

Graduate Education Courses

GED 501 – @Sem: Teaching Science in Secondary School (3) Integration of the history and philosophy of science and science curricula.

GED 502 – @Issues in Science/Technology/Society (3) This course will examine how STS applies to teaching science in today's classroom. STS defines scientifically and technologically literate individuals as those who understand how science, technology, and society influence one another, and use this understanding in their every day decision making.

GED 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, discipline, liability and teacher rights and responsibilities.

GED 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 the teacher's ability to take intellectual risk in making pedagogical and/or curricula decisions. As warranted.

GED 505 – @Topics in Mathematics for Elementary Teachers (3) This course is designed to improve mathematical preparation of elementary teachers. 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 the teachers and develop their confidence in doing and teaching mathematics.

GED 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. Summer.

GED 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 PK-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. Spring, odd years.

GED 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.

GED 513 – Comparative Cultures In Education (3) This seminar course investigates the relationship between various learning styles in selected societies throughout the world ranging from non-literate tribal to technologically advanced societies, with the course focus on individual research projects.

GED 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. Fall, odd years.

GED 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.

GED 516 – @Diversity & Advocacy in Education (3) The course is designed to help increase education students' awareness of cultural diversity and its relationship to advocacy in education. Upon completion of this course students will see themselves as advocates—utilizing equity pedagogy and prejudice reduction strategies—committed to developing school cultures that are socially just for all.

GED 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). Summer, Fall and Spring.

GED 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 and winter only.

GED 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. Summer (odd years), Fall and Spring.

GED 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. As warranted.

GED 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 volume/rates, and land forms will be examined. The course will be taught in a Wilderness area of the Adirondack Park. The class will be limited to 12 students. Permission of the instructor is required for acceptance into this course. Summer.

GED 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 also will consider related curricular issues outlined in the NYS and 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. Fall.

GED 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. As warranted.

GED 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. Summer.

GED 545 – @Teaching the English Language Learner in the Mainstream Classroom (3) This course provides K-12 educators learning and teaching strategies to enhance lesson development and effective instructional practices in order to foster English language development and ensure the English language learner success in the mainstream classrooms.

GED 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. Summer, Fall and Spring.

GED 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 databases, and examining instructional uses of power point and electronic communication. Summer, Spring and Fall.

GED 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 English Language Arts (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. MST students only. Summer. Corequisites: GRED 530 and GRED 600.

GED 552 – The 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 focuses 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, ancestralism, 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 heritages of both American and Vietnamese participants; and discussing the legacies or consequences the war has had on shaping contemporary issues are the foundations for this course. Prerequisite: Written permission of the instructor. Winterim.

GED 555 – @Classroom Management/Leadership: Middle/Secondary School (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. Secondary Students only.

GED 556 – @Reading in Middle/Secondary School (3) Explores the skills, strategies, and diverse text structures for reading across the disciplines. Application of teaching methods in the Secondary Education curriculum to support reading development of native English speakers and students who are English language learners. Includes practicum experience as needed to meet program requirements. Spring and Summer.

GED 557 – @Writing in the Middle and Secondary School (3) Explores the skills, strategies, and diverse text structures for writing across the disciplines. Application of teaching methods in the Secondary Education curriculum to support writing development of native English speakers and students who are

English language learners. Includes practicum experience as needed to meet program requirements. Fall and Summer.

GED 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. Summer, Fall and Spring.

GED 559 – @Literacy II: Methods - Childhood (3) This course is designed to help preservice 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. Fall and Spring.

GED 565 – @Elementary Mathematics: Content and Methods (3) Teaching mathematics effectively at the elementary level requires much more than the ability to carry out four arithmetical operations. The teacher must have 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 teacher candidates develop self-confidence in teaching mathematics at the elementary level through exploring various strategies and models for teaching that reflect current New York State and National standards. Fall and Spring.

GED 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. Fall and Spring.

GED 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. Summer, Fall, and Spring.

GED 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 Standards in Mathematics and the NCTM Standards. This will include how to integrate mathematics with other disciplines. Students will concurrently take GRED 578. Summer.

GED 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 in Mathematics and the NCTM Standards. Students will concurrently take GRED 579. Fall.

GED 571 – @Science Education Instruction in Secondary Schools (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 developed in GRED 672. Prerequisite: GRED 672. MST students only. Fall.

GRED 574 – Navajo Cultural Exchange Program (3) The Navajo Cultural Exchange Program is a three-week seminar-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, Havasupai, 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. 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 Curriculum & Instruction international students only. Fall.

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

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

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. MST students only. Prerequisite: GRED 550. Corequisites GRED 549, 584, 588, 589, & SPED 505. Fall.

GRED 583 – @The Development of Writing I (2) This course approaches Western academic writing as a cultural activity with traditional expectations that can be better understood through comparative analysis and practice. The course will offer a supportive environment in which students can work to improve their writing in English and their ability to meet the requirements of Western academic writing. Coursework will draw from the writing assignments in the students’ other graduate courses.

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, visual 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, construction 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. Corequisites GRED 549, 582 588, 589, & SPED 505. MST students only. Fall .

GRED 586 – @Practicum II (3) This practicum is designed to have students focus on “making systematic observations” that helps 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 Curriculum & Instruction international students only. 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, 607, 634 or student teaching.

GRED 588 – @Practicum 1: Teaching English Language Arts Secondary School (2) 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 part of the teaching and learning community. 50 clock hours of field-based experience required for certification. Corequisites: GRED 549, 582, 584, 589, & SPED 505. MST students only. Prerequisite: GRED 550. Fall.

GRED 589 – @Practicum 2: Teaching English Language Arts Secondary School (2) Students will observe, tutor, and teach in Secondary English Language Arts classrooms, grades 7-12. At least three consecutive days per week are allotted so that students have ample opportunity to become part of the teaching and learning community. 50 clock hours of field-based experience required for certification. Prerequisites: GRED 550 Corequisites: GRED 549, 582, 584, 588, & SPED 505. MST students only. Fall.

GRED 590 – @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 of the content topic for middle and secondary school learning/teaching in social studies. Permission of instructor or advisor required for undergraduate BA students. May be offered as a travel course.

GRED 593 – @The Development of Writing II (2) This course approaches Western academic writing as a cultural activity with traditional expectations that can be better understood through comparative analysis and practice. The course will offer a supportive environment in which students can work to improve their writing in English and their ability to meet the requirements of Western academic writing.

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 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. As warranted.

GRED 603 – Seminar: Teaching Science 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.

Summer and Fall.

GRE 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 secondary 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: GRE 681 & 688. Summer.

GRE 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. Summer, Fall and Spring.

GRE 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. Fall, as warranted.

GRE 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: GRE 672. MST Secondary Science students only. Summer.

GRE 613 – Teaching Internship, Grades 1-3 (6) This course provides the teacher candidate 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 teacher candidate'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. Corequisites: GRE 676 & 696. MST Childhood students only.

GRE 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. Each educational professional's area of content will be studied and applied for the development of appropriate curriculum and evaluation. Summer and Fall.

GRE 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 in 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: GRE 660.

GRE 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. As warranted..

GRE 635 – Educational Research in Curriculum & Instruction (3) This course is designed to meet the needs of Educational Professionals. 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. Summer, Fall and Spring.

GRE 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. Spring, even years.

GRE 664 – Practicum in Childhood Education (1-12) 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. Fall and Spring.

GRE 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 Curriculum & Instruction Korean international students only. Fall.

GRE 667 – Topics and Research in Mathematics Education (3) Designed as a capstone course for the secondary mathematics education Master's 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. Summer.

GRE 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.

GRE 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. Fall and Spring.

GRE 670A – Culminating Experience (Project) (0-3) 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 draw from the student's graduate program. Prerequisite: Full admission in an MSED or MST degree program. Graded S*/U* only.

GRE 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. This course is taken in conjunction with Student Teaching. Spring.

GED 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. Summer.

GED 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 (<http://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 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. Fall.

GED 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.

GED 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.

GED 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. Corequisites: MST Childhood: GED 613 & 696; MST Secondary Mathematics and Social Studies: GED 694 & 697; MST Secondary English and Science: GED 692 & 697.

GED 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 students only. Summer and Fall.

GED 681 – Social Studies Curricula in Middle/Secondary School (3) Introduction to the social studies curricula 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 definition, 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. Summer.

GED 682 – Research in Social Studies Education (3) Review of selected research in middle and secondary school social studies education. Fall.

GED 684 – Secondary Social Studies Content Portfolio (1) In this course students prepare a portfolio designed to allow them to demonstrate their content knowledge of social studies as aligned with the National Council for the Social Studies (NCSS) ten thematic standards. In addition, a reflective essay for each standard is required in which students discuss how they integrated this content knowledge into their student teaching. Prerequisite: GED 681. Corequisites: GED 688 & 689. MST Soc Studies 7-12 5-6 Ext majors only.

GED 687 – Action Research (3) With approval from the instructor, an action research topic will be selected by the student that is directly related to his/her content area and classroom setting. This is a field-based course so students will be conducting action research in their own schools and classrooms. A written paper and presentation will be required for all students. A copy of the action research paper will be maintained in Crumb Library. Fall, Spring and Summer.

GED 688 – Social Studies Instruction in Middle/Secondary School (2) Introduction to methods and materials of instruction and evaluation in social studies in the middle and secondary schools. Analyses 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 - GED 681. Corequisite: GED 684 & 689. Fall.

GED 689 – Practicum in Middle/Secondary School Social Studies Instruction (4) Students will observe and instruct social studies in the middle and secondary school. Prerequisites: permission of the instructor. Corequisite: GED 688. Fall.

GED 692 – Student Teaching: Junior High School 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. Corequisites: GED 676 & 697. MST students only.

GED 693 – Supervised Clinical Experience/Student Teaching, Grades 9-12 (6) This course will consist of a half semester of field experience in a public school setting. Students will be assigned to a grade 9-12 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 evaluating pupil performance. Corequisite GED 676 & 692. MST students only.

GED 694 – Student Teaching in the Middle/Junior High School 5-9 (6) Half semester of student teaching in the student's certification program in grades 5, 6, 7, 8 and/or 9, under the guidance of a sponsor teacher and a college supervisor. Corequisites: GED 676 & 697. For MST & BA/MST secondary students only.

GED 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 as electives in Master of Science in Education/Master of Science in Teaching degree programs. For further information relative to special offerings, consult with the department chair or graduate adviser.

GRE 696 – Student Teaching: Childhood Education 4-6 (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. Corequisites: GRE 613 & 678. MST students only.

GRE 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. Corequisites: GRE 692 or 694, and GRE 676. For MST and BA/MST students only.

GRE 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. Summer, Fall and Spring.