit at least two letters of recommendation that speak to the applicant’s readiness for graduate work and preparedness for working with advanced technologies.

6. Candidates may enroll in up to six credit hours (two courses) in these programs as non-matriculated students. However, study above the six credit hours requires full matriculation into the respective program of study.
7. Candidates in the ICT programs will only be considered fully matriculated after all program planning forms and Designation of Advisor forms have been filed with the Office of Graduate Studies.

8. Applicants interested in any of the ICT programs are strongly urged to apply for admission during the academic year in order to complete the program planning and Designation of Advisor forms with a graduate academic advisor in a timely fashion. Those wishing to begin study in the Summer or Fall terms should complete the application process in April.

Additional Degree Information

Students in ICT programs will be working with computers and computer applications throughout their program of study. As such, it is required that all students own or have regular access to a personal computer that can be used outside of class. No preference is given to Windows or Macintosh operating systems.

All degree candidates are required to successfully complete a Culminating Experience as indicated in their program of studies and designed to synthesize their academic experiences.

Course Requirements

A minimum of 36–39 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Education, Information and Communication Technology degree. Candidates will select an Information and Communication Technology program from the following options. The 36–39 credit hours are divided as indicated within each program of study.

A. Educational Technology Specialist

The Educational Technology Specialist concentration is intended for students who hold a valid classroom teaching certificate and who wish to earn an additional certification as an Educational Technology Specialist. Completion of this program will also satisfy the academic requirements for Professional certification in the candidate’s existing certification area(s).

Foundation Requirements ................................................. 24
IT 614  Technology in Education ................................. 3
IT 635  Research & Theory on Communication and Performance Technology .................. 3
IT 631  Systematic Design for Performance Improvement ................................................. 3
IT 654  Program Evaluation ............................................ 3
IT 656  Multimedia Production ...................................... 3
IT 657  Practicum in Technology ................................... 3

One of the following courses selected with prior approval of the advisor:
IT 605  Network Architecture ...................................... 3
IT 639  Network Management ........................................ 3
IT 649  Advanced Web Page Development ...................... 3

Controlled Options/Electives ............................................... 12

One course from each of the following four sets with prior approval of advisor:

I. Philosophical/Cultural Foundations
IT 615  Critical Issues with Technology Utilization ........ 3
IT 625  History and Philosophy of Technology Utilization ................................................. 3

II. Literacy Component
IT 544  Desktop Publishing .......................................... 3
IT 545  Preparation and Delivery Professional Presentations .............................................. 3
IT 546  Preparing Performance Support Materials .......... 3
IT 644  Advanced Desktop Publishing .............................. 3
GRDG 625  Using Technology to Teach Literacy ................ 3

III. Programming and Authoring
IT 619  Principles of Computer Programming ................. 3
IT 621  Authoring and Scripting for Multimedia ............... 3
IT 622  Computer Programming for Performance Support ................................................. 3
IT 623  Programming and Authoring for the Internet .. 3
IT 624  Visual Basic Programming ................................ 3

IV. Technology Utilization
IT 529  Computer Applications/Performance Improvement ................................................. 3
IT 650  Seminar in Performance and Communication Technology ........................................... 3
IT 652  Computer Graphics ............................................ 3
IT 655  Video Design and Production .............................. 3
IT 656  Simulations and Games ...................................... 3
IT 668  Distance Education ............................................ 3
GRED 534  Teaching Mathematics in a Technological World ................................................. 3
SPED 612  Technology in Special Education .................... 3
OR
other technology courses with prior advisor approval

Culminating Experience ......................................................... 3
IT 659  Technology Product Development ....................... 3

Total required credit hours ................................................. 39

B. Human Performance Technology

The Human Performance Technology ICT concentration is intended for individuals seeking employment in education and training for the health services, social service agencies, post-secondary education and military service. This degree will not lead to a New York State teaching certificate.

Performance Technology Required Courses ................................ 15
IT 635  Research & Theory on Communication and Performance Technology .............................. 3
IT 648  Principles of Performance Technology .................. 3
IT 651  Systematic Design for Performance Improvement ................................................. 3
IT 654  Program Evaluation ............................................ 3
Controlled Options/Electives ............................................ 18

At least six courses which focus on management, training or hardware utilization selected with prior approval of the advisor:

IT 520 Organizational Development .......... 3
IT 523 Team Building ........................................... 3
IT 524 Public Relations ........................................ 3
IT 525 Organizational Communications .......... 3
IT 526 Small Group Communications .......... 3
IT 527 Information Management ................. 3
IT 528 Cost Analysis .......................................... 3
IT 515 Managing Innovation ............................. 3
IT 520 Knowledge Management ................... 3
IT 529 Computer Applications/Performance Improvement .......... 3
IT 544 Desktop Publishing ................................ 3
IT 545 Preparing and Delivering Professional Presentations .......... 3
IT 546 Preparing Performance Support Materials .......... 3
IT 549 Web Page Development ......................... 3
IT 601 Staff Development ................................ 3
IT 602 Human Resources ................................ 3
IT 603 Policies, Issues and Ethics for Professional Practice .......... 3
IT 604 Principles of Design for Information Technology .......... 3
IT 605 Network Architecture ................................ 3
IT 606 Project Management ............................... 3
IT 607 Principles of Leadership ....................... 3
IT 608 Organizational Theory .......................... 3
IT 609 Conflict Resolution .............................. 3
IT 610 Change Processes ................................... 3
IT 611 Data Management ................................... 3
IT 614 Technology in Education ...................... 3
IT 619 Principles of Computer Programming .......... 3
IT 621 Authoring and Scripting for Multimedia .......... 3
IT 622 Computer Programming for Performance Support .......... 3
IT 623 Programming and Authoring for the Internet .......... 3
IT 624 Visual Basic Programming ..................... 3
IT 627 Computer Training ................................ 3
IT 639 Network Management ............................ 3
IT 644 Advanced Desktop Publishing ................. 3
IT 646 Advanced Web Page Development .......... 3
IT 650 Seminar in Performance and Communication Technology .......... 3
IT 652 Computer Graphics .................................. 3
IT 653 Instructional Planning and Development Process .......... 3
IT 655 Video Design and Production .................. 3
IT 656 Multimedia Production ......................... 3
IT 661 Advanced Systematic Design ................. 3
IT 666 Simulations and Games ......................... 3
IT 667 Internship .............................................. 3
IT 668 Distance Education .................................. 3
IT 669 Project Development .............................. 3
OR other management, training, or hardware utilization course, with prior advisor approval

Culminating Experience ............................................. 3
IT 678 Needs Assessment ...................................... 3

Total required credit hours ......................... 36

C. Organizational Leadership

The Organizational Leadership concentration is intended for individuals seeking employment in a leadership position in management, training, health services, social service agencies, post-secondary education and military service. This degree will not lead to a New York State teaching certificate.

Foundation Requirements ........................................... 12
IT 520 Organizational Development .......... 3
IT 548 Principles of Performance Technology .......... 3
IT 654 Program Evaluation ............................... 3
IT 607 Principles of Leadership ....................... 3

Controlled Options/Electives ...................................... 21

I. At least four courses focusing on Management, selected from the following list, with prior approval of the advisor:

IT 523 Team Building ........................................... 3
IT 524 Public Relations ........................................ 3
IT 525 Organizational Communications .......... 3
IT 526 Small Group Communication .......... 3
IT 527 Information Management ................. 3
IT 528 Cost Analysis .......................................... 3
IT 535 Managing Innovation ............................. 3
IT 520 Knowledge Management ................... 3
IT 601 Staff Development ................................ 3
IT 602 Human Resources ................................ 3
IT 603 Policies/Issues Ethics in Professional Practice .......... 3
IT 604 Principles of Design for Information Technology .......... 3
IT 605 Network Architecture ................................ 3
IT 606 Project Management ............................... 3
IT 607 Principles of Leadership ....................... 3
IT 608 Organizational Theory .......................... 3
IT 609 Conflict Resolution .............................. 3
IT 610 Change Processes ................................... 3
IT 611 Data Management ................................... 3
IT 614 Technology in Education ...................... 3
IT 619 Principles of Computer Programming .......... 3
IT 621 Authoring and Scripting for Multimedia .......... 3
IT 622 Computer Programming for Performance Support .......... 3
IT 623 Programming and Authoring for the Internet .......... 3
IT 624 Visual Basic Programming ..................... 3
IT 627 Computer Training ................................ 3
IT 639 Network Management ............................ 3
IT 644 Advanced Desktop Publishing ................. 3
IT 646 Advanced Web Page Development .......... 3
IT 650 Seminar in Performance and Communication Technology .......... 3
IT 652 Computer Graphics .................................. 3
IT 653 Instructional Planning and Development Process .......... 3
IT 655 Video Design and Production .................. 3
IT 656 Multimedia Production ......................... 3
IT 661 Advanced Systematic Design ................. 3
IT 666 Simulations and Games ......................... 3
IT 667 Internship .............................................. 3

II. At least two courses which focus on Performance or Technology Utilization, selected from the following list with prior approval of the advisor:

IT 529 Computer Applications/Performance Improvement ................. 3
IT 544 Desktop Publishing ................................ 3
IT 545 Preparing and Delivering Professional Presentations .......... 3
IT 546 Preparing Performance Support Materials .......... 3
IT 549 Web Page Development ......................... 3
IT 605 Network Architecture ................................ 3
IT 606 Project Management ............................... 3
IT 607 Principles of Leadership ....................... 3
IT 608 Organizational Theory .......................... 3
IT 609 Conflict Resolution .............................. 3
IT 610 Change Processes ................................... 3
IT 611 Data Management ................................... 3
IT 614 Technology in Education ...................... 3
IT 619 Principles of Computer Programming .......... 3
IT 621 Authoring and Scripting for Multimedia .......... 3
IT 622 Computer Programming for Performance Support .......... 3
IT 623 Programming and Authoring for the Internet .......... 3
IT 624 Visual Basic Programming ..................... 3
IT 627 Computer Training ................................ 3
IT 639 Network Management ............................ 3
IT 644 Advanced Desktop Publishing ................. 3
IT 646 Advanced Web Page Development .......... 3
IT 650 Seminar in Performance and Communication Technology .......... 3
IT 652 Computer Graphics .................................. 3
IT 653 Instructional Planning and Development Process .......... 3
IT 655 Video Design and Production .................. 3
IT 656 Multimedia Production ......................... 3
IT 661 Advanced Systematic Design ................. 3
IT 666 Simulations and Games ......................... 3
IT 667 Internship .............................................. 3
IT 621  Authoring and Scripting for Multimedia .......................... 3
IT 622  Computer Programming for Performance Support ................................................................. 3
IT 623  Programming and Authoring for the Internet .......................... 3
IT 624  Visual Basic Programming .................................................. 3
IT 627  Computer Training .......................................................... 3
IT 639  Network Management .......................................................... 3
IT 644  Advanced Desktop Publishing .............................................. 3
IT 649  Advanced Web Page Development ........................................ 3
IT 650  Seminar in Performance & Communication Technology .......................................................... 3
IT 651  Systematic Design for Performance Improvement .......................................................... 3
IT 652  Computer Graphics .......................................................... 3
IT 655  Video Design and Production .............................................. 3
IT 656  Multimedia Production .......................................................... 3
IT 661  Advanced Systematic Design .............................................. 3
IT 666  Simulations and Games .......................................................... 3
IT 668  Distance Education .......................................................... 3

III. One additional elective, selected with prior advisor approval

Culminating Experience .......................................................... 3
IT 658  Needs Assessment .......................................................... 3

Total required credit hours .................................................. 36 credits

D. Information Technology Production
The Information Technology Production concentration is intended for individuals seeking employment in a leadership position in multimedia product development, technology project management and web site development. This degree will not lead to a New York State teaching certificate.

Foundation Requirements .......................................................... 15
IT 622  Computer Programming for Performance Support .......................................................... 3
IT 649  Advanced Web Page Development .............................................. 3
IT 654  Program Evaluation .......................................................... 3
IT 656  Multimedia Production .......................................................... 3

One of the following courses selected with prior approval of the advisor:
IT 605  Network Architecture .......................................................... 3
IT 639  Network Management .......................................................... 3

Controlled Options/Electives .......................................................... 18
With prior approval of advisor, take at least one of the following:

I. Programming and Authoring
IT 619  Principles of Computer Programming .................................................. 3
IT 621  Authoring and Scripting for Multimedia .................................................. 3
IT 623  Programming and Authoring for the Internet .................................................. 3
IT 624  Visual Basic Programming .................................................. 3

With prior approval of advisor, take at least four of the following:

II. Technology Utilization
IT 529  Computer Applications/Performance Improvement .................................................. 3
IT 544  Desktop Publishing .......................................................... 3
IT 545  Preparation and Delivery Professional Presentations .................................................. 3
IT 546  Preparing Performance Support Materials .................................................. 3

IT 549  Web Page Development .......................................................... 3
IT 611  Data Management .......................................................... 3
IT 614  Technology in Education .................................................. 3
IT 637  Computer Training .......................................................... 3
IT 644  Advanced Desktop Publishing .............................................. 3
IT 650  Seminar in Performance & Communication Technology .................................................. 3
IT 652  Computer Graphics .......................................................... 3
IT 655  Video Design and Production .............................................. 3
IT 666  Simulations and Games .......................................................... 3
IT 667  Internship .......................................................... 3
IT 668  Distance Education .......................................................... 3
Other courses with prior advisor approval

III. Elective .......................................................... 3
Selected with prior advisor approval

Culminating Experience .......................................................... 3
IT 669  Project Development .......................................................... 3

Total required credit hours .................................................. 36

E. Technology Educator
The Technology Educator program is intended for students with certification in Early Childhood or Childhood Education, Secondary Education in Mathematics and Secondary Education in English who wish to become better technology-using teachers. This program does not lead to an additional certification, but does satisfy the academic requirements for Professional certification in the candidate’s existing certification area.

Foundation Requirements .......................................................... 9
IT 635  Research & Theory on Communication and Performance .................................................. 3
IT 651  Systematic Design of Instruction .................................................. 3
IT 654  Program Evaluation .......................................................... 3

Controlled Options/Electives .......................................................... 12
One of the following courses selected with prior approval of the advisor:
IT 615  Critical Issues with Technology Utilization .................................................. 3
IT 625  History & Philosophy of Technology Utilization .................................................. 3

Technology Options .......................................................... 9
Three of the following courses with advisement:
IT 529  Computer Applications/Performance Improvement .................................................. 3
IT 544  Desktop Publishing .......................................................... 3
IT 545  Preparing and Delivering Professional Presentations .................................................. 3
IT 546  Preparing Performance Support Materials .................................................. 3
IT 549  Web Page Development .......................................................... 3
IT 605  Network Architecture .......................................................... 3
IT 614  Technology in Education .................................................. 3
IT 619  Principles of Computer Programming .................................................. 3
IT 621  Authoring and Scripting for Multimedia .................................................. 3
IT 622  Computer Programming for Performance Support .................................................. 3
IT 623  Programming and Authoring for the Internet .................................................. 3
IT 624  Visual Basic Programming .................................................. 3
IT 639  Network Management .......................................................... 3
IT 644  Advanced Desktop Publishing .................... 3
IT 649  Advanced Web Page Development .................... 3
IT 650  Seminar in Performance and Communication Technology ............................................. 3
IT 652  Computer Graphics ............................................. 3
IT 655  Video Design and Production ............................ 3
IT 666  Simulations and Games ..................................... 3
IT 668  Distance Education ........................................... 3
OR  other technology course with prior approval of advisor

Content and/or Content Linking Courses .......................... 12
Content or content linking courses are selected in consultation with the advisor and in relation to the candidate's initial certification area. Candidates holding early childhood or childhood certification should include study in a range of the core academic disciplines found in elementary school curriculum. Content courses are graduate courses offered by Arts and Sciences Departments; content linking courses are graduate courses developed jointly by faculty in the content areas and education faculty (see list of available content-linking courses below).

**GRED 504** Using Spreadsheets in Teaching School Mathematics ................................................. 3
**GRED 505** Topics in Mathematics for Elementary Teachers .......................................................... 3
**GRED 517** Integrating the Arts in the Elementary Classroom ........................................................... 3
**GRED 531** Creative Problem Solving – Mathematics .......... 3
**GRED 548** Literacy and Literature for Young Children .... 3
**GRED 549** Adolescent Literature and the Teaching of Reading/Literacy ........................................... 3
**GRED 615** Literacy: Family/School/Community Collaboration ............................................................ 3
**GRED 620** Literacy and Linguistically Diverse Learners .... 3

**Culminating Experience** ............................................. 3
IT 659  Technology Project Development ..................... 3

**Total required credit hours** ........................................ 36

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**Literacy**

**Master of Science in Education (MSED)**

SUNY Potsdam offers two graduate programs that prepare candidates to serve in the field of literacy education:

- MSED Literacy Specialist
- MSED Literacy Educator

These programs have been designed to meet the certification regulations of the New York State Education Department as well as the Standards for Literacy Professionals of the International Reading Association. The Literacy Specialist program is nationally recognized by the International Reading Association.

Candidates in our Literacy Specialist program can obtain initial certification in one of the following levels as well as satisfying the academic requirements for Professional certification in their current certification area:

- MSED Literacy Specialist Early Childhood and Childhood (Birth–Grade 6)
- MSED Literacy Specialist Middle Childhood and Adolescence (Grades 5–12)

The Literacy Educator program does not lead to an additional certification. This program addresses the interests of candidates who seek greater understandings about literacy and literacy education, but do not intend to pursue careers as literacy specialists. Graduates of the Literacy Educator program will satisfy the academic requirements for Professional certification in their current certification area.

**Requirements for Admission**

**General Graduate Admission Requirements (see page 9)**

**Additional Admission Requirements**

1. Submission of a copy of a current teaching certificate is required for admission. In accordance with New York State certification regulations, candidates for the Literacy Specialist program must have preparation in general education at the level they are seeking literacy certification. For example, candidates holding a certificate in Early Childhood or Childhood may enroll only in the Literacy Specialist Birth–Grade 6 program. Candidates holding a certificate in Middle Childhood or Adolescence may enroll only in the Literacy Specialist Grades 5–12 program. Candidates holding certificates in K–12 areas (i.e., Art, Music, Physical Education) should consult with the Coordinator of Graduate Admissions.

2. A minimum grade point average of 2.75 (A = 4.0) in the most recent 60 credit hours of undergraduate study.

3. Candidates will submit three letters of recommendation including at least one focusing on teaching performance, using forms available from The Office of Graduate Studies web page at www.potsdam.edu/educ/gradstudies.

4. Candidates will submit a thoughtful and well-written letter of intent in which they discuss why they wish to develop their knowledge and skills in the field of literacy education and highlight their personal attributes that will help them meet the challenges of graduate study in the program. The letter shall include a statement that the candidate has read and understands the MSED Literacy Procedures for Assessing and Monitoring Professional Dispositions (available from the Office of Graduate Studies).

5. At minimum, 6 credit hours of undergraduate study in literacy education that focuses on teaching methods.

**Additional Degree Information**

Candidates are strongly encouraged to review the section on *Policies and Procedures* focusing on the specific information related to education programs.

Candidates are advised that most, but not all, degree requirements may be completed in the Watertown area.

These programs have been designed so that full-time candidates who begin their study on campus in the Fall semester may complete their study in one calendar year. Part-time students...
and those intending to complete most of the program in Watertown should consult with their advisors about the time needed to complete their degrees.

For candidates in the Literacy Specialist programs, a practicum must be completed in the last semester of study. GRDG 600, GRDG 605 and GRDG 655/656 are prerequisites for the practicum. While New York state certification requirements have set a minimum of 30 clock hours in the field, candidates in our programs can expect to serve additional hours.

There is no practicum requirement for the Literacy Educator program.

All degree candidates are required to complete a Culminating Experience in the School of Education and Professional Studies designed to synthesize the academic experience. For candidates in the Literacy Specialist program this requirement is fulfilled by completion of the practicum (GRDG 690/691 or 696/697) or by completing the yearlong six credit hour internship (GRDG 699). For candidates in the Literacy Educator program, the Culminating Experience requirement is fulfilled by completing GRDG 681, Literacy Educator Portfolio.

Candidate progress is carefully monitored throughout the program based on demonstration of appropriate knowledge, skills, and dispositions. Candidates are provided with information on program expectations in the first semester (GRDG 600). Candidates not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

Course Requirements: Literacy Specialist

A minimum of 36 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Education, Literacy Specialist degree. The 36 hours are divided as follows:

Core Requirements

- GRDG 600 Foundations of Literacy .................................. 21
- GRDG 660 Literacy Assessment and Evaluation ................ 3
- GRDG 610 Seminar: Literacy Research ............................ 3
- GRDG 615 Literacy: Family/School/Community Collaboration ....................................... 3
- GRDG 620 Literacy & Linguistically Diverse Learners ...... 3
- GRDG 640 Literature-Based Literacy Instruction ............ 3
- IT xxx An advisor-approved technology course ............. 3

Early Childhood and Childhood Literacy — Birth-Grade 6

- GRDG 655* Literacy Intervention Strategies B-6 ............ 3
- GRDG 660 Teaching Writing B-6 ................................. 3
- GRDG 665 Emergent Literacy ...................................... 3

Middle and Adolescent Literacy — Grades 5-12

- GRDG 656** Literacy Intervention Strategies 5-12 .......... 3

Clinical Experience
(taken in final semester; prerequisite: GRDG 655) ............. 6

OR

- GRDG 690 Literacy Practicum B-2
- AND GRDG 691 Literacy Practicum 3-6

Total required credit hours ........................................ 36

Course Requirements: Literacy Educator

A minimum of 33 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Education, Literacy Educator degree. The 33 hours are divided as follows:

Core Requirements

- GRDG 600 Foundations of Literacy .................................. 12
- GRDG 605 Literacy Assessment and Evaluation ................ 3
- GRDG 681 Literacy Educator Portfolio (taken in final semester) ...................................... 3

One of the following (chosen under advisement)

- GRDG 655* Literacy Intervention Strategies B-6 .......... 3
- GRDG 656** Literacy Intervention Strategies 5-12 .......... 3

Controlled Options (chosen under advisement) ............. 9

- GRDG 660 Teaching Writing B-6 ................................. 3
- GRDG 661 Teaching Writing Grades 5-12 .................... 3
- GRDG 665 Emergent Literacy ...................................... 3
- GRDG 670 Teaching Reading and Study Skills in the Content Area ........................................ 3
- IT xxx An advisor-approved technology course ............. 3

Content or Content Linking Courses
(chosen under advisement) ........................................ 12

Total required credit hours ........................................ 33
Adolescence
English Education

Master of Science in Education (MSED)

The Master of Science in Education Adolescence Education: English program has been designed to meet the New York State Education Department’s regulations on Teacher Education, the National Council for the Accreditation of Teacher Education (NCATE) standards, and the National Council of Teachers of English (NCTE) standards, and in response to Advisory Board recommendations and alumni feedback. This program satisfies the academic requirements for Professional certification in Adolescence English Education (7–12).

Requirements for Admission

General Graduate Admission Requirements (see page 9)

Additional Admission Requirements

1. Submission of a copy of a current teaching certificate in 7–12 English.
2. A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study.
3. Three letters of recommendation, including at least two from previous professors, focusing on academic ability.

Additional Degree Information

Candidates are strongly encouraged to review the section on Policies and Procedures focusing on the specific information related to education programs.

All degree candidates are required to successfully complete a Culminating Experience in the School of Education and Professional Studies designed to synthesize their academic experiences. GRED 670 fulfills that requirement for the MSED Adolescence Education: English program.

Student progress is carefully monitored throughout the program based on demonstration of appropriate knowledge, skills and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

Course Requirements

A minimum of 33 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Education, Adolescence Education: English. The 33 credit hours are divided as follows:

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRED 600 Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>GRED 618 Curriculum and Evaluation in Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>GRED 623 Reflection and Inquiry in Teaching Secondary English Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>GRED 660 Educational Research</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following Content/Pedagogy Courses ........................................... 3
GRGD 549 Adolescent Literature and the Teaching of Reading/Literacy .................. 3
GRGD 620 Literacy and Linguistically Diverse Learners.................................. 3

Graduate English Electives .................................................................................. 9
(English and Communication Department)

Three graduate courses chosen from offerings in the English and Communication Department in the School of Arts and Sciences. These three courses must be selected with prior approval of the advisor, and an earned grade of at least 3.0 is required. See the School of Arts and Sciences for available courses and course descriptions.

Electives ............................................................................................................... 6

Two additional graduate courses (6 credits) selected from offerings in Secondary English Education, Technology, Literacy, Special Education, or from the School of Arts and Sciences, with prior approval by the advisor.

Culminating Experience ....................................................................................... 3
GRED 670 Culminating Experience ......................................................................... 3

Total required credit hours .................................................................................. 33

Adolescence
Mathematics Education

Master of Science in Education (MSED)

The Master of Science in Education, Adolescence Mathematics Education program has been designed to meet the certification regulations of The New York State Education Department, the National Council for the Accreditation of Teacher Education (NCATE) standards, and the National Council of Teachers of Mathematics (NCTM) standards, along with Advisory Board recommendations and alumni feedback. The program satisfies the academic requirements for Professional certification in Adolescence Mathematics Education 7–12.

Requirements for Admission

General Graduate Admission Requirements (see page 9)

Additional Admission Requirements

1. Submission of a copy of a current teaching certificate in 7–12 mathematics.
2. A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study.
3. Three letters of recommendation, including at least two from previous professors which focus on academic ability.

Additional Degree Information

Candidates are strongly encouraged to review the section on Policies and Procedures focusing on the specific information related to education programs.

All degree candidates are required to create a comprehensive portfolio (GRED 670), modeled after the National Board for Professional Teaching Standards Certification process. The
Purpose of this culminating experience is to give students an opportunity to document and synthesize their professional development, as well as to lay the foundation for future development.

Student progress is carefully monitored throughout the program based on demonstration of appropriate knowledge, skills and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

Course Requirements

A minimum of 33 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Education, Adolescence Education: Mathematics degree. The 33 credit hours are to be divided as follows:

Required Courses .................................................................12
GRED 600 Philosophical Foundations of Education........... 3
GRED 618 Curriculum and Evaluation in Secondary Schools ........................................... 3
GRED 660 Educational Research........................................... 3
GRED 667 Topics and Research in Mathematics Education ........................................... 3

Mathematics Concentration .....................................................12
Candidates will select a total of four courses from the following math content/pedagogy courses listed in (A) and (B), with at least one course selected from each group.

A. At least one of the following:
GRED 504 Using Spreadsheets in Teaching School Mathematics........................................... 3
GRED 531 Creative Problem Solving – Mathematics........... 3
GRED 534 Teaching Mathematics in a Technological World........................................... 3
GRED 535 School Mathematics from an Advanced Standpoint........................................ 3
GRED 538 Mathematical Modeling in School Mathematics................................................ 3
GRED 539 Explorations in Discrete Mathematics for Teachers........................................... 3
GRED 608 Advanced Secondary Mathematics Education.................................................. 3
OR
other graduate mathematics education courses selected with prior advisor approval

B. At least one of the following:
MATH 522 Number Theory.................................................. 3
MATH 524 Modern Algebra II............................................. 3
MATH 526 Linear Algebra II............................................... 3
MATH 533 Concepts of Geometry....................................... 3
MATH 567 Introduction to Complex Variables with applications ........................................ 3
MATH 541 Introduction to Topology
OR MATH 661 Topology I.................................................. 3
other graduate mathematics courses selected with prior advisor approval

For mathematics course descriptions, refer to course descriptions offered by the School of Arts and Sciences.

Electives................................................................................. 6
Two graduate courses in education, mathematics, technology, literacy or special education, selected with prior advisor approval.

Culminating Experience....................................................... 3
GRED 670 Culminating Experience ........................................ 3

Total required credit hours................................................. 33

Adolescence Social Studies Education

Master of Science in Education (MSED)

The Master of Science in Education: Adolescence Education, Social Studies program has been designed to meet the New York State Education Department’s regulations on Teacher Education, the National Council for the Accreditation of Teacher Education (NCATE) standards, and the National Council for the Social Studies (NCSS) standards, and to respond to Advisory Board recommendations and alumni feedback. This program satisfies the academic requirements for Professional certification in Adolescence Social Studies Education (7-12).

Requirements for Admission

General Graduate Admission Requirements (see page 9)
Additional Admission Requirements

1. Submission of a copy of a current teaching certificate in 7–12 Social Studies.
2. A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study.
3. Three letters of recommendation, including at least two from previous professors, focusing on academic ability.

Additional Degree Information

Candidates are strongly encouraged to review the section on Policies and Procedures focusing on the specific information related to education programs.

All degree candidates are required to successfully complete a Culminating Experience in the School of Education and Professional Studies designed to synthesize their academic experiences. GRED 670 fulfills that requirement for the MSED Adolescence Education: English program.

Student progress is carefully monitored throughout the program based on demonstration of appropriate knowledge, skills and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.
**Course Requirements**

A minimum of 33 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Education, Adolescence Education: Social Studies. The 33 credit hours are divided as follows:

**Required Courses** ............................................................ 12
- GRED 600 Philosophical Foundations of Education .............. 3
- GRED 618 Curriculum and Evaluation in Secondary Schools ............................................................ 3
- GRED 660 Educational Research ........................................ 3
- GRED 682 Research in Social Studies Education ................ 3

**Social Studies Content/Pedagogy** ...................................... 12

*The following two courses must be completed:*
- GRED 690 Special Social Studies Education Content Topic ............................................................ 3
- HIST 640 Readings in American History .......................... 3

*Plus two of the following (6 credits) with advisor approval:*
- GRED 516 Multicultural Education ................................... 3
- GRED 529 The Navajo Cultural Exchange Program ............. 3
- GRED 595 Perspectives in Schooling; Culture & Ethnicity: A Caribbean Experience ......................... 3
- GRED 595 Caribbean Studies: Rhythm, Rhyme, Reason & Resistance ................................................. 3
- EMRE 595 Contemporary Issues in Employment Relations ............................................................ 3
- HIST 641 Readings in European History ............................ 3
- SOCI 570 Readings in the Sociology of Education .............. 3

**Electives** .............................................................................. 6

Six credits of additional graduate education or liberal studies courses selected with prior advisor approval.

**Culminating Experience** ..................................................... 3
- GRED 670 Culminating Experience ..................................... 3

**Total required credit hours** ................................................. 33

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**Special Education**

**Master of Science in Education (MSED)**

SUNY Potsdam offers four graduate programs to prepare teachers to work with students in special education. The programs have been designed to meet regulations of the New York State Education Department, the National Council for Accreditation of Teacher Education (NCATE) standards, and to respond to Advisory Board recommendations and alumni feedback. The special education program at SUNY Potsdam has been recognized by The Council for Exceptional Children. Candidates in the MSED Special Education programs will complete the academic requirements for Professional certification in their current certification area along with receiving Initial certification in one of the following levels:

- Early Childhood Special Education (birth–grade 2)
- Childhood Special Education (grades 1–6)
- Middle Childhood Special Education (grades 5–9, generalist)
- Adolescence Special Education (grades 7–12, Subject Area)

**Requirements for Admission**

**General Graduate Admission Requirements (see page 9)**

**Additional Admission Requirements and Information**

1. Submission of a copy of a current teaching certificate in early childhood, childhood, middle childhood, or adolescence education (or their equivalents) is required for admission.

2. A minimum grade point average of 3.0 (A–4.0) in the most recent 60 semester hours of undergraduate study.

3. The Letter of Intent must clearly answer the following questions:
   a. Why do you wish to develop your knowledge and skills in the field of special education?
   b. What personal attributes do you possess that will help you meet the challenges of this graduate program?

4. Three satisfactory letters of recommendation (including at least one recommendation focusing on teaching performance) from persons who can provide information about the academic potential of the applicant (e.g. former or current professors, school administrators); recommendations should be submitted using forms available from the Office of Graduate Studies or on the Special Education page on the SUNY Potsdam website.

5. Prerequisites:
   a. general education reading methods (6 credit hours)
   b. an introductory course in exceptionality/special education (3 credit hours)
   c. evidence of a minimum of 30 hours of field experience
   d. at least 20 days of student teaching

6. In accordance with New York State certification regulations, applicants for certification in special education must have preparation in general education at the level they are seeking in special education. For example, an applicant holding a Childhood Education certificate valid for Grades 1–6 is eligible to complete Special Education programs at the Early Childhood (Birth–Grade 2) or Childhood (Grades 1–6) or Middle Childhood (Grades 5–9, generalist) levels.

7. Candidates with other certifications (e.g., music, art, physical education, speech), should consult the Chair of the Special Education Department.

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**Additional Degree Information**

The MSED programs in Special Education begin in the Fall semester.

The MSED programs provide the academic preparation required for Initial certification in special education. However, applicants for certification will need to meet additional state testing and other requirements to be eligible for certification. Questions about any additional requirements should be addressed to the Office of Teacher Certification and Field Experiences, 111 Satterlee Hall.
Candidates are strongly encouraged to review the section on Policies and Procedures focusing on the specific information related to education programs.

Candidates may not elect S/U grading options for any required courses in their program.

Student progress is carefully monitored throughout the MSEd Special Education programs based on demonstration of appropriate knowledge, skills and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

Course Requirements
A minimum of 36–39 credit hours with an overall grade point average of 3.0 or higher is required for the granting of any of the Master of Science in Education, Special Education degrees. The 36–39 credit hours are to be divided as follows:

Required Courses .................................................. 27–30
(Courses offered: Su = Summer, F = Fall, Sp = Spring)
SPED 601 Characteristics of Learners with Mild/Moderate Disabilities (F) ........................................... 6
SPED 607 Educational Research: Critical Issues in Special Education (Sp) ........................................... 3
SPED 609 Field Experience I (F) ................................... 1
SPED 612 Technology in Special Education (F, Sp) ....... 3
SPED 637 Diagnosis and Assessment of Educational Disabilities (F, Sp) ........................................... 3
SPED 640 Behavior Management for the Special Educator (F) ......................................................... 3
SPED 649 Field Experience II (Sp) .............................. 1
SPED 650 Collaborative Consultation with Professionals and Parents (Su, F) ........................................... 3
SPED 669 Practicum (Su, F, Sp) ................................. 3–6
SPED 670 Culminating Experience (Su, F, Sp) .............. 1

Program-Specific Course Requirements selected from A, B, C or D:

A. Early Childhood Special Education
(Birth–Grade 2) ................................................... 9
SPED 648 Strategies for Early Childhood Special Education (Sp) ......................................................... 3
Elective Course selected with advisor approval .......... 3
And one of the following:
SPED 642 Communication/Early Literacy in Young Children with Disabilities (Sp) ...................... 3
GRDG 638 Teaching Reading for Students with Special Needs (Su, F, Sp) ......................................... 3

B. Childhood Special Education (Grades 1–6) .......... 9
SPED 646 Strategies for Teaching Elementary Students with Disabilities (Sp) ................................. 3
Elective Course selected with prior advisor approval ... 3
GRDG 638 Teaching Reading for Students with Special Needs (Su, Sp) ......................................... 3

C. Middle Childhood Special Education
(Grades 5–9, generalist) ............................................. 9
SPED 646 Strategies for Teaching Elementary Students with Disabilities (Sp) ................................. 3
SPED 647 Strategies for Teaching Secondary Students with Disabilities (Sp) ................................. 3
GRDG 638 Teaching Reading for Students with Special Needs (Su, Sp) ......................................... 3
Elective Course selected with advisor approval .......... 3

D. Adolescence Special Education
(Grades 7–12, subject area) ...................................... 9
GRDG 638 Teaching Reading for Students with Special Needs (Su, Sp) ......................................... 3
SPED 647 Strategies for Teaching Secondary Students with Disabilities (Sp) ................................. 3
Elective Course selected with advisor approval .......... 3

Total required credit hours .......................... 36–39

Full-time Sample Schedule of the MSEd Special Education Program

Fall I Spring I Summer I or Fall II
SPED 601 SPED 607 SPED 640
SPED 609 SPED 612 SPED 669
SPED 637 SPED 649 SPED 670
SPED 640 2 Program Courses 1 Program Course or Elective

Alternative for Summer I or Fall II study: take a 3 credit elective course before beginning special education courses, elective must be selected with prior advisor approval.

Part-time Sample Schedule of the MSEd Special Education Program

Fall I Spring I Summer II or Fall III
SPED 601 SPED 607 Elective
SPED 609 SPED 637 SPED 669
SPED 640 2 Program Courses SPED 669
SPED 640 SPED 649 SPED 670

Completion of More Than One Certification Program

Most students will complete one of the above degree programs at the level of their original general education certificate; however, because of the design of the special education degree programs, it is possible to complete more than one certification program with the addition of one or more courses. Students interested in this option should consult their advisor at the beginning of their program of studies to assure that both programs can be completed.
For candidates pursuing Early Childhood Special Education:
To add Childhood certification; complete SPED 646.
For candidates pursuing Childhood Special Education:
To add Early Childhood certification; complete SPED 648.
To add Middle Childhood certification; complete SPED 647.
For candidates pursuing Middle Childhood Special Education:
To add Childhood certification; there are no additional requirements; SPED 647 replaces the elective.
To add Adolescence certification (subject area); there are no additional requirements; SPED 646 replaces the elective. Note: a major in an academic discipline is required.
For candidates who are pursuing Adolescence Special Education:
To add Middle Childhood certification; complete SPED 646.

Childhood Education

Master of Science in Teaching (MST)

The Master of Science in Teaching Childhood Education program has been designed to meet certification regulations of The New York State Education Department as well as the standards of the National Council for the Accreditation of Teacher Education (NCATE). This program is nationally recognized by the Association for Childhood Education International (ACEI). The program leads to Initial Childhood (grades 1–6) certification.

Requirements for Admission

General Graduate Admission Requirements (see page 9)

Additional Admission Requirements

1. This program is intended for candidates who do not hold a teaching certificate and seek to earn certification in Childhood Education (grades 1–6). Candidates will undergo a transcript review in order to determine the completion of prerequisites.

2. A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study.

3. Submission of three letters of recommendation from persons who can provide information about the academic and teaching potential of the applicant (e.g., former or current professors, school administrators), using the form available from the Office of Graduate Studies or from the SUNY Potsdam website www.potsdam.edu/educ/gradstudies.

4. Candidates may complete prerequisite courses prior to entering the program or simultaneously with provisional admission. Candidates must earn a grade of 2.0 (C) or better to satisfy a prerequisite requirement. All program prerequisites must be fully completed prior to the student teaching semester. Candidates are strongly encouraged to contact the Office of Graduate Studies for details related to their prerequisite requirements.

Childhood Education program prerequisites:

- Artistic Expression (a minimum of 3 credit hours to include two of the following areas: music, visual art, dance and drama)
- Communications (6 credit hours)
- Concepts in History (3 credit hours)
- Humanities (3 credit hours in Children’s Literature)
- Language other than English (6 credit hours)
- Mathematical Processes (6 credit hours)
- Pedagogy (3 credit hours in human or child development)
- Science Processes (6 credit hours from two areas, one with a lab)
- Social Studies (6 credit hours from two areas)
- Technology (3 credit hours)

5. Candidates may begin enrollment in the fall, spring or summer terms. Canadian students who seek to enter the part-time Ogdensburg program may begin enrollment only in the fall term.

Additional Degree Information

Candidates are strongly encouraged to review the section on Policies and Procedures focusing on the specific information related to education programs.

Candidates may complete most, but not all, of their degree requirements in the Watertown area.

All degree candidates are required to successfully complete a Culminating Experience in the School of Education and Professional Studies designed to synthesize their academic experiences. GRED 669 Professional Development Performance Portfolio completed during the Student Teaching semester satisfies this requirement.

While not required for degree completion, candidates are required to complete all New York State teaching requirements to be eligible for certification. This will include completion of HLTH 230 School Health (CA, SAVE) (2 credits) and successful passing of all applicable New York State Teacher Certification Exams: Liberal Arts and Sciences Test (LAST), Assessment of Teacher Skills–Written (ATS–W), and the Content Specialty Test (CST).

Student progress is carefully monitored throughout the program based on demonstration of appropriate knowledge, skills and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

Course Requirements

A minimum of 47 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Teaching, Childhood degree. Additionally, candidates will complete HLTH 230 (2 credits) to satisfy certification requirements for a total of 49 credit hours. The 49 credit hours are divided as follows:
Required Courses .............................................................. 27
GRED 530 Classroom Management and Discipline ............... 3
GRED 558 Literacy I: Methods (Childhood) ......................... 3
GRED 559 Literacy II: Methods (Childhood) .......................... 3
GRED 565 Elementary Mathematics: Content and Methods ......... 3
GRED 566 Elementary Science: Content and Methods .............. 3
GRED 567 Elementary Social Studies: Content and Methods ........ 3
GRED 607 Foundations of Education (B–6) ......................... 3
GRED 664 Practicum in Childhood Education .......................... 3
SPED 505 Introduction to Special Education OR another advisor approved Special Education course ....................... 3
Education Elective ................................................................ 3
One graduate education course selected with prior advisor approval
Certification Requirement ................................................... 2
HLTH 230 School Health (CA, SAVE) .................................... 2
Student Teaching and Culminating Experience ........................... 17
GRED 613 Teaching Internship, Grades 1-3 ......................... 6
GRED 669 Professional Development Performance Portfolio ....... 3
GRED 676 Student Teaching Seminar: Policies and Practice in American Education ............................... 2
GRED 696 Teaching Internship, Grades 4-6 ......................... 6
Total credit hours .............................................................. 49

Full-time Sample Schedule for MST Childhood Education

<table>
<thead>
<tr>
<th>Term I</th>
<th>Term II</th>
<th>Term III</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRED 538</td>
<td>Practicum</td>
<td>Student Teaching</td>
</tr>
<tr>
<td>GRED 558</td>
<td>GRED 530</td>
<td>GRED 613</td>
</tr>
<tr>
<td>GRED 567</td>
<td>GRED 559</td>
<td>GRED 669</td>
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<td>GRED 607</td>
<td>GRED 565</td>
<td>GRED 676</td>
</tr>
<tr>
<td>SPED 505</td>
<td>GRED 566</td>
<td>GRED 696</td>
</tr>
<tr>
<td>Elective</td>
<td>GRED 664</td>
<td></td>
</tr>
</tbody>
</table>

Candidates considering part-time study should contact the advisor.

Adolescence Education, English

Master of Science in Teaching (MST)

The MST Adolescence Education Program for teaching English is designed to meet the teacher education regulations of the New York State Education Department, the National Council for the Accreditation of Teacher Education (NCATE) standards, the National Council of Teachers of English (NCTE), as well as Advisory Board recommendations and alumni feedback. The program leads to Initial Adolescence Education, English (grades 7–12) certification.

Requirements for Admission

General Graduate Admission Requirements (see page 9)

Additional Admission Requirements

1. This program is intended for candidates who do not hold a teaching certificate and seek to earn certification for teaching English in Adolescence Education (grades 7–12).

2. An undergraduate major comparable to a SUNY Potsdam undergraduate major in English (a minimum of 36 credits, excluding freshman composition), as well as six credits of a foreign language, is required for admission. A review of the candidate’s transcript will determine the need for completion of prerequisite courses.

3. A minimum grade point average of 3.0 (A=4.0) in the most recent 60 credits hours of undergraduate study.

4. A minimum undergraduate grade point average of 3.0 in the English major.

5. Submission of three letters of recommendation from persons who can provide information about the academic and teaching potential of the applicant (e.g., former or current professors, school administrators, etc.).

6. Candidates are strongly advised to consult with the department chair concerning their degree completion plans and the appropriate semester to begin their study.

Additional Degree Information

Candidates are strongly encouraged to review the section on Policies and Procedures focusing on the specific information related to education programs. All degree candidates are required to successfully complete a Culminating Experience in the School of Education and Professional Studies designed to synthesize their academic experiences. In this program GRED 671 Developing a Professional Portfolio, will fulfill the Culminating Experience requirement.

While not required for degree completion, candidates are required to complete all New York State teaching requirements to earn initial certification. This will include completion of HLTH 230 School Health (CA, SAVE) (2 credits) and achieving passing scores on the following New York State Teacher Certification Exams: Liberal Arts and Sciences Test (LAST), Assessment of Teacher Skills—Written (ATS–W), and the Content Specialty Test: English (CST).
Student progress is carefully monitored throughout the program based on demonstration of appropriate knowledge, skills and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

**Course Requirements**
A minimum of 47 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Teaching, Adolescence Education, English degree. Additionally, candidates will complete HLTH 230 (2 credits) to satisfy certification requirements for a total of 49 credit hours. The 49 credit hours are divided as follows:

**Required Courses**
- GRED 549  Adolescence Literature and Teaching of Reading/Literacy ............................................. 3
- GRED 550  Introduction to Teaching English Language Arts Grades 7–12 ............................................. 3
- GRED 582  Teaching Writing/Language/Communication Grades 7–12 .................................................. 3
- GRED 584  Teaching Literature and Literacy Grades 7–12 .................................................................. 3
- GRED 592  Practicum: Teaching English Language Arts in Secondary Schools .................................. 3
- GRED 594  English/Language Arts Practicum Seminar ..... 3
- GRED 600  Philosophical Foundations of Education ............................................................................. 3
- GRED 671  Developing a Professional Portfolio: Culminating Experience .............................................. 3
- GRED 677*  Development and Learning in Adolescence..... 3
- SPED 505  Introduction to Special Education ............... 3

* GRED 677 is required if the candidate’s undergraduate work does not include a course in developmental, adolescent or educational psychology. If the candidate has previously satisfied the GRED 677 requirement, then a second elective will be selected with prior advisor approval.

**Education Elective**
One graduate education course selected with prior advisor approval

**Student Teaching**
- GRED 676  Student Teaching Seminar: Policies and Practice in American Education ................. 2
- GRED 692  Student Teaching in the Jr. High School (7–9) ................................................................. 6
- GRED 697  Student Teaching in the Senior High School (10–12) ......................................................... 6

**Total credit hours** .................................................................................................................. 47

**Additional Certification Requirement**
- HLTH 230 School Health (CA, SAVE) ......................... 2

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### Adolescence Education, Mathematics

**Master of Science in Teaching (MST)**

The Adolescence Education Program with Middle Childhood Extension for teaching mathematics has been designed to meet changes based on The New York State Education Department’s new regulations on Teacher Education, the National Council of Accreditation for Teacher Education (NCATE) standards, the National Council of Teachers of Mathematics (NCTM) standards, along with Advisory Board recommendations and alumni feedback. The Mathematics MST program is nationally recognized by the National Council of Teachers of Mathematics (NCTM). The program leads to Initial Adolescence Education, Mathematics (grades 7–12) with an extension for Middle Childhood Mathematics Education (grades 5–6) certification.

**Requirements for Admission**

**General Graduate Admission Requirements (see page 9)**

**Additional Admission Requirements**

1. This program is intended for candidates who do not hold a teaching certificate and seek to earn certification for teaching Mathematics in Adolescence Education (grades 7–12) with an extension for Middle Childhood Mathematics Education (grades 5–6). Candidates will undergo a transcript review in order to determine the completion of prerequisites.

2. An undergraduate major comparable to a SUNY Potsdam undergraduate major in mathematics, as well as six hours of a foreign language, is required for admission.

3. A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study.

4. A minimum undergraduate grade point average of 2.75 in the mathematics major.

5. Submission of three letters of recommendation from persons who can provide information about the academic and teaching potential of the applicant (e.g., former or current professors, school administrators, etc.).

6. Candidates are required to begin enrollment during the summer term only.

**Additional Degree Information**

Candidates are strongly encouraged to review the section on Policies and Procedures focusing on the specific information related to education programs.

All degree candidates are required to create a comprehensive portfolio, modeled after the National Board for Professional Teaching Standards Certification process. The purpose of this culminating experience is to give students an opportunity to document and synthesize their professional development, as well as to lay the foundation for future development. The Portfolio/Culminating Experience may be taken for 0 or 3 credits and used to fulfill elective credit hours with prior approval of the advisor.
While not required for degree completion, candidates are required to complete all New York State teaching requirements to earn certification. This will include completion of HLTH 230 School Health (CA, SAVE) (2 credits) and passing all applicable New York State Teacher Certification Exams: Liberal Arts and Sciences Test (LAST), Assessment of Teacher Skills–Written (ATS–W), and the Content Specialty Test (CST).

Student progress is carefully monitored throughout the program based on demonstration of appropriate knowledge, skills and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

Course Requirements
A minimum of 48 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Teaching, Mathematics, Adolescence Education degree. Additionally, candidates will complete HLTH 230 (2 credits) to satisfy certification requirements for a total of 50 credit hours. The 50 credit hours are divided as follows:

Required Courses ...............................................................

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRED 556</td>
<td>Reading and Literacy in the Middle and Secondary School I</td>
<td>3</td>
</tr>
<tr>
<td>GRED 557</td>
<td>Reading and Literacy in the Middle and Secondary School II</td>
<td>3</td>
</tr>
<tr>
<td>GRED 568</td>
<td>Teaching Mathematics in the Middle School</td>
<td>3</td>
</tr>
<tr>
<td>GRED 569</td>
<td>Teaching Mathematics in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>GRED 578</td>
<td>Practicum in Middle School Mathematics</td>
<td>2</td>
</tr>
<tr>
<td>GRED 579</td>
<td>Practicum in Secondary School Mathematics</td>
<td>2</td>
</tr>
<tr>
<td>GRED 600</td>
<td>Philosophical Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>GRED 667</td>
<td>Topics and Research in Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>GRED 677</td>
<td>Development and Learning in Adolescence</td>
<td>3</td>
</tr>
<tr>
<td>SPED 505</td>
<td>Introduction to Special Education</td>
<td>3</td>
</tr>
</tbody>
</table>

* GRED 677 is required if the candidate’s undergraduate work does not include a course in developmental, adolescent or educational psychology. If a candidate has previously satisfied the GRED 677 requirement, then a second elective will be selected with prior advisor approval.

Technology Elective....................................................... 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRED 534</td>
<td>Teaching Math in a Technological World</td>
</tr>
<tr>
<td>OR</td>
<td>another technology course selected with prior advisor approval</td>
</tr>
</tbody>
</table>

Education Elective....................................................... 3

One graduate education course selected with prior advisor approval.

Certification Requirement.............................................. 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 230</td>
<td>School Health (CA, SAVE)</td>
</tr>
</tbody>
</table>

Student Teaching....................................................... 14

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRED 676</td>
<td>Student Teaching Seminar: Policies and Practice in American Education</td>
</tr>
<tr>
<td>GRED 694</td>
<td>Student Teaching in the Middle/Jr. High School (7–9)</td>
</tr>
</tbody>
</table>

GRED 697    Student Teaching in the Senior High School (10–12) .............................................. 6

Total credit hours .................................................. 50

Full-time Sample Schedule for MST Adolescence, Mathematics

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer I</td>
<td>GRED 556*</td>
<td>Reading and Literacy in the Middle and Secondary School I</td>
</tr>
<tr>
<td>Spring I</td>
<td>GRED 334</td>
<td>Teaching Mathematics in the Middle School</td>
</tr>
<tr>
<td>Fall I</td>
<td>GRED 534</td>
<td>Teaching Mathematics in the Secondary School</td>
</tr>
<tr>
<td>Summer II</td>
<td>GRED 557</td>
<td>Practicum in Middle School Mathematics</td>
</tr>
<tr>
<td></td>
<td>GRED 557**</td>
<td>Elective**</td>
</tr>
<tr>
<td></td>
<td>GRED 569</td>
<td>Equipment in Mathematics</td>
</tr>
<tr>
<td></td>
<td>GRED 600</td>
<td>Practicum in Secondary School Mathematics</td>
</tr>
<tr>
<td></td>
<td>GRED 600**</td>
<td>Elective**</td>
</tr>
</tbody>
</table>

*These courses are prerequisites for courses taken in the fall and must be completed in the summer.

** Optional if taken previously.

Candidates considering part-time study should contact the advisor.

Adolescence Education, Science

Master of Science in Teaching (MST)

The Adolescence Education Program for teaching science has been designed to meet changes based on the New York State Education Department’s new regulations on Teacher Education, the National Council of Accreditation for Teacher Education (NCATE) standards, National Science Teachers Association standards, along with Advisory Board recommendations and alumni feedback. The program leads to Initial Adolescence Education, Science: biology, chemistry, earth science or physics (grades 7–12) certification.

Requirements for Admission

General Graduate Admission Requirements (see page 9)

Additional Admission Requirements

1. This program is intended for candidates who do not hold a teaching certificate and who seek to earn certification for teaching Science in Adolescence Education (grades 7–12). Candidates will undergo a transcript review in order to determine the completion of prerequisites.

2. An undergraduate major comparable to a SUNY Potsdam undergraduate major in biology, chemistry, geology or physics, as well as six hours of a foreign language, is required for admission.

3. A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study.

4. A minimum undergraduate grade point average of 2.75 in the science major.
5. Submission of three letters of recommendation from persons who can provide information about the academic and teaching potential of the applicant (e.g., former or current professors, school administrators, etc.). At least one letter must be from a college instructor in the candidate’s science major.

6. This program is a competitive program and allows only 20 students to enroll annually. Candidates are encouraged to apply early. Notification of admission acceptances may not occur until April 1 and will continue until the program begins.

7. Candidates enter the program during the summer term only. Study begins with the required course GRED 672 Science Program, Curricula and Standards.

Additional Degree Information

Candidates are strongly encouraged to review the section on Policies and Procedures focusing on the specific information related to education programs.

All degree candidates are required to complete successfully a Culminating Experience in the School of Education and Professional Studies designed to synthesize their academic experiences.

While not required for degree completion, candidates are required to complete all New York State teaching requirements to earn certification. This will include completion of HLTH 230 School Health (CA, SAVE) (2 credits) and passing all applicable New York State Teacher Certification Exams: Liberal Arts and Sciences Test (LAST), Assessment of Teacher Skills–Written (ATS–W), and the Content Specialty Test (CST).

Student progress is carefully monitored throughout the program based on demonstration of appropriate knowledge, skills and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

Course Requirements

A minimum of 47 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Teaching, Adolescence Education – Science, degree. Additionally, candidates will complete HLTH 230 School Health (CA, SAVE) (2 credits) and satisfy certification requirements for a total of 49 credit hours. The 49 credit hours are divided as follows:

Required Courses ................................................................. 30

GRED 502 Issues in Science–Technology–Society............. 3
GRED 556 Reading and Literacy in the Middle and Secondary School I ....................................... 3
GRED 557 Reading and Literacy in the Middle and Secondary School II........................................ 3
GRED 571 Science Education Instruction in Secondary Schools ...................................................... 3
GRED 603 Seminar: Teaching in the Secondary School .... 3
GRED 610 Advanced Secondary Science Education
OR substitution of GRED 553 Outdoor Activities for Teaching Science with prior advisor approval ................................................................. 3
GRED 677* Development and Learning in Adolescence..... 3
GRED 672 Science, Curricula, Programs and Standards ... 3
GRED 673 Secondary Science Field Work ...................... 3
SPED 505 Introduction to Special Education ................... 3

* GRED 677 is required if the candidate’s undergraduate work does not include a course in developmental, adolescent or educational psychology. If the candidate has previously satisfied the GRED 677 requirement, then a second elective will be selected with prior advisor approval.

Education Elective ...................................................................... 3
One of the following electives selected with prior advisor approval:
GRED 530 Classroom Management and Discipline....... 3
GRED 544 Co-operate to Educate ............................... 3
GRED 670 Culminating Experience ................................. 3
IT XXX Technology course ............................................. 3

Certification Requirement ......................................................... 2
HLTH 230 School Health (CA, SAVE)............................ 2

Student Teaching .................................................................... 14
GRED 676 Student Teaching Seminar: Policies/Practice in American Education......................... 2
GRED 692 Supervised Clinical Experience/Student Teaching (7–9) .................................................. 6
GRED 697 Student Teaching in the Senior High School (10–12) .................................................. 6

Total credit hours ..................................................................... 49

Full-time Sample Schedule for MST Adolescence, Science

<table>
<thead>
<tr>
<th>Summer I</th>
<th>Fall I</th>
<th>Spring I</th>
<th>Summer II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicum</td>
<td>GRED 556</td>
<td>GRED 502</td>
<td>GRED 676</td>
</tr>
<tr>
<td></td>
<td>GRED 672</td>
<td>GRED 557</td>
<td>GRED 692</td>
</tr>
<tr>
<td></td>
<td>GRED 677</td>
<td>GRED 571</td>
<td>GRED 697</td>
</tr>
<tr>
<td></td>
<td>SPED 505</td>
<td>GRED 603</td>
<td>GRED 673</td>
</tr>
</tbody>
</table>

Candidates considering part-time study should contact the advisor.

Note: Undergraduate students interested in pursuing one of the BA/MST options to secure certification in secondary science, should consult the Undergraduate Catalog for details on this combined program.
Adolescence Education, Social Studies

Master of Science in Teaching (MST)

The Adolescence Education Program for teaching social studies has been designed to meet The New York State Education Department’s new regulations on Teacher Education, the National Council for the Accreditation of Teacher Education (NCATE) standards, the National Council for the Social Studies (NCSS), along with Advisory Board recommendations and alumni feedback. The MST Social Studies program is nationally recognized by the National Council for the Social Studies (NCSS). The program leads to Initial Adolescence Education, Social Studies (grades 7–12) with an extension for Middle Childhood Social Studies Education (grades 5–6) certification.

Requirements for Admission

General Graduate Admission Requirements (see page 9)

Additional Admission Requirements

1. This program is intended for candidates who do not hold a teaching certificate and seek to earn certification for teaching Social Studies in Adolescence Education (grades 7–12) with an extension for grades 5–6. Candidates will undergo a transcript review in order to determine the completion of prerequisites.

2. An undergraduate major comparable to a SUNY Potsdam undergraduate major in anthropology, economics, geography, history, politics or sociology, as well as six hours of a foreign language, is required for admission. Candidates planning to teach in Ontario are advised that a major in history is required for certification in Ontario.

3. A minimum grade point average of 2.75 (A=4.0) in the most recent 60 semester hours of undergraduate study.

4. A minimum undergraduate grade point average of 2.75 in the social science major.

5. Submission of three letters of recommendation from persons who can provide information about the academic and teaching potential of the applicant (e.g., former or current professors, school administrators, etc.).

6. Adolescence Education, Social Studies program prerequisites:
   • Introduction to Cultural Anthropology
   • A course in geographic literacy
   • An introductory-level history or historical research course
   • Psychology of Middle Childhood and Adolescence
   • Introduction to Sociology
   • Introduction to Microeconomics or Macroeconomics
   • Introduction to Politics
   • A course in world cultures or world history with emphasis on global cultures
   • U.S. Politics and/or American Government
   • A U.S. history course (in addition to the introductory history course stated above)
   • An upper level U.S. or World geography/history course
   • History of New York State

7. Candidates begin enrollment during the summer term only.

Additional Degree Information

Candidates are strongly encouraged to review the section on Policies and Procedures focusing on the specific information related to education programs.

While not required for degree completion, candidates are required to complete all New York State teaching requirements to earn certification. This will include completion of HLTH 230 School Health (CA, SAVE) (2 credits) and passing all applicable New York State Teacher Certification Exams: Liberal Arts and Sciences Test (LAST), Assessment of Teacher Skills–Written (ATS–W), and the Content Specialty Test (CST).

Student progress is carefully monitored throughout the MST Social Studies, Adolescence program based on demonstration of appropriate knowledge, skills and dispositions. Students are provided with information on program expectations in their first semester. Students not making satisfactory progress will be counseled by their advisor and may be dropped from the program.

Course Requirements

A minimum of 47-50 credit hours with an overall grade point average of 3.0 or higher is required for the granting of the Master of Science in Teaching, Adolescence Education – Social Studies degree. Additionally, candidates will complete HLTH 230 (2 credits) to satisfy certification requirements for a total of 49-52 credit hours. The 49-52 credit hours are divided as follows:

Required Courses .......................................................... 30-33
GRED 556 Reading and Literacy in the Middle and Secondary School I ............................................. 3
GRED 557 Reading and Literacy in the Middle and Secondary School II ........................................... 3
GRED 600 Philosophical Foundations of Education........ 3
GRED 606 Advanced Secondary Social Studies Education ................................................................. 3
GRED 681 Social Studies Curriculum in Middle/Secondary School .................................................. 3
GRED 682 Research in Social Studies Education .......... 3
GRED 688 Social Studies Instruction in Middle/
by the School of Education and Professional Studies. Credit earned may be applied, under advisement, as electives in Master of Science in Education/Master of Science in Teaching degree programs.

**GRDG 600 Foundations of Literacy (3)** This course surveys the history of literacy and theoretical foundations of literacy education. Students will examine the ideological underpinnings of varied approaches to teaching literacy including the teaching of reading, language arts, writing and media. Landmark research of literacy education will be studied in historical contexts and in conjunction with major theories of language development, cognition, and literacy acquisition. Offered summer, fall and spring.

**GRDG 605 Literacy Assessment and Evaluation (3)** This course includes in-depth study of individual and group techniques for literacy assessment and evaluation of children (B–12). Theoretical understanding and assessment of the literacy process will be developed through readings, class discussions, demonstrations and case studies. Students will gain experience in the administration and interpretation of a variety of formal and informal assessment tools, culminating in written literacy assessment reports. Offered summer, fall and spring.

**GRDG 610 Seminar: Literacy Research (3)** The purpose of this seminar is to acquaint students with research methods and current topics, studies and writings in the area of literacy. The objectives of this course include preparing students to be consumers of literacy research and enhance their ability to find information, studies, and data in a variety of research journals and texts both on-line and in hardcopy. Students will explore a wide range of current literacy topics and make reports, presentations and demonstrations throughout the course. Offered summer, fall and spring.

**GRDG 615 Literacy: Family/School/Community Collaboration (3)** In this course students examine the role that community and family literacy programs, and parent-school partnerships have played in the literacy development and education of children. Students will evaluate practices of these social institutions and their effectiveness in light of current research concerning literacy education and diverse families and communities. Students will discuss current practices and future trends of collaboration between diverse literacy models of development of schools, families, and communities to support children’s literacy development. Offered summer and fall.

**GRDG 620 Literacy and Linguistically Diverse Learners (3)** This course explores the many challenges to literacy achievement that confront linguistically diverse learners (speakers of non-standard English varieties and English speakers of other languages). From a contemporary perspective, the course examines the characteristics of linguistically diverse learners in B–12 classrooms and focuses on instructional responses that foster literacy competencies and achievement in school. Offered fall and spring.

**GRDG 625 Using Technology to Teach Literacy (3)** This course involves a case-based approach to teaching literacy and the use of technology in literacy education. Authentic literacy situations are presented to the students for observation and analysis. Applications of software and the Internet are created by students for enhancing literacy instruction. Samples of classroom work and a variety of assessment records form an important part of this course in order to present a comprehensive picture of literacy development and needs among children with a range of abilities. Based on cumulative records, current assessment, classroom work and multi-media cases, students will gain insight into instructional decision-making with technology for the purpose of enhancing literacy abilities among children. Offered summer (even years) and fall (even years).

**GRDG 638 Teaching Reading for Students with Special Needs (3)** The purpose of this course is to prepare preservice and inservice special education teachers with theoretical frameworks and practical applications of assessment and intervention strategies in literacy (P–12). The course includes frameworks and philosophies of assessment.

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### Full-time Sample Schedule for MST Adolescence, Social Studies

<table>
<thead>
<tr>
<th>Summer</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRED 556</td>
<td>GRED 575</td>
<td>GRED 590</td>
<td>GRED 600</td>
</tr>
<tr>
<td>GRED 600</td>
<td>GRED 610</td>
<td>GRED 620</td>
<td>GRED 625</td>
</tr>
<tr>
<td>GRED 681</td>
<td>GRED 683</td>
<td>GRED 690</td>
<td>GRED 694</td>
</tr>
<tr>
<td>SPED 505</td>
<td>GRED 615</td>
<td>GRED 629</td>
<td>GRED 630</td>
</tr>
<tr>
<td>IT XXX</td>
<td>GRED 640</td>
<td>GRED 650</td>
<td>GRED 660</td>
</tr>
</tbody>
</table>

* GRED 677 is required if the candidate’s undergraduate work does not include a course in developmental, adolescent or educational psychology.

Candidates considering part-time study should contact the program coordinator.

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### School of Education and Professional Studies Course Descriptions

Notation: course order is provided alphabetically by course number GRDG (literacy), GRED (education), HLTH (community health), IT (information and communication technology), and SPED (special education). Where possible, the academic term the course is to be taught has been provided. For courses where no specific term of teaching is provided, students should contact the chair of the department, the Office of Graduate Studies or their advisor for information.

#### Literacy Courses (GRDG)

- **GRDG 595L Special Topics (1-6)** Workshops, seminars and/or institutes designed to meet special needs of teachers, or others interested in initial graduate-level study in the field. Offerings available upon announcement.
and intervention strategies in early childhood through adolescent literacy. Students will explore assessment and intervention methods and activities that can be used to assist and enhance literacy abilities of students with varying abilities.

GRDG 640 Literature-based Literacy Instruction (3) Selected examples of children's and young adult literature are utilized in demonstrating methods of developing literacy using a literature based approach. Special emphasis is placed on the use of such materials for enriching classroom literacy programs, individualizing student literacy development, and designing literacy intervention programs. This course involves extensive reading of literature, developing of strategies for teaching reading, writing, speaking, and listening through the use of literature, and focusing curricula development to represent the multiple levels, broad interests, cultural and linguistic backgrounds of all learners. MSED Literacy only.

GRDG 655 Literacy Intervention Strategies Birth–6 (3) The purpose of this course is to prepare preschool and inservice teachers with theoretical frameworks and practical applications of appropriate intervention strategies in literacy (B–6). The course includes frameworks and philosophies of intervention strategies in early childhood and childhood literacy. A repertoire of methods and activities will be used to assist and enhance literacy abilities among children and will cultivate in student-created programs of age- and grade-appropriate literacy intervention strategies. A central theme of this course will be to match appropriate instruction with assessed literacy difficulties. Offered summer, fall and spring.

GRDG 656 Literacy Intervention Strategies 5–12 (3) The purpose of this course is to prepare preservice and inservice teachers with theoretical frameworks and practical applications of appropriate intervention strategies in literacy (5–12). The course includes frameworks and philosophies of intervention strategies in middle childhood and adolescence literacy. A repertoire of methods and activities will be used to assist and enhance literacy abilities among children and will cultivate in student-created programs of age- and grade-appropriate literacy intervention strategies. A central theme of this course will be to match appropriate instruction with assessed literacy difficulties. Offered summer, fall and spring.

GRDG 660 Teaching Writing Birth–6 (3) This course integrates theory and practice for teaching writing in elementary school. The reciprocal relationship between writing and reading is emphasized. Topics include writing development, responding to and evaluating student writing, and strategies for teaching the writing processes in elementary classrooms. Offered summer and spring.

GRDG 661 Teaching Writing Grades 5–12 (3) In this course students learn and apply the process approach to writing. They will learn how to teach students drafting, revising, proof reading and editing their writing, they will learn how to teach strategies for writing across the content areas, they will reinforce the skills needed for the conventions of standard written English. Writing portfolios, peer review, and publishing also will be addressed. Offered summer and spring.

GRDG 665 Emergent Literacy (3) This course examines the relationship of language and cognition, the effects of home and community environments on language acquisition, and the stages of oral and written language development in young children. Instructional practices for emergent literacy of this course include guided reading, shared reading/writing, reading aloud, the language experience approach, and explicit phonics instruction. Offered summer and fall.

GRDG 670 Teaching Reading and Study Skills in the Content Area (3) Material and methods for teaching vocabulary, comprehension and study skills, with heavy emphasis on practical approaches to reading problems encountered in the content fields. Extensive practice is afforded in formal and informal testing, pupil interests and recreational reading. Offered summer (odd years) and fall.

GRDG 681 Literacy Educator Portfolio (3) This culminating activity is an intentional grouping of samples of work completed throughout the concentration. The portfolio provides evidence of achievement and documents students’ reflection on their learning experiences and professional growth as literacy educators as a result of those experiences. The portfolio also is a process designed for instructors to reflect on the program's ability to achieve its learning outcomes. Students receive general instructions on compiling evidence and assembling the portfolio initially in GRDG 600, Foundations of Literacy and are provided with additional instruction in each of the courses. MSED Literacy Educator only. Permission of Department Chairperson.

GRDG 690 Literacy Practicum, Birth–Grade 2 (3) The purpose of this course is to apply theories, knowledge and activities from previous literacy courses in a school environment. Students will assess literacy needs of children, and design an appropriate intervention program based on this assessment. Students will write a journal and progress reports on the pupils they tutor in birth–grade 2 levels. The practicum will include a minimum of 50 clock hours in a school-based setting. To be taken in the final semester of coursework. Prerequisites are GRDG 600, 605 and 655/656. Offered summer, fall and spring.

GRDG 691 Literacy Practicum, Grades 3–6 (3) The purpose of this course is to apply theories, knowledge and activities from previous literacy courses in a school environment. Students will assess literacy needs of children, and design an appropriate intervention program based on this assessment. Students will write a journal and progress reports on the pupils they tutor in grades 3–6 levels. The practicum will include a minimum of 50 clock hours in a school-based setting. To be taken in the final semester of coursework. Prerequisites are GRDG 600, 605 and 655/656. Offered summer, fall and spring.

GRDG 695L Special Topics (1-6) Workshops, seminars and/or institutes designed to meet special needs of teachers, or others interested in initial graduate-level study in the field. Offerings available upon announcement by the School of Education and Professional Studies. Credit earned may be applied, under advisement, as electives in Master of Science in Education/Master of Science in Teaching degree programs.

GRDG 696 Literacy Practicum, Grades 5–8 (3) The purpose of this course is to apply theories, knowledge and activities from previous literacy courses in a school environment. Students will assess literacy needs of children, and design an intervention program based on this assessment. Students will write a journal and progress reports on the pupils they tutor in grades 5–8 levels. The practicum will include a minimum of 50 clock hours in a school-based setting. To be taken in the final semester of coursework. Prerequisites are GRDG 600, 605 and 655/656. Offered summer, fall and spring.

GRDG 697 Literacy Practicum, Grades 9–12 (3) The purpose of this course is to apply theories, knowledge and activities from previous literacy courses in a school environment. Students will assess literacy needs of children, and design an intervention program based on this assessment. Students will write a journal and progress reports on the pupils they tutor in grades 9–12 levels. The practicum will include a minimum of 50 clock hours in a school-based setting. To be taken in the final semester of coursework. Prerequisites are GRDG 600, 605 and 655/656. Offered summer, fall and spring.

GRDG 699 Literacy Internship (6) MSED Literacy Specialist candidates intern at a school for an entire school year under the supervision of a NYS certified reading/literacy specialist. The focus of their work is on early identification of struggling readers and implementing intervention-based programs. The internship will complete the requirement for the practicum. Students are required to complete assignments designed to demonstrate evidence of competence in developing assessment-driven interventions, communicating assessment results, continuing to pursue professional development, and orchestrating professional development programs. Specific learning outcomes are drawn from the International Reading Association Standards for Reading Professionals (2003): Standards 3.3, 3.4, 5.2, and 5.4. Permission of Department Chair.
Education Courses (GRED)

GRED 502 Issues in Science–Technology–Society (3) The modern foundations of science education are perhaps best expressed in the concepts commonly associated with STS (Science–Technology–Society). STS describes 13 characteristics of the scientifically literate person: 1) uses science concepts, process skills, and values in making responsible everyday decisions; 2) understands how society influences science and technology as well as how science and technology influence society; 3) understands that society controls science and technology through the allocation of resources; 4) recognizes the limitations as well as the usefulness of science and technology in advancing human welfare; 5) knows the major concepts, hypotheses, and theories of science and is able to use them; 6) appreciates science and technology for the intellectual stimulus they provide; 7) understands that the generation of scientific knowledge depends upon the inquiry process and upon conceptual theories; 8) distinguishes between scientific evidence and personal opinion; 9) recognizes the origin of science and understands that scientific knowledge is tentative; 10) understands the application of technology and the decisions entailed in the use of technology; 11) has sufficient knowledge and experience to appreciate the worthiness of research and technological development; 12) has a richer and more exciting view of the world as the result of science education; and 13) knows reliable sources of scientific and technological information and uses these sources in the process of decision making. In this course students examine and evaluate the 13 characteristics listed above and use conclusions to make recommendations for teaching science in grades 7–12. Issues in health and drug education will be discussed in this course. Offered fall.

GRED 503 Educational Law (3) Study of principles and procedures underlying educational law in the United States with emphasis upon New York State. Analysis of critical current issues, church-state relationships, transportation, discipline, liability and teacher rights and responsibilities.

GRED 504 Using Spreadsheets in Teaching School Mathematics (3) The course is designed as an introduction to computational methods for concept development in school mathematics by using an electronic spreadsheet program. It demystifies the stereotype of using this commonly available software as a mathematical/pedagogical tool. The teachers will explore various pedagogical strategies and alternative computational ideas aimed at the design of spreadsheet-enabled lessons relevant to K–12 mathematics curriculum. Developed in accord with NYS Learning Standards, the course activities will be oriented towards fostering teacher’s ability to take intellectual risks in making pedagogical and/or curricula decisions.

GRED 505 Topics in Mathematics for Elementary Teachers (3) This course is designed to improve mathematical preparation of elementary teachers in the MST degree program. It fosters the development of profound understanding of mathematics taught to younger children through the in-depth study of basic mathematical ideas and concepts, emphasizes the importance of contemporary pedagogy, including the use of technology. The course has a potential to reduce math anxiety of teachers and develop their confidence in doing and teaching mathematics.

GRED 507 Developing a Positive Self-Concept (3) Students will study and apply ingredients that aid in the development of a positive self-concept. Caring, sharing, giving, accepting acceptance, etc. will be practiced within the class setting. The invitational education model will be stressed as a way to enhance one's self-concept both personally and professionally. Classroom projects and assignments will meet the professional and/or personal needs of the individual student. Offered summer.

GRED 510 Museums and Local Sites as Educational Resources (3) An examination of the general purposes of various types of museums and local sites, the contributions each can make to PreK–12 curriculums, and the instructional methods best suited for use in the student’s own teaching situation (be it public school classroom or other educational setting). Involves visits/field work at selected area museums and sites. Designed for education and non-education students. Offered spring (odd years).

GRED 511 Humanistic Education (3) Designed to focus on the discovery of meaning within teaching-learning situations and to explore the student's search for self-identity. The course will emphasize student-centered curricula, knowing students as unique individuals, classroom motivation and control, relevant knowledge, student creativity and self-evaluation. Inviting school success with the use of the invitational education model and Covey's principles of highly effective people will also be stressed.

GRED 514 International and Global Education (3) Part I of the course examines the roles of values in elementary and secondary education: teaching values, teaching about values and values clarification. Part II builds upon this conceptual base and applies it to specific social and ethical issues in the elementary and secondary curriculum: war and peace, food and hunger, environmental stewardship. Offered fall (odd years).

GRED 515 Teaching Local History and Community Studies (3) Analysis of the role of local history and community studies in the elementary and secondary curricula of New York State with emphasis on the subject of social studies. Investigation of resources available in North Country local communities: persons, artifacts and sites. Several in-class resource guests and some class visits to selected sites.

GRED 516 Multicultural Education (3) The course is designed to help increase education students’ awareness of the importance of culture in teaching. Upon completion of this course students will be able to incorporate a variety of multicultural approaches in their own subject matter and regular classroom teaching. Offered summer and fall.

GRED 517 Integrating the Arts into the Elementary Classroom (3) This course will help classroom teachers gain an increased understanding and appreciation of the value and importance of including the arts as an integral part of classroom curriculum. New York State Standards for the Arts will serve as a guide as activities are developed to enhance children’s cognitive, social, and emotional development. Participants will gain experience, familiarity, and comfort with various aspects of the arts (dance, music, theatre, and visual arts). Offered summer, fall and spring.

GRED 521 Language Acquisition and Learning in a Linguistically Diverse Society (3) Students will gain knowledge and understanding concerning language acquisition and literacy development in a second language for young children (Birth–8 years). Students will apply the knowledge and understanding they gain to classroom situations. Students will plan, develop, and implement instructional practices.

GRED 522 Creative and Affective Experiences in Early Childhood (3) This course is designed to focus on the value of play to develop the whole child in an environment that supports play. Students will plan and implement child-centered integrated learning experiences in play, music, drama, sensory, and art based on developmental needs of children. Offered summer.

GRED 523 Child, Family and Teacher Relations (3) This course focuses on developing an understanding of traditional and non-traditional families, structural and life-style variations, and parenting in diverse and at-risk families. Implications from these understandings will guide development of a parent involvement plan that includes effective ways to communicate with parents, conference with parents, and plan parent meetings and home visits.

GRED 530 Classroom Management and Discipline (3) This course is designed to develop the skills necessary to manage student behaviors in the classroom. The focus will be on effective practices and techniques.
for behavior management and discipline. Participants will be provided opportunities to practice different approaches through various activities. Current issues and problems will be discussed. Offered summer (odd years), fall and spring.

GRED 531 Creative Problem Solving – Mathematics (3) This course is designed with the goal to provide teachers with the experience of mathematical discovery through creative problem solving. A variety of instructional approaches, including the use of computers, will be examined by solving open-ended problems relevant to school mathematics curriculum. Offered summer.

GRED 533 Outdoor Activities for Teaching Science (3) This course is designed for secondary and elementary teachers of science. The main objective of this course is to provide science teachers with activities that can be used to teach students in an outdoor setting. Methods of soil and water testing, topographic map reading, compass use, plant and animal identification, population dynamics, ecosystem analysis, food chain/web structures, stream discharge volumes/rates, and land forms will be examined. The course will be taught in a Wilderness area of Adirondack Park. The class will be limited to 12 students. Permission of the instructor is required for acceptance into this course. Offered summer.

GRED 534 Teaching Math in a Technological World (3) Technology is changing the content and delivery of mathematics instruction in today’s classrooms. This course will allow teachers to explore ways in which technology can be used to enhance instruction. Students will also consider related curricular issues outlined in the NYS Math, Science and Technology Framework and the NCTM Standards. This course is appropriate for middle school and secondary school mathematics teachers. Students will work on projects which fit their level of expertise and interest. Offered fall.

GRED 535 School Mathematics from an Advanced Standpoint (3) This course is designed for pre-service and in-service school mathematics teachers and provides an advanced treatment of mathematical content typically associated with the secondary mathematics curriculum. The course activities involve the extension and generalization of mathematical propositions, informal and formal methods of justification, demonstration and proof, and the analysis of problems and concepts. Offered spring.

GRED 538 Mathematical Modeling in School Mathematics (3) An overview of mathematical modeling concepts oriented toward the goal of integrating modeling activities in the school mathematics curriculum. Provides pre-service or in-service teachers an introduction to the mathematical modeling process, including creative and empirical model construction, model analysis and model research. Discrete and continuous modeling methods will be discussed and employed within both empirical and theory-based approaches. Offered spring (odd years).

GRED 539 Explorations in Discrete Mathematics for Teachers (3) Discrete mathematics is an area of mathematics that has grown rapidly and taken on greater significance in the past few decades. Problems in discrete mathematics often involve real-world applications and can be posed to students at a variety of grade levels. National and state curricular standards are calling for a greater integration of discrete math topics into the K–12 math curriculum. This course will present pre-service and in-service middle and secondary math teachers with an overview of discrete mathematics and explore (at an advanced level) a variety of problems suitable for use in the classroom. Offered spring (even years).

GRED 544 Cooperate to Educate (3) This course is designed to provide classroom teachers and/or someone interested in becoming a classroom teacher the knowledge and practice in developing techniques needed to design and implement cooperative learning groups. Various teaching strategies in the following will be explored as integral to cooperative learning: group roles/responsibilities; creative and critical thinking/problem solving; creating a brain-compatible environment; thematic instructional units; resources (physical, human, etc.); other pertinent techniques depending on the knowledge and experience of the group. Offered summer.

GRED 545 Diverse Literature Seminar: Reading Language Arts (3) This seminar investigates a broad range of literature for children and adolescents. It examines literature sensitive to gender and multicultural diversity.

GRED 548 Literacy and Literature for Young Children (3) Selected examples of literature for young children are utilized in demonstrating methods of developing literacy using a literature-based approach. Special emphasis is placed on the use of such materials for enriching classroom literacy programs and also individualizing student development. Special attention is given to literature that represents cultural diversity and literature that allows for the integration of literacy development with other content areas described in New York State Learning Standards. Offered summer, fall and spring.

GRED 549 Adolescent Literature and the Teaching of Reading/Literacy (3) This course includes: 1) intensive and extensive reading of contemporary young adult literature; 2) study and development of strategies for teaching reading, writing, speaking, and listening through the use of adolescent literature; and 3) re-structuring curricula and teaching strategies to provide for the literacy needs, interests, and abilities of all learners. Students will also work in the computer lab using and locating resources on teaching adolescent literature, constructing reading data bases, and examining instructional uses of power point and electronic communication. Offered summer, fall and spring.

GRED 550 Introduction to Teaching English Language Arts, Grades 7–12 (3) A concepts-based approach will be used to provide an introduction to current theory and research on curriculum, teaching, learning, and evaluation in the secondary ELA classroom. State and national standards for the English Language Arts of reading, writing, speaking, and listening will be examined and an introduction to teaching strategies and framing school curricula to meet these standards will be explored. MTS students only. Co-requisite: GRED 592. Offered fall.

GRED 551 Early Child Curriculum: Integrated Math, Science and Social Studies (3) Candidates will have opportunities to apply knowledge and skills in authentic field experiences and become objective observers of the development of young children. They will concurrently have lecture classes where they will develop an understanding of Science and Mathematical concepts for the appropriate stages of the cognitive development of young children. The emphasis will be placed upon how science and math can be integrated throughout the curriculum and become valued functional tools.

GRED 552 Teaching Vietnam: Cultural/Historical Travel Program (3) This course is a travel course to Vietnam which also requires Saturday seminars prior to leaving. The seminars and trip focus on historical and cultural differences between Americans and Vietnamese as a way to integrate the concepts of religious diversity (Buddhism; Cao-Daism; Judeo-Christian, etc.), history, ancestorialism, nationalism, civil unrest and war, ecological consequences, and others into a comprehensive interdisciplinary study. There will be three major divisions of study: Teaching the Historical background, including an extensive understanding of Vietnamese history; Clashes in Culture: with a focus on contrasting the cultural heritage of both American and Vietnamese participants; and discussing the legacies or consequences the war has left on shaping contemporary issues. The course may be repeated for credit.

GRED 553 Childhood Literacy: Integrating Reading and Writing with Content (3) Guided by the NYS Standards, the purposes of this course are: to study reading and writing processes and how they are related, and to develop effective instructional strategies and programs that integrate and enhance children’s reading and writing abilities in all areas of content.

GRED 554 Literature in Early Childhood (3) This course will provide pre-service teachers with greater knowledge of the literature for younger children (Birth–8 years). It will build on GRED 581 and provide
This course is designed to develop the skills necessary to manage student behaviors in the classroom. The focus will be on effective practices and techniques for behavior management and discipline. Participants will be provided opportunities to practice different approaches through various activities. Current issues and problems will be discussed. Secondary Education students only.

GRED 556 Reading and Literacy in Middle and Secondary School I (3) Teaching literacy skills in reading, writing, speaking, listening and study skills in regular secondary school content areas to native English speakers and students who are English language learners. Includes practicum experience. Offered summer.

GRED 557 Reading and Literacy in Middle and Secondary School II (3) Continuation of GRED 556. Refines knowledge and provides opportunities for classroom application of methodologies required to teach literacy to native and reading to non-native English speakers. Addresses current issues of reading, writing, listening, and speaking skills, and study skills confronting secondary content area teachers. Participation with secondary school pupils. Prerequisite: GRED 556. Fall only.

GRED 558 Literacy I: Methods–Childhood (3) This course is designed for the elementary pre-service teacher who will be responsible for teaching literacy in grades 1–6. It is assumed that persons enrolled in this course know little or nothing about the theories of reading and other literacy skills development. With this assumption in mind, this course will be geared to teaching pre-service teachers the "whys" and "hows" of teaching reading, writing, listening, and speaking to children. Offered summer, fall and spring.

GRED 559 Literacy II: Methods–Childhood (3) This course is designed to help pre-service teachers understand and define the various components of a "balanced" literacy program for children in grades 1–6. Using quality children's literature, pre-service teachers will be expected to design and implement balanced literacy instruction in a classroom setting. Pre-service teachers will also be expected to use various forms of assessment to measure the success of their instruction as well as individual progress in literacy development. Offered fall and spring.

GRED 564 Practicum: Early Childhood Experience (3) The pre-service teacher will be provided supervised classroom experience at three different levels: Birth–4 years, Kindergarten, and 1 and 2 grades. Participation will involve working with all aspects of early childhood curriculum. Particular emphasis will be placed on the application of learning theory, curriculum development, assessment, and implementation.

GRED 565 Elementary Mathematics: Content and Methods (3) Teaching mathematics effectively at the elementary level requires much more than the ability to "do" mathematics. The teacher must have a deep understanding of the concepts behind the mathematical skills being taught and must be able to present these concepts in a variety of ways. This course will help elementary school teachers develop their own understanding of the mathematics, as well as explore strategies and models for teaching mathematics at the elementary level. A field experience is also required. Offered fall and spring.

GRED 566 Elementary Science: Content and Methods (3) Develops competency in teaching science to elementary-age school children. Emphasizes importance of science education as foundation of elementary curriculum. Examines scientific method. Includes observation/participation in elementary classroom. Offered fall and spring.

GRED 567 Elementary Social Studies: Content and Methods (3) This course examines the contributions of social studies to the elementary school program. It also examines a variety of methods and materials appropriate for use in instruction in elementary school social studies. The course includes major definitions and structures of the social science disciplines (anthropology, economics, geography, sociology, and political science) and history; the roles of both funded knowledge and conventional wisdom in elementary school social studies curriculum development, the various components of instructional planning in social studies, and evaluation in social studies of elementary school pupil performance. Appropriate field experiences are determined by the instructor. Offered summer, fall and spring.

GRED 568 Teaching Mathematics in the Middle School (3) This course will introduce students to current research and issues related to teaching mathematics in the middle school. They will learn how to provide learning experiences, including interdisciplinary experiences, and create assessments that are developmentally appropriate for middle level students. Preservice teachers will learn how to engage middle school students in meaningful mathematics, work with middle school students who are not meeting minimum standards and prepare middle school students for the abstract world of high school mathematics. They will become knowledgeable about the current NYS Learning Standards for Mathematics Science and Technology and the NCTM Standards. This will include how to integrate mathematics with other disciplines. Students will concurrently take GRED 578. Offered summer.

GRED 569 Teaching Mathematics in the Secondary School (3) This course will introduce students to current research and issues related to teaching mathematics in grades 9–12. The students in this course will learn how to engage high school students in meaningful mathematics and how to work with high school students who are not meeting minimum standards. They will prepare high school students to use mathematics as an everyday citizen and to move successfully into programs that require the study of mathematics at the college level. Students in this course will become knowledgeable about the current NYS Learning Standards for Mathematics, Science and Technology and the NCTM Standards. Students will concurrently take GRED 569. Offered fall.

GRED 571 Science Education Instruction in the Secondary School (3) This course begins with an introduction to the national science education teaching and assessment standards for junior high and high school. Topics include cooperative learning in the science classroom, student-centered learning environments, project-based teaching, and assessment of science knowledge and skills. Students will apply their knowledge to strategies of instruction as they teach the science unit that they develop in GRED 561. Prerequisite: GRED 561. Fall only. MST only.

GRED 574 Navajo Cultural Exchange Program (3) The Navajo Cultural Exchange Program is designed as a three-week workshop introducing participants to Native American Cultures of the Desert Southwest. The program will consist of three, 3 hour classroom workshops at SUNY Potsdam prior to leaving for Arizona. This part of the program will offer to SUNY Potsdam preservice teachers a workshop specifically designed to introduce them to the complexities of teaching culturally diverse students in a public school environment. In addition, a visit to the Navajo, Havasuapi, and Hopi reservation lands in Arizona will offer the participating students, regardless of their major, the opportunity to interact with, tutor, learn from and assist Navajo educators, students and families. This will occur on reservation lands in northeastern Arizona, in both elementary and secondary public schools as well as on private lands of Navajo families on the reservation. Prerequisite: Written permission of instructor. Offered summer.

GRED 576 Practicum I (3) This practicum is designed for the prospective teacher in pre-service training who is interested in teaching English in a country where English is not the primary language in grades K through 12. This practicum is to help the prospective teacher experience "teaching situations" which are believed to have four crucial features such as 1) teacher, 2) learner, 3) subject matter, 4) a social and physical
context. MSED General Professional Education international students only. Offered fall.

**GRED 577 Early Childhood Development and Learning** (3) This course provides an introduction and overview of current theories in early childhood development. It profiles the characteristics and needs of young children and focuses on developmentally appropriate practices in physical and motor, psychosocial, cognitive and language development for ages birth to eight. Strategies for learning assessment and evaluation also will be examined. Offered spring.

**GRED 578 Practicum in Middle School Mathematics** (2) Students will observe, tutor and teach mathematics in a middle school (grades 5–6). Offered summer.

**GRED 579 Practicum in Secondary School Mathematics** (2) Students will observe, tutor and teach mathematics in a secondary school (grades 9–12). Offered fall.

**GRED 581 Language, Literature and Emergent Literacy** (3) The purpose of this course is to provide students with knowledge of language development and the process of emergent literacy. It will prepare pre-service teachers with an understanding of the foundations of literacy and the learning principles and instructional strategies necessary to provide literacy instruction to emergent, novice, and transitional readers and writers. It will also develop knowledge of literature for younger children (Birth–8 years) as well as methodologies and strategies for utilizing literature to teach literacy in content areas of the curriculum. Offered summer (odd years), fall and spring.

**GRED 582 Teaching Writing, Language and Communication, Grades 7–12** (3) This course extends study in GRED 550, Introduction to Teaching English Language Arts, Grades 7–12 with special focus on teaching: 1) writing, 2) language studies (including grammar and linguistics), and 3) communication (including speaking, listening, mass media, and non-print texts.) Based on state and national standards, focused studies will include how to integrate teaching, learning, and curriculum in the area of study with all literacy skills of reading, writing, speaking, and listening. (For example, when studying the teaching of writing, we will also explore how to integrate writing instruction with the teaching of reading, speaking, and listening.) This course will examine how to conduct and construct formative and summative assessments of student learning and methods and procedures for sharing this information with students, parents, the school, and the larger community. Students will also examine media and technology applications, resources, software and non-print “texts” for teaching writing, language, and communication. Prerequisite: GRED 550 and GRED 592. Co-requisite: GRED 584. MST students only. Spring only.

**GRED 584 Teaching Literature and Literacy, Grades 7–12** (3) This course extends study in GRED 550 Introduction to Teaching English Language Arts, Grades 7–12 with special focus on teaching literature and reading. Based on state and national standards the course will examine: 1) how to integrate study of literary genre and “texts” (including, non-print texts such as film, media, arts, virtual literacy, etc.); 2) how to evaluate and select literature for secondary ELA curricula; 3) how to integrate the study of literature with the teaching of reading (including strategies for assessing reading skills, teaching reading comprehension and layered reading, constructing meaning, language and vocabulary development, study skills, etc.); 4) how to integrate the teaching of literature and reading with other literacy skills of writing, speaking, and listening; and, 5) how to conduct and construct formative and summative assessments of student learning and methods and procedures for sharing this information with students, parents, the school, and the larger community. Prerequisite: GRED 550 and GRED 592. Co-requisite: GRED 582. MST students only. Spring only.

**GRED 586 Practicum II** (3) This practicum is designed to have students focus on making systematic observations that help to study and analyze the teaching-learning environment in a systematic and objective fashion. With systematic classroom observation, each student is required to produce an acceptable paper which describes and explains the standard skills for all teachers perceived in the classroom which are divided into five areas such as: Classroom Environment, Preparation for Instruction, Interaction with Students, Management of the Learning Environment, and Professionalism. MSED General Professional Education international students only. Offered spring.

**GRED 587 Leadership in Communities of Learners** (3) By the end of this course, participants will be able to identify and describe elements of organizational culture in learning communities and related roles of leadership. Organizational culture includes policies and practices that oppress individuals and groups on the basis of socio-economics, race, ethnicity, language, learning styles, gender, sexual orientation, and/or disability. Participants will explore, develop, and apply strategies and skills related to transforming schools in ways that serve the interest of all individuals and groups within a community of learners. Prerequisite: GRED 600, or GRED 607, or GRED 634, or student teaching, or permission of the instructor(s).

**GRED 592 Practicum: Teaching English Language Arts in Secondary School** (3) Students will observe, tutor, and teach in secondary English Language Arts classrooms, grades 7–12. Three consecutive days per week is allotted so that students have ample opportunity to become a part of the teaching and learning community. 100 clock hours of field-based experience required for certification. Co-requisite: GRED 550. MST students only. Offered fall.

**GRED 594 English Language Arts Practicum Seminar** (3) This course will focus on reflective teaching practices through examination of students’ experiences in teaching and learning in the field-based practicum. The course will also include study and discussion of classroom management and behavior; professional roles and responsibilities; interdisciplinary/interdepartmental connections; teaching in diverse and inclusive classrooms; working with other members of the school community, including parents, administration, and the community; and, school reform and re-structuring. Prerequisites: GRED 550, GRED 582, GRED 584. Co-requisites: GRED 592. Offered fall.

**GRED 595 Special Topics** (1–6) Workshops, seminars and/or institutes designed to meet special needs of school systems, groups of teachers, or others interested in graduate-level study in the field. Offerings available upon announcement by the School of Education and Professional Studies. Credit earned may be applied, under advisement, as electives in Master of Science in Education/Master of Science in Teaching degree programs.

**GRED 600 Philosophical Foundations of Education** (3) This course examines the contributions of leading educators from Ancient Greece to the present. Students will be encouraged to examine their own philosophical beliefs and how they are applied to improving classroom teaching. Offered summer, fall and spring.

**GRED 603 Seminar: Teaching in the Secondary School** (3) This course is designed to provide the student with an understanding of the principles, concepts and methods involved in teaching. The focus will be on the learning process, curriculum development, instructional strategies and materials, planning, grouping, classroom management, evaluation, and drug education. Offered summer and fall.

**GRED 606 Advanced Secondary Social Studies Education** (3) Examines curriculum and instruction in secondary school social studies. Attention is given to national projects, recent developments at the state level, and selected locally designed curricula. Selected aspects of social studies instruction are analyzed: inquiry, use of primary sources, structures of social science disciplines, cross-cultural comparisons, simulation games and programmed instruction. Prerequisite for MST students: GRED 687/688. Prerequisite for BA/MST students: SECD 323/GRED 688. Offered summer.

**GRED 606E Advanced Economics Instruction** (3) Examines curriculum and instruction in secondary school Economics. Attention is given to international and national projects, recent developments at the state level, and selected locally designed curricula. Selected aspects of secondary economic instruction are analyzed; Inquiry, use
of primary sources, structures of the discipline of Economics, cross-cultural comparisons, simulation games and programmed instruction. Prerequisites for MST students: GRED 681/GRED 688E; Permission of instructor. Summer only.

GRED 606G Advanced Secondary Geography Instruction (3) Examines curriculum and instruction in secondary school Geography. Attention is given to international and national projects, recent developments at the state level, and selected locally designed curricula. Selected aspects of secondary geography instruction are analyzed: inquiry, use of primary sources, structures of the discipline of geography, cross-cultural comparisons, simulation games and programmed instruction. Prerequisites for MST students: GRED 681, GRED 688G. Permission of instructor. Summer only.

GRED 606H Advanced Secondary History Instruction (3) Examines curriculum and instruction in secondary school History. Attention is given to international and national projects, recent developments at the state level, and selected locally designed curricula. Selected aspects of secondary history instruction are analyzed: inquiry, use of primary sources and documents, structures of the discipline of History, cross-cultural comparisons, simulation games and programmed instruction. Prerequisite for MST students: GRED 681/GRED 688H. Permission of instructor. Summer only.

GRED 606P Advanced Secondary Political Science/Government Instruction (3) Examines curriculum and instruction in secondary school Political Science/Government. Attention is given to international and national projects, recent developments at the state level, and selected locally designed curricula. Selected aspects of secondary Political Science/Government instruction are analyzed: inquiry, use of primary sources and documents, structures of discipline of Political Science/ Government, cross-cultural comparisons, simulation games and programmed instruction. Prerequisite for MST students: GRED 681/GRED 688P. Permission of the instructor. Summer only.

GRED 607 Foundations of Education – Birth–Grade 6 (3) This course is designed to provide students with an overview of the philosophical basis of early childhood and elementary education and a historical outline of the field. It prepares future teachers for a variety of roles and professional responsibilities. It also provides an overview of curricular issues such as the goals of education, learning theories, and teaching and assessment strategies. Offered summer, fall and spring.

GRED 608 Advanced Secondary Mathematics Education (3) Participants will become familiar with the most recent literature on teaching and mathematics; the organization and structure of professional organizations, the nature of research in mathematics education; goals, strategies, research and standards for the teaching of mathematics. Offered fall (odd years).

GRED 609 Advanced Secondary English Education (3) The student reads in-depth and applies in practical ways materials related to the teaching of the nature of language, literature, and oral and written discourse. The student writes an extended and complete program of instruction (either a unit of instruction or a self-instructional program) suitable for a given level of secondary students. Offered summer.

GRED 610 Advanced Secondary Science Education (3) This course explores alternatives in science teaching methods, including the historical, contemporary and experimental. Considers special techniques for demonstration, field and laboratory and special learning situations, including criteria for slow and accelerated learners. Provides an opportunity for the student to develop his or her own teaching style reflecting techniques he or she has determined to be effective. Prerequisite for MST students: GRED 672. Offered summer.

GRED 611 Foundations of Modern Education – Birth–Grade 2 (3) This course explores historical and philosophical development in early childhood and the philosophy of various early and contemporary early childhood leaders. Various early childhood programs will be researched, discussed and compared. During the semester, each student will be required to develop a personal philosophy of education. It prepares teachers for a variety of roles and professional responsibilities. It also provides an overview of curricular issues such as learning theories as well as teaching and assessment strategies.

GRED 613 Teaching Internship, Grades 1-3 (6) This course provides the student teacher with a time and place where the theory of coursework at the College can be put into the actual practice of teaching. The course is designed to focus the student teacher's attention on the complete range of teacher functions and responsibilities found within a real school setting, including immersion in curriculum and long range planning, such as units. The internship provides the student with the opportunity to apply constructivist approaches in the teaching/learning setting (MST elementary students only: Co-requisites: GRED 676 and GRED 666).

GRED 616 Curriculum and Evaluation (3) Examination of basic elementary curriculum and evaluation concepts, principles and practices, including funded knowledge and conventional wisdom, aims and objectives; the cognitive, affective and psychomotor taxonomies; curriculum design, standardized and informal assessment. Special attention will be given to New York State requirements with respect to curriculum design and evaluation. Offered summer and fall.

GRED 618 Curriculum and Evaluation in Middle and Secondary Schools (3) Curriculum and evaluation concepts, principles, and practices in middle school and secondary school, including funded knowledge and conventional wisdom, aims and objectives, the cognitive, affective and psycho-motor taxonomies; interrelationships among curriculum development, instructional design, and evaluation; models and methods of assessment and evaluation.

GRED 623 Reflection and Inquiry in Teaching Secondary English Language Arts (3) This course will encourage participants to think about and reflect on the design and implementation of instruction that is appropriate to the schools, students and communities in which they will work. It will help participants develop and reflect on essential questions that arise in the teaching of secondary English in order to create lessons, units and activities that will help answer those essential questions while incorporating district, state and national standards (NCTE, INTASC, NCATE) and the SUNY Potsdam Teacher Education Curriculum Framework. Prerequisite: GRED 660.

GRED 626 Zebra Stripes and Learning Types (3) The purpose of this course is to: 1) examine the accepted theoretical concepts put forth by psychologists and pedagogical experts today; 2) discuss and define how various learning style concepts and/or models impact on the teacher, the student, the administrator, and the curriculum; 3) design instructional strategies that provide for the individual learning styles of students. Offered summer.

GRED 634 Philosophical Foundations of Curriculum and Instruction (3) This course is designed to provide students with an overview of the philosophical basis of early childhood and elementary education. It examines the contribution of leading educators from Ancient Greece to the present. Students will be encouraged to examine their own philosophical beliefs and how they are applied to improving classroom teaching.

GRED 635 Educational Research in Curriculum and Instruction (3) This course is designed to meet the needs of early childhood and elementary classroom teachers. The fundamentals of research design, data analysis and evaluation are studied. Teachers become informed consumers of educational research and learn to conduct research in a number of environments including their own classrooms.

GRED 646 Assessment, Evaluation and Reporting Progress of Young Children with Disabilities (3) Teachers of young children need a clear understanding of the purposes and methods of assessing children with special needs and their progress from an ecological perspective. This understanding will enable early childhood educators of children with disabilities to develop, implement, and evaluate effective instructional programs to enhance the development of competence in infants and
young children with disabilities. The course will provide the teacher with the knowledge to plan assessments for the purposes of identification and diagnosis, program planning, and program evaluation for infants and young children with disabilities. A pre-requisite to this course is successful completion of GRED 521 and GRED 648. Offered fall.

GRED 660 Educational Research (3) This is a basic course designed to provide the graduate student of education with the knowledge and analytical skills needed to: 1) understand and critically evaluate reports of research; 2) ask and attempt to answer questions in ways that are likely to increase the accuracy and validity of one's answers. Offered summer, fall and spring.

GRED 661 Readings in Social Studies Education (3) Readings, analyses, and discussions of selected articles and books in history, historiography, the social sciences and contemporary social commentary which will be of interest and use for teachers of social studies, K–12. The selections will be primarily publications of the post-World War II period. Some will vary each semester. Emphasized will be the selections' usefulness as background readings for teachers of social studies. Participants' comprehension of underlying considerations of contemporary social, economic, political, global, and environmental issues or topics will be enhanced. Appropriate discussion techniques and critical thinking skills for the social studies lesson or classroom will be discussed and modeled. Offered spring (even years).

GRED 664 Practicum in Childhood Education (3) The future childhood teacher will be provided supervised classroom experience. This practicum (at least 100 hours in the field) will involve working with all aspects of childhood curriculum. Particular emphasis will be placed on application of learning theory plus curriculum development, assessment and implementation. Offered fall and spring.

GRED 665 Language and Culture (3) This course is designed for the prospective teacher in pre-service training who is interested in teaching English to students in a country where the primary language is not English in grades K through 12. The course is geared to teaching language in cultural context with a focus on "Proficiency-Oriented Instruction": MSED General Professional Education international students only. Offered spring.

GRED 667 Topics and Research in Mathematics Education (3) Designed as a capstone course, for the secondary mathematics education masters degree programs, this course will allow students to review the research on a current issue related to secondary mathematics. They will develop and present a research proposal. Students will also finalize their teaching portfolio as part of this course. Offered summer.

GRED 668 Professional Portfolio Development (1) Before graduating, each student is required to complete a professional development performance portfolio (PDPP). This portfolio will demonstrate students' progress and development over the tenure of their pedagogical preparation. The PDPP is a collection of select artifacts and reflections that represent pre-service teachers’ experiences, knowledge, and growth during the pre-student teaching and teaching experience. This requirement fulfills the culminating experience requirement.

GRED 669 Professional Development Performance Portfolio (3) The Developmental Performance Portfolio (DPP) is an intentional grouping of artifacts that are reflective of the INTASC Standards that demonstrates the pre-service teacher's progress and growth over the tenure of his/her pedagogical preparation. There should be evidence of achievement and reflection on the achievement. The DPP is a collection of select artifacts and reflections that represent the pre-service teacher’s experiences. The artifacts will include samples of work completed during the program that represent the pre-service teacher's experiences, knowledge and growth and samples of work from pre-student teaching and student teaching experiences. The DPP should prompt reflective thinking in the knowledge and skills determined by INTASC Standards by providing documented evidence of accomplishments. Fulfills the Culminating Experience requirement. Offered fall and spring.

GRED 670 Culminating Experience (Project) (Maximum of 3) The project may be an electronic or paper portfolio; a thesis; an empirical or library research project; a historical or philosophical study; a descriptive analysis; a curriculum design; a slide presentation; a module cluster; or something else of particular use to the student. The project must be related to and drawn from the student’s graduate program. Prerequisite: Full Admission in an MSED or MST degree program. (Graded S*/U* only.)

GRED 671 Developing a Professional Teaching Portfolio (3) The Professional Development Performance portfolio (PDPP) is an intentional grouping of work that shows the pre-service teacher's progress in professional growth over time. There should be evidence of achievement and reflection on that achievement. The PDPP should be a collection of select artifacts and reflections that represent the pre-service teacher's experiences, knowledge and growth during the pre-student teaching and student teaching experience. The PDPP is considered a work in progress and should prompt reflective thinking in the knowledge and skills determined by the faculty by providing documented evidence of accomplishments. Fulfills culminating experience requirement for MST Secondary English Degree. Offered spring.

GRED 672 Science Curricula, Programs and Standards (3) This course is designed to introduce future teachers to school science curricula and programs in grades 7–12. Students will be made aware of current trends in science education as defined by the New York State Department of Education, the National Science Education Standards, Project 2061, and NSTA's Science Scope and Sequence Project. This course will integrate study of educational technology with the study of curricula and programs. Offered fall.

GRED 673 Secondary Science Field Work (3) Field experience provides opportunity to apply what has been learned in a classroom setting, and to develop the skills and understandings necessary for student teaching. The guidelines (principles, teaching, assessment, content, program evaluation, school system evaluation) for this field experience are provided in the National Science Education Standards (www.nap.edu/readingroom/books/nses/html). You will be assigned to a mentor teacher during the first week of the course. You will develop a secondary science unit plan with advisement of the course instructor and your mentor teacher. Beginning in week two, you will observe and assist in the classroom of your mentor teacher for a minimum of seven hours each week in the public school. Beginning in week four and for the duration of the semester you will continue to observe and assist for six hours per week and will teach a minimum of one hour per week. Your teaching will begin with small groups, and progress to whole class groups. You will have opportunity to reflect on your teaching experiences in discussions with mentor teachers, peers, and the course instructor. Discussions will focus on specified topics drawn from the National Science Education Standards and the New York State Math, Science, Technology Standards. Discussions will occur in class sessions on Wednesday's and in the on-line discussion forum provided in the Blackboard class space. The distance learning class space will include mentor teachers. Field experience provides the major setting for Performance Based Assessments required in your teacher education program portfolio. Rubrics for Performance Assessments of Knowledge, Skills and Dispositions contained in the NSES will be provided at the beginning of the course and will be the focus of course activities. Offered fall.

GRED 674 Culminating Experience/Thesis Research (3) This course is designed to help the student in planning his or her "Culminating Experience" under the supervision of his or her graduate advisor. For this exit requirement project, the student should be able to complete his or her work relative to "Teaching English as a Second/Foreign Language" or "English-Korean Bilingual Education". The project should include appropriate aspects of previously completed SUNY Potsdam course work and must have written documentation.

GRED 675 Secondary Science Teaching Research (3) This course is designed to introduce future teachers to science education research
in grades K−12. Students will study current issues and trends in science education research, and relate those to local school issues. Students will design and defend a research proposal linking their study of national issues and trends with observations in local schools.

GRED 676 Student Teaching Seminar: Policies and Practice in American Education (2) The course will provide a forum for discussion of the broad range of contemporary educational and professional issues, as well as their historical routes. Students will critically examine various perspectives of a topic through reading and research. Co-requisites: MST Elementary: GRED 615 and GRED 696; MST Secondary: GRED 692 or GRED 694 and GRED 697.

GRED 677 Development and Learning in Adolescence (3) This course is designed to provide classroom teachers with a sufficient understanding of the principles and theories of both learning and human development to be better able to plan and carry out instruction. MST Adolescence only. Offered summer.

GRED 679 Student Teaching Seminar: Issues and Ideas in Early Childhood Education (1–2) This course will provide a forum for discussion of the broad range of contemporary educational and professional issues in Early Childhood Education. Each seminar will have a portion of time set aside to examine a specific topic for discussion and research. A portion of each seminar will also consist of dialogue related to field assignments.

GRED 681 Social Studies Curriculum in Middle/Secondary School (3) Introduction to the social studies curriculums of middle and secondary schools. Defines and analyzes the processes and products of funded knowledge and conventional wisdom, curriculum development, curriculum, instructional planning, instructional plan, instruction, and evaluation, as they are used in social studies. Also examines the interrelationships of these eight. Emphasizes concepts, their definitions, their uses, and their roles in social studies. Examines the substantive and syntactical contributions to social studies of the disciplines of anthropology, economics, geography, history, sociology, and political science. Studies definitions of citizenship; the roles of controversial issues in social studies; and the changing definitions of social studies. Offered summer.

GRED 682 Research in Social Studies Education (3) Review of selected research in middle and secondary school social studies education. Prerequisite: GRED 681, 688, and 606. Offered fall.

GRED 688 Social Studies Instruction in Middle/Secondary School (3) Introduction to methods and materials of instruction and evaluation in social studies in the middle and secondary schools. Analyzes and practice in the development of lesson plans; the designing of social studies aims and objectives; the specific levels of the cognitive and affective domains; and the evaluation of learning and of teaching including tests and other means of assessment. Prerequisites: Full admission into the MST or BA/MST Program (including all required undergraduate courses). For MST students only – GRED 681. For BA/MST students only – SECD 473. Co-requisite: GRED 689. Offered fall.

GRED 688E Economics Instruction in Middle/Secondary Schools (3) Introduction to methods and materials of instruction and evaluation in Economics in the middle and secondary schools. Analyzes and practice in the development of integrated inquiry and issues based lesson plans designed to teach standards based economic literacy; the designing of goals and objectives; the specific levels of the cognitive and affective domains; and the evaluation of learning and of teaching including tests and other means of assessment. Prerequisites: Full admission into the MST program (including all required undergraduate courses). For MST students only. Prerequisite: GRED 681. Permission of instructor. Offered fall.

GRED 688G Geography Instruction in Middle/Secondary Schools (3) Introduction to methods and materials of instruction and evaluation in Geography in the middle and secondary schools. Analyzes and practice in the development of integrated inquiry and issues based lesson plans designed to teach standards based geographic literacy; the designing of goals and objectives; the specific levels of the cognitive and affective domains; and the evaluation of learning and of teaching including tests and other means of assessment. Prerequisites: Full admission into the MST program (including all required undergraduate courses). For MST students only. Prerequisite: GRED 681. Permission of instructor. Offered fall.

GRED 688H History Instruction in Middle/Secondary Schools (3) Introduction to methods and materials of instruction and evaluation in History in the middle and secondary schools. Analyzes and practice in the development of integrated inquiry and issues based lesson plans designed to teach standards based historical literacy; the designing of goals and objectives; the specific levels of the cognitive and affective domains; and the evaluation of learning and of teaching including tests and other means of assessment. Prerequisites: Full admission into the MST Program (including all required undergraduate courses). For MST students only: Prerequisite: GRED 681. Permission of instructor. Offered fall.

GRED 688P Political Science/Government Instruction in Middle/Secondary Schools (3) Introduction to methods and materials of instruction and evaluation in Political Science and Government in the middle and secondary schools. Analyzes and practice in the development of integrated inquiry and issues based lesson plans designed to teach standards based Political Science and Government; the designing of goals and objectives; the specific levels of the cognitive and affective domains; and the evaluation of learning and of teaching including tests and other means of assessment. Prerequisites: Full admission into the MST Program (including all required undergraduate courses). For MST students only: Prerequisite: GRED 681. Permission of instructor. Offered fall.

GRED 689 Practicum in Middle/Secondary School Social Studies Instruction (3) Students will observe and instruct social studies in the middle and secondary school. Prerequisites: permission of the instructor. Co-requisite: GRED 688. Offered fall.

GRED 690 Special Social Studies Education Content Topic (3) Examination of a special topic in social studies education. The special topic may vary each semester. Emphasis is on the content area of the special topic and on curricular, instructional, and evaluation considerations for middle and secondary school learning/teaching in social studies. Field trips may be required. Prerequisite for MST students: GRED 681; GRED 688. Prerequisite for BA/MST students: SECD 473 or GRED 688.

GRED 691 Student Teaching in Early Childhood Education (6–12) This course provides the future early childhood teacher with a time and place where theory of coursework at the College can be put into the actual practice of teaching. Experience will include three different placements in the following: Birth−4 years, Kindergarten, and grades 1 and 2. This course is designed to focus the future early childhood teacher’s attention on the complete range of teacher functions and responsibilities found in authentic early childhood settings.

GRED 692 Student Teaching: Jr. High 7−9 (6) This course will consist of a semester of field experience in a public school setting. Students will be assigned to a Grades 7−9 experience over the course of half a semester. Students are expected to demonstrate skills in defining educational objectives, developing learning experiences, selecting educational materials and assessing/evaluating pupil performance. MST only. Co-requisites: GRED 676, GRED 697.

GRED 693 Supervised Clinical Experience/Student Teaching, Grades 10−12 (6) Students will be assigned to a Grades 10-12 experience in a public school setting over the course of half a semester. Students are expected to demonstrate skills in defining educational objectives, developing learning experiences, selecting educational materials and evaluating pupil performance. MST only. Co-requisites: GRED 692 and GRED 676.
GRED 694 Student Teaching in the Middle/Junior High School (6) Half semester of student teaching in the student's certification program in grades 5, 6, 7 and/or 8, under the guidance of a sponsor teacher and a college supervisor. For MST & BA/MST secondary students only. Co-requisites: GRED 676 and GRED 697.

GRED 695 Special Topics (1–6) Workshops, seminars, and/or institutes designed to meet special needs of school systems, groups of teachers, or others interested in graduate level study in the field. Offerings available upon announcement by the School of Education and Professional Studies. Credit earned may be applied, under advisement, in Master of Science in Education degree programs. For further information relative to special offerings, consult with the department chair or graduate advisor.

GRED 696 @Student Teaching: Childhood Education 1–6 (6) This course provides the student with the initial opportunity to student teach in the public school setting. Students are assigned to an elementary classroom in which the induction process leads to full teaching responsibilities under the direction and supervision of a sponsor teacher and college supervisor. Students are expected to demonstrate skills in defining educational objectives, developing learning experiences, selecting educational materials, and evaluating pupil performance. For MST students only. Co-requisites: GRED 615 and GRED 678.

GRED 697 @Student Teaching Sr. High 10–12 (6) This course will consist of a field experience in a public school setting. Students will be assigned to a secondary experience over the course of half a semester. Students are expected to demonstrate skills in defining educational objectives, developing learning experiences, selecting educational materials and assessing/evaluating pupil performance. For MST and BA/MST students only. Co-requisites: GRED 692 or GRED 694 and GRED 676.

GRED 699 Thesis Research (3) The thesis topic is selected by the student according to his or her interest, with the approval of his or her graduate advisor and thesis committee. An oral defense of the thesis is required. The original typescript of the final document, presented in standard thesis format, becomes part of the holdings of the School of Education and Professional Studies. Offered summer, fall and spring.

Community Health Courses (HLTH)

HLTH 230 School Health (CA, SAVE) (2) This class provides an overview of the National Health Education Standards in order to assist Teacher Education students in achieving Health Literacy. Included in the course is information related to child abuse identification, reporting, and prevention. Additionally, course material will address issues regarding education to prevent school violence. The course will focus on health risk behaviors of the children as identified by the Federal Centers for Disease Control and Prevention, and on ways that teachers may help their students become critical thinkers, responsible and productive learners, and effective communicators, as these characteristics relate to the health of Americans in the 21st century.

HLTH 531 Bereavement, Dying and Death (3) An examination of the social and psychological implications of the study of bereavement, death and dying with particular emphasis on their relevance to enhancing the quality of life. Death is viewed as an integral part of life and the final stage of growth, more than a mere biological event. A focus of the course is to provide an understanding of those issues which have an impact upon individuals when going through life-threatening processes and confronting losses of various types. An analysis of cultural avoidance and denial is explored.

HLTH 545 Advanced Alcohol Studies (3) Viewing ethyl alcohol as a physiologically addictive liquid drug, the course is designed for teachers, helping professionals, volunteers and public employees concerned with societal and medical implications of alcohol use and abuse. Focusing on societal and individual beliefs about alcohol, possible causes of alcoholism, its widespread effect and approaches to prevention and treatment are major considerations. Other concerns related to alcoholism will be: physiological and behavior effects; theories of prevention and treatment; community resources; and impact on the roles of family members.

HLTH 550 Drug Studies (3) Investigation of the pharmacology of current drugs of choice. Current approaches in primary prevention of the use and abuse of drugs. Indepth examination and critical analysis of current theoretical approaches to causality, prevention and treatment from sociological, psychological, and public health perspectives.

Information and Communication Technology Courses (IT)

IT 502 Organizational Development (3) The purpose of this course is to look at the principles and the nature of the organizational development field, and dominant methods, models and perspectives taken to conduct this work. Offered fall.

IT 503 Team Building (3) This course focuses on working closely with colleagues in productively academic and business environments. Effective team leadership and membership principles will be covered. Psychodynamic and organizational inhibitors and facilitation of effective team functioning also will be reviewed.

IT 504 Public Relations (3) This course looks at the duties and responsibilities of administrators in planning and executing public information and public relations programs to serve an organization’s clientele groups.

IT 505 Organizational Communications (3) This course examines the structure and nature of communications within an organization and underlying factors affecting internal flow of information, the methods employed in distribution of information and the relationship of problem solving procedures and inflow of information, policy formulation and information dissemination. Offered fall.

IT 506 Small Group Communication (3) The purpose of this course is to analyze the concepts and theories of dynamics and provide the opportunity to assess and develop group process consultation skills. Offered fall (odd years).

IT 507 Information Management (3) The concepts, principles, issues and techniques for managing corporate data resources. Techniques for managing the design and development of large database systems including logical data modes, concurrent processing, data distribution, database administration, data warehouse, data cleaning, and data mining.

IT 508 Cost Analysis (3) This course analyzes various planning, evaluation, and decision making models which link cost to outcome.

IT 514 Computer Applications/Content Area Teaching (3) This course presents an introduction to computer applications used to support instruction in an instructional setting. Students gain experience with software suites, using the internet and electronic communications, and various other software applications. The emphasis in this course is on conveying teaching strategies for use when applying computers to instruction, as well as using technology to support current learning standards. This is an introductory course for secondary education students. Offered fall and spring.

IT 515 Managing Innovation (3) This course explores the concepts that are basic to the creation and implementation of new ideas and technologies. It also identifies the skills needed to accomplish visions for the future.

IT 518 Computers in Elementary Education (3) This course presents an introduction to varied microcomputer applications in education. Students receive knowledge of and experience with computer-aided instruction; word processing, data base, and spreadsheet software; and problem-solving through programming. Emphasis is placed on understanding the role of computer technology in elementary
This course explores information systems that enable organizations to systematically identify, acquire, store, analyze and distribute information and knowledge from internal and external sources in order to enhance organizational productivity.

IT 520 Knowledge Management (3) This course explores information systems that enable organizations to systematically identify, acquire, store, analyze and distribute information and knowledge from internal and external sources in order to enhance organizational productivity.

IT 529 Computer Applications/Performance Improvement (3) Students will explore the use of computers as a tool for instructional applications in education. Word processing, database management, spreadsheet creation, and presentation software will all be covered. Internet based communications tools will also be emphasized. Emphasis will be placed on developing practical applications for education settings in a cross-platform environment. (Prerequisite: basic word processing, mouse skills, some internet experience to be augmented by jumpstart classes if these skills are lacking.) Intermediate - level course. Offered summer (even years).

IT 544 Desktop Publishing (3) The course will emphasize the understanding of message design concepts and principles in the pre-publication process. Students will design and develop publications using text design techniques. Students will produce newsletters, informational flyers, brochures, and other materials. Introductory course.

IT 545 Preparing and Delivering Professional Presentations (3) The purpose of this course is to prepare students to design, develop and deliver professional presentations. In this course students will utilize paper and electronic resources for the production of presentation materials. Topics of user interface design, audience characteristics and message design will be covered.

IT 546 Preparing Performance Support Materials (3) This course provides a comprehensive overview of the computer-based preparation of instructional materials. Students will become familiar with principles of message design and the guidelines that pertain to creating instructional materials on a computer. Using a range of software and multimedia applications, students will design and develop such materials as informational pamphlets, handouts, worksheets, tests, overhead transparencies and web pages. Students will have the opportunity to apply their knowledge and understanding of course concepts in a series of assignments and a final project.

IT 549 Web Page Development (3) The course is intended to provide students with experience in web page design and development. The course will emphasize the understanding of the design principles and hypertext markup language used to create web sites. Students will work with a variety of media, such as audio, video, text, and graphics to exploit the personal computer's ability to present information through the Internet. Introductory course.

IT 601 Staff Development (3) This course examines ideas and models and programs related to the training, motivation, career paths, and professional growth of skilled staff.

IT 602 Human Resources (3) This course explores human resource management issues facing managers. It will emphasize acquisition, retention, development and appraisal of efficient and productive workforce and human capital as investment. It will also deal with managing human resources from the viewpoint of the organization within the restriction of rules and employment laws.

IT 603 Policies, Issues and Ethics for Professional Practice (3) This course examines the formulation and implementation of organizational policy through the lens of ethical values. Ethical choices within organizational cultures and context will be explored.

IT 604 Principles of Design for Informational Technology (3) This course will examine systems development life cycles, analysis and design techniques, information systems planning and project identification and selection, requirements collection and structuring, process modeling, data modeling, design of interface and data management, system implementation and operation, system maintenance, and change management implications of systems. Globalization issues in systems will also be examined.

IT 605 Network Architecture (3) This course will examine telecommunications fundamentals including data, voice, image, and video and the concepts, models, architectures, protocols, standards, and security for the design, implementation, and management of digital networks. Essentials of local area networks (LAN), metropolitan area networks (MAN), and wide area networks (WAN) will be examined. Regulatory and technical environments also will be reviewed. Offered spring.

IT 606 Project Management (3) This course reviews topics and issues related to facilities and resource management, including budget planning and management, resource acquisition, and grant and bid proposal development.

IT 607 Principles of Leadership (3) This course reviews issues and themes in the exercise of influence, power and authority by individuals within small and large groups and among groups in the context of an organization. Offered fall.

IT 608 Organizational Theory (3) The purpose of this course is to examine contemporary organizational systems, structural variables, and dynamics: the organization, organizational growth, affects of size and technology, emergence of new control systems, and directions of change in organizational forms.

IT 609 Conflict Resolution (3) This course focuses on dealing effectively with conflict within organizations. The emphasis will be on the importance of principled negotiation and resolution of conflict as well as conflict as a normal part of organizational and interpersonal relationships.

IT 610 Change Processes (3) This course looks at models of change process, diffusion and implementation strategies and the skills needed to create and implement new ideas and technologies. Offered spring.

IT 611 Data Management (3) The concepts, principles, issues and techniques for managing corporate data resources. Techniques for managing the design and development of large database systems including logical data modes, concurrent processing, data distribution, database administration, data warehouse, data cleaning, and data mining.

IT 614 Technology in Education (3) This course is a survey of various technologies, both computer based and non-computer based, for use in instructional settings. Topics covered include sound capture and editing, video capture editing, computer graphics, applied learning theories, and various other technologies. Students will receive hands-on instruction in each area, and will create a project in each of these areas which reflect a theory of learning. Intermediate level - not an introductory level course.

IT 615 Critical Issues with Technology Utilization (3) This course is intended to examine sociological and philosophical problems with the implementation of technological innovations in performance improvement settings. Topical areas will include implications of the use of selected learning theories, systematic processes, evaluation techniques and theories. Prereq: IT 635 plus three other IT courses. Advanced level. Offered fall.

IT 619 Principles of Computer Programming (3) The course introduces students to programming and development of problem-solving skills through educational programming activities. Students will learn fundamental commands and syntax rules and apply them to the development of instructional programs. No previous programming experience required.

IT 621 Authoring and Scripting for Multimedia (3) The goal of this course is to help students acquire a working knowledge of the Macromedia Flash authoring environment. Emphasis will be placed on understanding the problem solving skills associated with production relating to business and/or educational products reflecting a client's
needs. Intermediate level - not an introductory level course. Prerequisite: Permission of ICT Dept. Offered fall.

**IT 622 Computer Programming for Performance Support (3)** This course will introduce students to the creation and modification of computer programs written in a selected computer programming language. Students will learn fundamental commands and syntax rules of a programming language and apply them to the development of a variety of applications. No previous programming experience is required. Intermediate level – not an introductory course. Prerequisite: Permission of ICT Dept.

**IT 623 Programming and Authoring for the Internet (3)** This course will cover advanced web page development through the use of HTML and a variety of programming and authoring tools including JavaScript and XML. Emphasis will be placed on the effective use of these tools to create interactive web pages. Offered summer.

**IT 624 Visual Basic Programming (3)** This course will examine structured programming through a visual programming environment. Focus will be given to the use of Visual Basic in the development of a productivity application. Emphasis will be placed on the nature of object-oriented programming, structured procedures and the use of programming libraries.

**IT 625 History and Philosophy of Technology Utilization (3)** This course is designed to help graduate students understand the rationale and development of the instructional technology movement in the United States during the last century. The implications for teaching and learning from various educational philosophies and theories will be analyzed and investigated as they relate to current practices in performance technology. Prerequisite: IT 635 plus three other IT courses. Offered spring.

**IT 635 Research & Theory on Communication and Performance Technology (3)** This course explores current research and theory in the field of performance technology. Topics covered will be concerned with development and design theory, practices and procedures, including content structure, course organization, course sequence, and instructional strategies. It will include locating and interpreting information from published reports and using research to explore questions related to performance technology. Offered fall.

**IT 637 Computer Training (3)** The purpose of this course is to prepare IT students to train adult learners in the use of a variety of computer programs and applications.

**IT 639 Network Management (3)** The course is intended to provide graduate students in technology programs with a conceptual background and initial experience in computer network installation and management. The course will emphasize the nature and structure of both local area networks and wide area networks involving a variety of computer platforms and operating systems. Students will develop an understanding of how to work with networking hardware and software, and to plan, select, install, manage, and maintain computer-based telecommunications networks including configuring and customizing the operating systems of computers and computer networks in various settings. Intermediate level - not an introductory level course. Offered fall.

**IT 644 Advanced Desktop Publishing (3)** This course is based on using concepts from visual literacy and information design in print media. Typography, standards for digital publishing, the internet’s impact on print and other topics will be covered. The class is project based, and class time will be divided between project development and discussion. Advanced level. Prerequisite: Permission of the ICT Dept. Offered fall.

**IT 648 Principles of Performance Technology (3)** The purpose of the seminar is to develop an understanding of new ways of doing business by encouraging professionals to approach their work with broader, multi-disciplinary perspectives. Students will be exposed to work in performance analysis, information support, knowledge management, appraisal and other important themes and interventions. Offered fall.

**IT 649 Advanced Web Page Development (3)** The course is intended to provide students with practical experience in web page design and development. The course will emphasize the understanding of the extensible hypertext markup language, CSS and WYSIWYG editors, to create web sites. Students will manipulate graphics to achieve professional level results to exploit the personal computer's ability to present information through the internet. Advanced level. Offered spring.

**IT 650 Seminar in Performance and Communication Technology (3)** Seminar addressing topics and issues meeting the special needs of school systems, groups of teachers, or others interested in the study and application of technology for performance improvement.

**IT 651 Systematic Design For Performance Improvement (3)** This is a course for educators interested in designing performance improvement systems, from classroom/lecture to individualized instruction. Students will explore the various components of the instructional design process including content analysis, sequencing, goal analysis and instructional strategies as they develop instructional sequences. Prerequisite: IT 635 recommended. Offered spring.

**IT 652 Computer Graphics (3)** Students will produce computer graphics and integrate them into various computer applications. Topics include producing graphics, storyboarding, animation, resolution, commercial graphics, and integration of graphics into print and the world wide web. Intermediate level - not an introductory course. Prerequisite: Permission of ICT Department. Offered fall.

**IT 653 Instructional Planning & Development Process (3)** This course involves students in practical training in instructional planning and development. Emphasis will be placed on understanding the relationship between planning and development theory and practice. The course will provide an opportunity for students to examine the planning process in the context of instructional environments.

**IT 654 Program Evaluation (3)** This course involves students in practical training in program evaluation. Topics will include audience identification, evaluation design, question formulation, data gathering, analysis, reporting and meta-evaluation. Prerequisite: IT 635 recommended.

**IT 655 Video Design & Production (3)** This course involves students in practical training in the use of video equipment for instructional applications. Students will study the theoretical rationale behind video design and utilization, as well as receive hands-on instruction in the use of video equipment. Offered summer.

**IT 656 Multimedia Production (3)** This course involves students in practical training in multimedia production. An emphasis is placed on the integration of a variety of delivery systems in the production of instructional products. Students will examine the use of a variety of media, including audio, video, text, and graphics to produce instructional multimedia products. Prerequisite: one technology course with approval of advisor; also recommended: IT 621 or IT 652. Advanced level. Offered spring.

**IT 657 Practicum in Technology (3)** This course provides students in the ICT program an opportunity to synthesize technology knowledge and skills. Each student works in a selected field setting to improve the use of technology. Working from an approved plan of action, the student works with field staff, maintains a log of activities and accomplishments, and submits a final report. Prerequisite: permission of instructor and at least 5 IT courses.

**IT 658 Needs Assessment (3)** This course will provide students with a look at the ideas and practices that should take place when decisions are first being made about instructional or program development. Students will focus on how they can use these concepts and skills in different work applications, from developing classes and preparing to implement State standards to analyzing organizations and institutions. In addition to presenting ideas and skills this course will provide an opportunity to analyze and practice them. Prerequisite: IT 654. Offered spring.
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IT 659 Technology Product Development (3) This course is designed to provide students with the opportunity to apply the skills and knowledge that they have acquired from other courses in the instructional technology program into one complete project. Working from an approved plan, students will produce an electronic web portfolio in Task Stream as well as a customized presentation portfolio created outside Task Stream. Class meetings will provide students the opportunity to share work in progress and elicit and provide feedback from their colleagues and the instructor. Taken in the final semester of coursework.

IT 661 Advanced Systematic Design (3) This course will assist educators in applying Instructional Design Principles to curriculum, units and lessons. The focus throughout the course will be on practical applications of Instructional Design in K–12 settings.

IT 666 Simulations and Games (3) This course is a seminar in simulations and games. The purpose of this course is for the students to acquire an understanding of the historical development of simulations and games and how they can (and have been) used. Students will apply their knowledge in creating a simulation or game, as well as developing and carrying out a research study on an appropriate topic. Along with the course projects, students will be expected to discuss assigned readings.

IT 667 Internship (3) This course emphasizes strategies for managing technology infrastructure, supporting training development and managing knowledge dissemination within organizations. In addition to regular class meetings, field work will be required. Prerequisite: At least 5 IT courses.

IT 668 Distance Education (3) This course will introduce students to the history, research, practice and potential of distance education. Current controversies and problems such as increasing drop-out rates, questions of course ownership, and lack of interaction will be discussed and solutions proposed in a hands-on manner making use of online computer conferencing. Offered spring (even years).

IT 669 Project Development (3) The purpose of this course is to provide students with the opportunity to apply the skills and knowledge that they have acquired from other courses in the instructional technology program into one complete project. Working from an approved plan, students will produce a project specific to their needs. Class meetings will provide students the opportunity to share work in progress and elicit and provide feedback from their colleagues and the instructor. Taken in the final semester of coursework.

SPED 505 Introduction to Special Education (3) Provides an overview of the educational, psychological and social needs of learners with disabilities and gifted/talented students; discusses the impact of special education law on the public school program; provides background for designing appropriate interventions for students with a variety of special learning needs; this course may be applied to the prerequisite course requirement in the MSED Special Education program. Offered summer, fall and spring.

SPED 595S Special Topics (1–6) Workshops, seminars and/or institutes designed to meet needs of teachers, or others interested in initial graduate-level study in the field of special education. Offerings available upon announcement by the School of Education and Professional Studies. Credit earned may be applied, under advisement, as electives in Master of Science in Education/Master of Science in Teaching degree programs.

SPED 601 Characteristics of Learners with Mild/Moderate Disabilities (6) Considers the characteristics of learners with mild/moderate disabilities, including those with learning disabilities, attention-deficit/hyperactivity disorders, mental retardation and emotional behavioral disorders; identifies the commonalities and differences among these disabilities; addresses the philosophy of service to such learners. Offered fall.

SPED 607 Educational Research: Critical Issues in Special Education (3) This course will examine foundational research principles and classic and contemporary issues in special education. The principles and methods of qualitative and quantitative empirical research will be coordinated with an active investigation of research studies focused on special educational issues. Prerequisites: An introductory course in special education or permission of instructor. Offered spring.

SPED 609 Field Experience I (1) This experience will provide preservice special education teachers the opportunity to observe, participate, and reflect upon procedures and activities in special education programs in the public schools. Observation of classroom organization, models of service delivery, student strengths and weaknesses, instructional techniques, and behavior management strategies will be conducted. A philosophy of service to students with disabilities will be developed. Offered fall.

SPED 612 Technology in Special Education (3) This is a survey of the varied applications of recent technology, focusing on computer-based technology, in the field of special education. Students will work with hardware and software that allow the integration of children with special learning needs into the regular educational program. In addition, they will gain a broad understanding of the variety of technologies designed to meet the special needs of individuals with disabilities. Prerequisites: SPED 505 or equivalent course. Offered fall and spring.

SPED 617 Diagnosis and Assessment of Educational Disabilities (3) Provides information regarding techniques for the assessment of special learning needs for individual learners; provides instruction and practice in observation, recording, charting, and curriculum-based assessment; includes experience in selecting, administering, scoring, and interpreting standardized tests; discusses use of formal and informal assessment data in preparing and monitoring Individualized Education Programs; addresses current issues and philosophy of assessment. Prerequisite or corequisite: SPED 601. Offered fall and spring.

SPED 624 Communication and Early Literacy in Young Children with Disabilities (3) This course considers communication and emergent literacy skills in children (birth to Grade 2) from a developmental perspective; addresses the role of parents as the child's first language teachers; develops skills for diagnosing and remediating delays in language acquisition in young children with a variety of disabilities. Offered spring.

SPED 644 Strategies for Teaching Elementary Students with Learning/Behavioral Disabilities (3) Discusses selection, development and implementation of appropriate teaching strategies for use with elementary students with mild/moderate disabilities; includes developmental, remedial and compensatory strategies for use in instruction and management, modifications to materials, teaching approaches, and the physical environment, and the use of on-going evaluation procedures for monitoring student progress; develops competencies in the formulation of Individualized Education Programs. A multidisciplinary approach to education will be stressed. Prerequisites: SPED 601, SPED 637. Offered spring.

SPED 647 Strategies for Teaching Secondary Students with Learning/Behavioral Disabilities (3) Discusses selection, development and implementation of appropriate teaching strategies for use
with secondary students with mild/moderate disabilities; includes developmental, remedial and compensatory strategies for use in instruction and management, modifications to materials, teaching approaches, and the physical environment, and the use of on-going evaluation procedures for monitoring student progress; develops competencies in the formulation of Individualized Education Program; discusses life skills curricula and vocational education, as well as transition from school to community. A multidisciplinary approach to education will be stressed. Prerequisites: SPED 601, SPED 637. Offered spring.

**SPED 648 Strategies for Early Childhood Special Education (3)** Identifies the learning and behavioral needs of pre-school children with disabilities; considers the philosophical issues involved in providing services in the least restrictive environment; develops competencies in working with multidisciplinary teams to develop Individual Family Service Plans; discusses the selection, development, and implementation of teaching strategies for use with pre-school children with disabilities; discusses procedures for monitoring student progress and communicating that progress to parents. Prerequisites: SPED 601, SPED 637. Offered spring.

**SPED 649 Field Experience II (1)** This course will provide pre-service special education teachers the opportunity to acquire experience in planning and conducting instruction with various groups of students with diverse learning needs to meet their academic and/or social needs. This experience will also include design and use of assessment techniques for evaluating student progress. Prerequisites: SPED 601, SPED 637. Offered spring.

**SPED 650 Collaborative Consultation with Professionals and Parents (3)** Explore and develop competencies needed to work in cooperation with other special educators, general educators and parents, as well as support personnel, with the goal of effectively maintaining learners with mild/moderate disabilities in general classroom settings; includes the skills of communication, consultation, conflict resolution, sharing of assessment results, conduct of conferences and processes for collaborative development of Individualized Education Programs. Prerequisites: SPED 601, SPED 637. Offered summer and fall.

**SPED 669 Practicum (3–6)** Provides experience in the application of techniques for evaluation and instructional programming for learners with mild/moderate learning and behavioral disabilities; work with students shall include educational assessment, implementation of Individualized Education Programs, and planning for instructional activities designed to meet identified student needs. Prerequisites: Completion of all course requirements for the MSED Special Education. Offered summer (for 6 credits only), fall and spring.

**SPED 670 Culminating Experience (1)** This culminating activity includes the compilation of a portfolio including samples of work completed during the program. This process is designed to allow students and instructors to reflect on the experiences in the program and their growth as a result of their experiences. Students receive specific instructions on the assembly of the portfolio during their first semester. Offered summer, fall and spring.

**SPED 695S Special Topics (1-6)** Workshops, seminars and/or institutes designed to meet needs of teachers, or others interested in initial graduate-level study in the field of special education. Offerings available upon announcement by the School of Education and Professional Studies. Credit earned may be applied, under advisement, as electives in Master of Science in Education/Master of Science in Teaching degree programs. Offered summer, fall and spring.