SECONDARY EDUCATION

(845) 257-2850

Master of Science in Education
Adolescence Education (7-12)

Biology (031B), Chemistry (032B), Earth Science (Geology) (033B),
English (034B), French* (035B)*, Mathematics (037B), Spanish* (039B),
Social Studies (040B) * Please note the College will stop accepting admission to the following programs starting in fall 2019 (http://www.newpaltz.edu/adolescence-education/notice-of-program-suspension)

The Master of Science in Education (MSEd.) is a 30 credit graduate program designed with flexibility in mind. It allows initially certified teachers the opportunity to tailor the program to their interests. At its core, the MSEd. aims to deepen teachers' knowledge of subject content, of the theory and practice of teaching and learning, and of the diverse contexts of education. In a two-semester course, students develop skills in research-based inquiry focused on the classroom. This graduate program enables students to complete the curriculum requirement for professional certification in New York State.

Master of Arts in Teaching

Biology (101B), Chemistry (104B), Earth Science (102B), English (103B),
French* (105B), Mathematics (107B), Social Studies (109B), and
Spanish* (110B) * Please note the College will stop accepting admission to the following programs starting in fall 2019 (http://www.newpaltz.edu/adolescence-education/notice-of-program-suspension)

The Master of Arts in Teaching (MAT) is a 45-48 credit program designed specifically for college graduates holding an appropriate liberal arts degree in biology, chemistry, English, French, geology or earth science, history, mathematics, social studies or Spanish who have not had formal background in education and who wish to prepare for a teaching career in adolescence education grades 7-12.

Upon successful completion of the program, candidates will be recommended to the New York State Education Department for Initial/Professional Certification.

Graduate Programs in Secondary Education

- MSEd in Adolescent Education (7-12) (http://catalog.newpaltz.edu/graduate/education/secondary-education/msed-adolescence-education-7-12)
- MAT - Master of Arts in Teaching (http://catalog.newpaltz.edu/graduate/education/secondary-education/mat-master-arts-teaching)

SED507. Fieldwork I Second Language Education. 1 Credit.

Fieldwork and targeted observations toward the teaching and learning of English learners (ELs) at the elementary level. Roles consist of observer, assistant, and teacher for one-on-one, small group, and whole class instruction.

Restrictions:

- Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED509. Fieldwork II Second Language Education. 1 Credit.

Fieldwork and targeted observations toward the teaching and learning of English learners (ELs) at the secondary level. Roles consist of observer, assistant, and teacher for one-on-one, small group, and whole class instruction.

Restrictions:

- Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED525. Digital Literacies and Learning in Secondary Education. 1 Credit.

An introduction to issues and research related to digital literacies and learning in face-to-face and virtual environments. Students will examine relevant research and strategies for integrating digital tools and resources in secondary classrooms and in the professional work of teachers.

Restrictions:

- Must have the following level: Graduate

SED540. Graduate Foundations of Secondary Education Seminar . 1 Credit.

In a series of classroom activities, students will inquire into key curriculum issues in secondary education within the broader philosophical, psychological, social, and sociocognitive contexts of schools and schooling.

Restrictions:

- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed:Biology (101B)
  - Adolescence Ed: Earth Science (102A)
  - Adolescence Ed:Earth Science (102B)
  - Adolescence Ed: English (103A)
  - Adolescence Ed:English (103B)
  - Adolescence Ed: Chemistry (104A)
  - Adolescence Ed:Chemistry (104B)
  - Adolescence Ed: French (105A)
  - Adolescence Ed:French (105B)
  - Adolescence Ed:Mathematics (107A)
  - Adolescence Ed:Mathematics (107B)
  - Adolescence Ed: Social Studies (109A)
  - Adolescence Ed:Social Studies (109B)
  - Adolescence Ed: Spanish (110A)
  - Adolescence Ed:Spanish (110B)
  - Adolescence Ed: Biology (101A)
SED541. Constructing Scientific Conceptual Knowledge . 3 Credits.
A study of the nature of science and the ways students learn about science. Topics include students’ conceptions (and misconceptions) about natural phenomena and instructional strategies to promote meaningful learning, especially conceptual change.
Restrictions:
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed:Biology (031B)
  - Adolescence Ed: Chemistry (032A)
  - Adolescence Ed:Chemistry (032B)
  - Adolescence Ed: Earth Science (033A)
  - Adolescence Ed:Earth Science (033B)
  - Adolescence Ed: Biology (101A)
  - Adolescence Ed: Biology (101B)
  - Adolescence Ed: Earth Science (102A)
  - Adolescence Ed:Earth Science (102B)
  - BA/MAT Earth Science (102E)
  - Adolescence Ed:English (103B)
  - Adolescence Ed: Chemistry (104A)
  - Adolescence Ed:Chemistry (104B)
  - BA/MAT Chemistry (104C)
  - Chemistry (50CH)
  - Geology/Earth Science (51ES)
  - Adolescence Ed: Biology (031A)

SED542. Meaningful Problem Solving in Science . 3 Credits.
A study of how students solve science problems and how teachers can enhance the likelihood that their students will solve such problems meaningfully, i.e., by understanding the relevant concepts rather than by mechanically following a prescribed set of rules.
Restrictions:
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed:Biology (031B)
  - Adolescence Ed: Chemistry (032A)
  - Adolescence Ed:Chemistry (032B)
  - Adolescence Ed: Earth Science (033A)
  - Adolescence Ed:Earth Science (033B)
  - Adolescence Ed: Biology (101A)
  - Adolescence Ed: Biology (101B)
  - Adolescence Ed: Earth Science (102A)
  - Adolescence Ed:Earth Science (102B)
  - BA/MAT Earth Science (102E)
  - Adolescence Ed:English (103B)
  - Adolescence Ed: Chemistry (104A)
  - Adolescence Ed:Chemistry (104B)
  - BA/MAT Chemistry (104C)
  - Chemistry (50CH)
  - Geology/Earth Science (51ES)
  - Adolescence Ed: Biology (031A)

SED543. Science in the Secondary School . 3 Credits.
Science as a process of inquiry with examples from current research. Cultural implications of scientific and technological development and their effect upon the secondary school science curriculum. Course will also include a series of structured instructional experiences intended to further students’ first-hand knowledge of secondary schools and schooling.
Prerequisites:
- EDS 539 with a minimum grade of D- and EDS 730 with a minimum grade of D-
Restrictions:
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed:Biology (101B)
  - Adolescence Ed: Earth Science (102A)
  - Adolescence Ed:Earth Science (102B)
  - Geology/Earth Science (51ES)
  - Adolescence Ed: Chemistry (104A)
  - Adolescence Ed:Chemistry (104B)
  - BA/MAT Chemistry (104C)
  - Chemistry (50CH)
  - Adolescence Ed: Biology (101A)
  - BA/MAT Earth Science (102E)

SED545. Mathematics in the Secondary School . 3 Credits.
This course will provide methods and techniques for effective teaching of mathematics in secondary schools. It will help the pre-service teacher develop the knowledge, skills and attitudes necessary for successful mathematics teaching. Course will also include a series of structured instructional experiences intended to further students’ first-hand knowledge of secondary schooling.
Prerequisites:
- EDS 539 with a minimum grade of D- and EDS 730 with a minimum grade of D-
Restrictions:
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed:Mathematics (107B)
  - Adolescence Ed: Mathematics (107A)
SED546. Social Studies in the Secondary School . 3 Credits.
Students will analyze various methods of secondary school social studies instruction and will prepare several types of instructional strategies, both short and long term. Course will also include a series of structured instructional experiences intended to further students’ first-hand knowledge of secondary schools and schooling.

Prerequisites:
- EDS 539 with a minimum grade of D- and EDS 730 with a minimum grade of D- and EDS 549 with a minimum grade of D-

Restrictions:
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed: Social Studies (109B)
  - Adolescence Ed: Social Studies (109A)

SED547. Foreign Language in the Secondary School . 3 Credits.
Acquaints foreign language teachers with elements of organization, classroom management, lesson planning and teaching strategies appropriate to the needs and abilities of students in secondary foreign language classrooms. Students will be exposed to the best sources of information available to foreign language teachers as well as to traditional and new approaches in teaching.

Restrictions:
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed: French (105B)
  - Adolescence Ed: French (105A)
  - Adolescence Ed: French (105A)
  - Adolescence Ed: French (105B)
  - Adolescence Ed: Mathematics (107A)
  - Adolescence Ed: Mathematics (107B)
  - Adolescence Ed: Social Studies (109A)
  - Adolescence Ed: Social Studies (109B)
  - Adolescence Ed: Spanish (110A)
  - Adolescence Ed: Spanish (110B)
  - Adolescence Ed: Biology (031A)

SED548. Literacy Instruction in the Secondary School . 3 Credits.
Initiation, organization, and development of secondary literacy programs. Interpretation and use of reading and writing assessments (e.g., standardized tests, portfolios, informal assessment) with the goal of recognizing and addressing literacy difficulties. Selection of appropriate reading materials. Development of classroom libraries and literacy projects.

Prerequisites:
- EDS 372 with a minimum grade of D-

Restrictions:
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed: Biology (031B)
  - Adolescence Ed: Chemistry (032A)
  - Adolescence Ed: Chemistry (032B)
  - Adolescence Ed: Earth Science (033A)
  - Adolescence Ed: Earth Science (033B)
  - Adolescence Ed: English (034A)
  - Adolescence Ed: English (034B)
  - Adolescence Ed: French (035A)
  - Adolescence Ed: French (035B)
  - Adolescence Ed: Mathematics (037A)
  - Adolescence Ed: Mathematics (037B)
  - Adolescence Ed: Spanish (039A)
  - Adolescence Ed: Spanish (039B)
  - Adolescence Ed: Social Studies (040B)
  - Adolescence Ed: Biology (101A)
  - Adolescence Ed: Biology (101B)
  - Adolescence Ed: Earth Science (102A)
  - Adolescence Ed: Earth Science (102B)
  - Adolescence Ed: English (103A)
  - Adolescence Ed: English (103B)
  - Adolescence Ed: Chemistry (104A)
  - Adolescence Ed: Chemistry (104B)
  - Adolescence Ed: French (105A)
  - Adolescence Ed: French (105B)
SED549. Teaching Literacy Across the Disciplines 6-12. 3 Credits.
Examines strategies for developing literacy and thinking across the disciplines, focusing on text “comprehension” and its variety of guises. Topics include reading and writing processes related to the understanding of literary and expository texts, instructional and assessment strategies designed to improve text comprehension, developing integrated curricula, selection and evaluation of classroom materials.
Restrictions:
• Must have the following level: Graduate

SED550. Teaching Mathematics for All . 3 Credits.
Special instructional strategies and tactics for effective teaching of mathematics for all students.
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration):
  • Adolescence Ed:Mathematics (107B)
  • Adolescence Ed: Mathematics (107A)

SED551. Field Experience I . 1 Credit.
Students will immerse themselves in secondary school settings, cultures, and teaching-related activities. This includes interviewing, observing, and interacting with students, teachers, administrators and staff. COURSE FEE FOR WATERMARK.
Prerequisites:
• SED Fieldwork Form with a score of Y
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration):
  • Adolescence Ed:Biology (101B)
  • Adolescence Ed: Earth Science (102A)
  • Adolescence Ed: Earth Science (102B)
  • Adolescence Ed: English (103A)
  • Adolescence Ed: English (103B)
  • Adolescence Ed: Chemistry (104A)
  • Adolescence Ed: Chemistry (104B)
  • Adolescence Ed: French (105A)
  • Adolescence Ed: French (105B)
  • Adolescence Ed: Mathematics (107A)
  • Adolescence Ed: Mathematics (107B)
  • Adolescence Ed: Social Studies (109A)
  • Adolescence Ed: Social Studies (109B)
  • Adolescence Ed: Spanish (110A)
  • Adolescence Ed: Spanish (110B)
  • Adolescence Ed: Biology (101A)

SED552. Field Experience II . 1 Credit.
Students will immerse themselves in secondary school settings, cultures and direct discipline-related activities. This includes interviewing, observing, and interacting with students, discipline-specific teachers, administrators and staff. Co-requisite with a discipline-specific methods course (SED370, SED371, SED373, SED374, SED375, SED381, SED391).
Prerequisites:
• SED 551 and SED 370 with a minimum grade of D-
SED553. Field Experience III. 1 Credit.
Students will immerse themselves in particular secondary school settings with the purpose of understanding the school culture in which they will be student teaching. This will involve interviewing, observing, and interacting with students, teachers, administrators and staff in a broad range of "normal" school-related activities. Co-requisite with a discipline-specific student teaching course (SED404, SED405).

Prerequisites:
• SED 552 and SED 604 and SED 605 and SED 606

Restrictions:
• Must have the following field(s) of study (major, minor or concentration):
  • Adolescence Ed:Biology (101B)
  • Adolescence Ed:Eart Science (102A)
  • Adolescence Ed:Earth Science (102B)
  • BA/MAT Earth Science (102E)
  • Adolescence Ed: English (103A)
  • Adolescence Ed:English (103B)
  • Adolescence Ed: Chemistry (104A)
  • Adolescence Ed:Chemistry (104B)
  • BA/MAT Chemistry (104C)
  • Adolescence Ed: French (105A)
  • Adolescence Ed:French (105B)
  • Adolescence Ed: Mathematics (107A)
  • Adolescence Ed:Mathematics (107B)
  • Adolescence Ed: Social Studies (109A)
  • Adolescence Ed:Social Studies (109B)
  • Adolescence Ed: Spanish (110A)
  • Adolescence Ed:Spanish (110B)
  • Chemistry (50CH)
  • Geology/Eart Science (51ES)
  • Adolescence Ed: Biology (101A)

SED554. HVWP Invitational Institute I: Teachers as Writers. 3 Credits.
Engage in personal and professional writing while developing skills as a writing teacher. Learn how to model writing and other research-proven teaching strategies. Work with a Hudson Valley Writing Project coach to design a professional development workshop based on what works in your classroom. For application, go to http://www.newpaltz.edu/hvwp/

SED555. HVWP Invitational Institute II: Teachers as Learners. 3 Credits.
Deepen understanding of writing instruction, writing assessment, digital learning environments, and professional development leadership. Work with Hudson Valley Writing Project colleagues to plan and lead a writing workshop for teachers, student writers, and their families.

Prerequisites:
• SED 554 with a minimum grade of D-

SED556. Storytelling, Folklore and the English Language Arts Curriculum. 3 Credits.
Explores the central role of oral narrative as a learning tool for diverse cultures throughout the centuries. Students will experience and research stories from a wide range of genre and examine the potential of story to foster community and develop critical literacy skills in K-12 classrooms.

Restrictions:
• Must have the following level: Graduate

SED557. Computers in Secondary School Mathematics Education. 3 Credits.
Study the various ways of analyzing mathematics software, teaching programming and developing applications of the computer as it relates to the NYS Mathematics curriculum.

Restrictions:
• Must have the following level: Graduate
  • Must have the following field(s) of study (major, minor or concentration):
    • Adolescence Ed:Biology (031B)
    • Adolescence Ed: Chemistry (032A)
    • Adolescence Ed:Chemistry (032B)
    • Adolescence Ed: Earth Science (033A)
    • Adolescence Ed:Earth Science (033B)
    • Adolescence Ed: English (034A)
    • Adolescence Ed: English (034B)
    • Adolescence Ed: French (035A)
    • Adolescence Ed: French (035B)
    • Adolescence Ed: Mathematics (037A)
    • Adolescence Ed: Mathematics (037B)
    • Adolescence Ed: Spanish (039A)
    • Adolescence Ed: Spanish (039B)
    • Adolescence Ed: Social Studies (040B)
    • Adolescence Ed: Biology (101A)
    • Adolescence Ed: Biology (101B)
    • Adolescence Ed: Earth Science (102A)
    • Adolescence Ed: Earth Science (102B)
    • Adolescence Ed: English (103A)
    • Adolescence Ed: English (103B)
    • Adolescence Ed: Chemistry (104A)
    • Adolescence Ed: Chemistry (104B)
    • Adolescence Ed: French (105A)
    • Adolescence Ed: French (105B)
    • Adolescence Ed: Mathematics (107A)
    • Adolescence Ed: Mathematics (107B)
    • Adolescence Ed: Social Studies (109A)
    • Adolescence Ed: Social Studies (109B)
    • Adolescence Ed: Spanish (110A)
    • Adolescence Ed: Spanish (110B)
    • Adolescence Ed: Biology (031A)
**SED558. Dealing with Diversity in the Foreign Language Classroom . 3 Credits.**
Deals with diversity and its scope and impact in the foreign language classroom. Participants will be helped to define diversity and multiculturalism and its place within the foreign language classroom. Understanding diversity, teaching diversity, confronting issues of diversity, and lesson planning to promote diversity and student involvement will be the focus of the course.

**Restrictions:**
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed:French (035B)
  - Adolescence Ed: Spanish (039A)
  - Adolescence Ed:Spanish (110B)
  - Adolescence Ed: French (105A)
  - Adolescence Ed:French (105B)
  - Adolescence Ed: Spanish (110A)
  - Adolescence Ed: French (035A)
  - Adolescence Ed:Spanish (039B)

**SED559. Problem Solving for Mathematics Teachers . 3 Credits.**
Problem solving is a major focus of the current upper elementary and secondary mathematics curricula. A study and investigation of methods for solving problems in mathematics, and teaching these problem solving skills to our students.

**Restrictions:**
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed:Mathematics (107B)
  - Adolescence Ed: Mathematics (107A)
  - Adolescence Ed: Mathematics (037A)
  - Adolescence Ed:Mathematics (037B)

**SED560. Technology in the Classroom . 3 Credits.**
Designed to introduce students to the microcomputer and related technologies and how they may be used to support teaching and learning. Students will learn how to integrate the microcomputer and related technologies to achieve curriculum goals.

**Restrictions:**
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Second Language Education (065)
  - Adolescence Ed: Biology (101A)
  - Adolescence Ed:Biology (101B)
  - Adolescence Ed: Earth Science (102A)
  - Adolescence Ed:Earth Science (102B)
  - Adolescence Ed: English (103A)
  - Adolescence Ed:English (103B)
  - Adolescence Ed: Chemistry (104A)
  - Adolescence Ed:Chemistry (104B)
  - Adolescence Ed: French (105A)
  - Adolescence Ed:French (105B)
  - Adolescence Ed: Mathematics (107A)
  - Adolescence Ed:Mathematics (107B)
  - Adolescence Ed: Social Studies (109A)
  - Adolescence Ed:Social Studies (109B)
  - Adolescence Ed: Spanish (110A)
  - Adolescence Ed:Spanish (110B)
  - Literacy Education: 5 - 12 (030B)

**SED564. Reconstructing Social Studies Using Diverse Perspectives. 3 Credits.**
While learning diverse perspectives on the history and teaching of social studies, students will reflect on their practices by asking: Toward what end should I teach social studies so that all students learn better?.

**Restrictions:**
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed:Social Studies (109B)
  - Adolescence Ed: Social Studies (109A)
  - Adolescence Ed: Spanish (110A)
  - Adolescence Ed:Spanish (110B)
  - Literacy Education: 5 - 12 (030B)

**SED565. World History Institute. 3 Credits.**
Students will develop a conceptual understanding of the field of World History in order to make effective choices concerning content to be taught in a high school course.

**SED566. Education Across Borders:International Ideas and Experience. 3 Credits.**
Through interdisciplinary study of the policies, practices, histories, and guiding ideals of educational systems internationally, we will gain some understanding of other systems and also a broader perspective on our own.
SED567. HVWP Invitational Institute III: Teachers as Leaders. 3 Credits.
Participants deepen their understanding of leadership and professional development, considering purposeful and practical opportunities in an ever-shifting context of school reform. Work includes strategic planning, engagement, and evaluation of leadership in the teaching of writing. This class will be taught at an off-campus site.
Prerequisites:
• SED 554 with a minimum grade of D- and SED 555 with a minimum grade of D-

SED573. Teaching English as a New Language I. 3 Credits.
Examination of methods, materials, and assessment for teaching English as a new language at the elementary (P-6) level. Includes differentiation of instruction for learners of English as a new language at different proficiency levels. Focus on teaching language modalities (listening, speaking, reading, and writing), second language acquisition, and multicultural perspectives.
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED575. Teaching Literacy in English as a New Language. 3 Credits.
Examination of literacy skills, methods, and assessments, including reading enrichment and remediation, for teaching English to speakers of a new language and to English learners with disabilities at elementary and secondary levels. Includes study of phonetic and phonological awareness through reading instruction.
Prerequisites:
• SED 573 with a minimum grade of D-
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED576. Teaching English as a New Language II. 3 Credits.
Examination of methodologies, materials, and assessments used in teaching language and content (e.g., mathematics, social studies, and science) to learners of English as a new language, including those with disabilities. Focus on incorporating language modalities into 7-12 content instruction, as well as second language acquisition and multicultural perspectives.
Prerequisites:
• SED 573 with a minimum grade of D-
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED577. Applied Linguistics for Teachers of English as a New Language (ENL). 3 Credits.
Examination of the structure of the English language, including discussion and evaluation of techniques for teaching the phonological, morphological, and syntactical components of English to learners of English as a new language.
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED578. Second Language Learning . 3 Credits.
Discussion of the psychological, sociological and anthropological aspects of language. Provides an overview of bilingualism and second language acquisition theory and research as related to the teaching and learning of other languages. Co-requisite: SED575, SED576.
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED579. Practicum in Teaching English as a Second Language . 6 Credits.
A college-supervised experience in the Teaching of English to Speakers of Other Languages required of all students in the TESOL concentration during their final semester. A research project based on the practicum experience will be required.
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED580. English Grammar for Teachers of English as a New Language (ENL). 3 Credits.
Provides candidates with a systematic understanding of English grammar and its implications for writing, reading, and oral communication. This course focuses on the role of grammar and syntax in classroom instruction, including a review of techniques and materials for teaching English grammar to learners of English as a new language.
Prerequisites:
• SED 577 with a minimum grade of D-
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED585. Materials Development for the Foreign Language Classroom. 3 Credits.
Focuses on the development of effective foreign language instructional materials in light of SLA theoretical views, state and national standards, findings in the areas of cognition, individual learner styles, multiple intelligences, differentiation, and teacher/learner beliefs.
Restrictions:
• Must have the following level: Graduate
SED591. Inquiry Learning in Science Education. 3 Credits.
Student develop critical abilities to explore, plan and implement inquiry-based educational practices, and demonstrate how inquiry questioning and problem-based/project-based lessons develop critical thinking and process skills during the creation of student-oriented scientific investigative design.
Restrictions:
• Must have the following level: Graduate

SED593. Secondary Ed Selected Topic. 12 Credits.
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration):
  • Adolescence Ed: Chemistry (032B)
  • Adolescence Ed: Earth Science (033B)
  • Adolescence Ed: English (034B)
  • Adolescence Ed: French (035B)
  • Adolescence Ed: Mathematics (037B)
  • Adolescence Ed: Social Studies (040B)
  • Adolescence Ed: Biology (101B)
  • Adolescence Ed: Earth Science (102B)
  • BA/MAT Earth Science (102E)
  • Adolescence Ed: English (103B)
  • Adolescence Ed: Chemistry (104B)
  • BA/MAT Chemistry (104C)
  • Adolescence Ed: French (105B)
  • Adolescence Ed: Mathematics (107B)
  • Adolescence Ed: Social Studies (109B)
  • Adolescence Ed: Spanish (110B)
  • Chemistry (50CH)
  • Geology/Earth Science (51ES)
  • Adolescence Ed: Biology (031B)

SED595. Indep Study Secondary Ed. 1-12 Credits.
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration):
  • Adolescence Ed: Biology (031B)
  • Adolescence Ed: Chemistry (032A)
  • Adolescence Ed: Chemistry (032B)
  • Adolescence Ed: Earth Science (033A)
  • Adolescence Ed: Earth Science (033B)
  • Adolescence Ed: English (034A)
  • Adolescence Ed: English (034B)
  • Adolescence Ed: French (035A)
  • Adolescence Ed: French (035B)
  • Adolescence Ed: Mathematics (037A)
  • Adolescence Ed: Mathematics (037B)
  • Adolescence Ed: Spanish (039A)
  • Adolescence Ed: Spanish (039B)
  • Adolescence Ed: Social Studies (040B)
  • Adolescence Ed: Biology (101A)
  • Adolescence Ed: Biology (101B)
  • Adolescence Ed: Earth Science (102A)
  • Adolescence Ed: Earth Science (102B)
  • BA/MAT Earth Science (102E)
  • Adolescence Ed: English (103A)
  • Adolescence Ed: English (103B)
  • Adolescence Ed: Chemistry (104A)
  • Adolescence Ed: Chemistry (104B)
  • BA/MAT Chemistry (104C)
  • Adolescence Ed: French (105A)
  • Adolescence Ed: French (105B)
  • Adolescence Ed: Mathematics (107A)
  • Adolescence Ed: Mathematics (107B)
  • Adolescence Ed: Social Studies (109A)
  • Adolescence Ed: Social Studies (109B)
  • Adolescence Ed: Spanish (110A)
  • Adolescence Ed: Spanish (110B)
  • Chemistry (50CH)
  • Geology/Earth Science (51ES)
  • Adolescence Ed: Biology (031A)

SED604. Practicum in Secondary Ed 7-9. 6 Credits.
PRACTICUM EXPERIENCE IN SECONDARY ED 7-9.

SED605. Practicum in Secondary Ed 10-12. 6 Credits.
A full-time experience in teaching the subject in grades 10-12.
Restrictions:
• Must have the following level: Graduate
SED606. Practicum Seminar. 1 Credit.
All secondary education students must take this seminar while student teaching. The goals of the seminar are to provide practical support for candidates and time to reflect on their experiences so as to enhance teaching and learning in schools.

Restrictions:
• Must have the following level: Graduate

SED607. Practicum Seminar: Second Language Education. 1 Credit.
Sec Lang Ed Students must take this seminar while student teaching. The goals are to provide practical support for candidates and time to reflect on their experiences so as to enhance teaching and learning in schools.

Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration): Second Language Education (065)

SED701. Inquiry into Teaching, Learning, and School: Part I. 3 Credits.
First course in a two-semester sequence in which candidates read, discuss, debate, and write about educational research and its intersection with teaching and learning. An "action research" investigation will be designed and carried out during the second semester.

Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration):
  • Childhood Education 1-6 (013C)
  • Adolescence Ed: Biology (031A)
  • Adolescence Ed: Biology (031B)
  • Adolescence Ed: Chemistry (032A)
  • Adolescence Ed: Chemistry (032B)
  • Adolescence Ed: Earth Science (033A)
  • Adolescence Ed: Earth Science (033B)
  • Adolescence Ed: English (034A)
  • Adolescence Ed: English (034B)
  • Adolescence Ed: French (035A)
  • Adolescence Ed: French (035B)
  • Adolescence Ed: Mathematics (037A)
  • Adolescence Ed: Mathematics (037B)
  • Adolescence Ed: Spanish (039A)
  • Adolescence Ed: Spanish (039B)
  • Adolescence Ed: Social Studies (040B)
  • Economics (040E)
  • Geography (040G)
  • History (040H)
  • Political Science (040P)
  • Second Language Education (065)
  • Adolescence Ed: Biology (101A)
  • Adolescence Ed: Biology (101B)
  • Adolescence Ed: Earth Science (102A)
  • Adolescence Ed: Earth Science (102B)
  • Adolescence Ed: English (103A)
  • Adolescence Ed: English (103B)
  • Adolescence Ed: Chemistry (104A)
  • Adolescence Ed: Chemistry (104B)
  • Adolescence Ed: French (105A)
  • Adolescence Ed: French (105B)
  • Adolescence Ed: Mathematics (107A)
  • Adolescence Ed: Mathematics (107B)
  • Adolescence Ed: Social Studies (109A)
  • Adolescence Ed: Social Studies (109B)
  • Adolescence Ed: Spanish (110A)
  • Adolescence Ed: Spanish (110B)
  • Early Childhood: B-2 (13EC)
  • Reading/Literacy (13RL)
  • Sci
  • Tech
  • Engr & Math (STEM) (13ST)
  • Early Childhood Education (011A)
SED702. Inquiry into Teaching, Learning, and School: Part II Every Semester . 3 Credits.
Second course in a two-semester sequence in which candidates, under the guidance of the professor, carry out an empirical study designed in Inquiry into Teaching, Learning, and School: Part 1 (SED 701).
Prerequisites:
- SED 701 with a minimum grade of D-
Restrictions:
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Childhood Education 1-6 (013C)
  - Adolescence Ed: Biology (031A)
  - Adolescence Ed: Biology (031B)
  - Adolescence Ed: Chemistry (032A)
  - Adolescence Ed: Chemistry (032B)
  - Adolescence Ed: Earth Science (033A)
  - Adolescence Ed: Earth Science (033B)
  - Adolescence Ed: English (034A)
  - Adolescence Ed: English (034B)
  - Adolescence Ed: French (035A)
  - Adolescence Ed: French (035B)
  - Adolescence Ed: Mathematics (037A)
  - Adolescence Ed: Mathematics (037B)
  - Adolescence Ed: Spanish (039A)
  - Adolescence Ed: Spanish (039B)
  - Adolescence Ed: Social Studies (040B)
  - Economics (040E)
  - Geography (040G)
  - History (040H)
  - Political Science (040P)
  - Second Language Education (065)
  - Adolescence Ed: Biology (101A)
  - Adolescence Ed: Biology (101B)
  - Adolescence Ed: Earth Science (102A)
  - Adolescence Ed: Earth Science (102B)
  - Adolescence Ed: English (103A)
  - Adolescence Ed: English (103B)
  - Adolescence Ed: Chemistry (104A)
  - Adolescence Ed: Chemistry (104B)
  - Adolescence Ed: French (105A)
  - Adolescence Ed: French (105B)
  - Adolescence Ed: Mathematics (107A)
  - Adolescence Ed: Mathematics (107B)
  - Adolescence Ed: Social Studies (109A)
  - Adolescence Ed: Social Studies (109B)
  - Adolescence Ed: Spanish (110A)
  - Adolescence Ed: Spanish (110B)
  - Adolescence Ed: Biology (101A)

SED703. Curriculum: Designs for Literacy, Learning, and Assessment in Secondary Schools. 3 Credits.
Teacher candidates will read, discuss, debate, and write philosophies and practices related to curriculum assessment, and adolescent literacy. The co-requisite, Field Experience 1, permits candidates to observe and analyze curriculum, assessment, and literacy as it is enacted by local teachers and students.
Prerequisites:
- SED Fieldwork Form with a score of Y
Restrictions:
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed: Biology (101B)
  - Adolescence Ed: Earth Science (102A)
  - Adolescence Ed: Earth Science (102B)
  - Adolescence Ed: English (103A)
  - Adolescence Ed: English (103B)
  - Adolescence Ed: Chemistry (104A)
  - Adolescence Ed: Chemistry (104B)
  - Adolescence Ed: French (105B)
  - Adolescence Ed: Mathematics (107A)
  - Adolescence Ed: Mathematics (107B)
  - Adolescence Ed: Social Studies (109A)
  - Adolescence Ed: Social Studies (109B)
  - Adolescence Ed: Spanish (110A)
  - Adolescence Ed: Spanish (110B)
  - Adolescence Ed: Biology (101A)

SED712. Recent Research in Education . 3 Credits.
Current research methods and findings and their significance for education in the United States. Each student explores an intensive research program.
Restrictions:
- Must have the following level: Graduate

SED741. Teaching English in the Secondary School . 3 Credits.
Examines effective methods of secondary school English instruction in heterogeneous classrooms and helps the pre-service teacher develop the knowledge, skills and dispositions necessary for successful English teaching. Course will also include a series of structured instructional experiences intended to further students’ first-hand knowledge of secondary schools and schooling.
Prerequisites:
- SED 703 with a minimum grade of D-
Restrictions:
- Must have the following level: Graduate
- Must have the following field(s) of study (major, minor or concentration):
  - Adolescence Ed: English (103B)
  - Adolescence Ed: English (103A)
SED742. Teaching Dramatic Literature in the Secondary School . 3 Credits.
An examination of performance as a method of comprehension and engagement. Participants will learn to make dramatic literature accessible to all students as well as to make literature dramatic (e.g., readers' theatre, storytelling).
Restrictions:
• Must have the following level: Graduate

SED743. Teaching Writing and Thinking in the Secondary School. 3 Credits.
Examines writing as a constructive process and mode of learning. Topics include the development of writing abilities; creating classroom ecologies that support critical thinking and creativity; differentiating instruction in heterogeneous, multicultural classrooms; opening texts through writing and writing through texts; preparing students for high-stakes writing examinations; responding to and evaluating writing.
Restrictions:
• Must have the following level: Graduate

SED745. Teaching Literature in the Middle School Every Semester . 3 Credits.
Examines quality literature that appeals to young adults and focuses on teaching methods that support literary understanding. Topics include aesthetic and efferent reading processes; developing curriculum for heterogeneous, multicultural classrooms; using writing and the arts as tools for developing literary comprehension; assessment and evaluation of literature learning.
Restrictions:
• Must have the following level: Graduate

SED747. Teaching Geometry and Algebra in the Secondary School . 3 Credits.
From the study of geometry, criteria for identifying objectives for various subsets of the student body. Methods and materials to accomplish these goals.
Restrictions:
• Must have the following level: Graduate
  • Must have the following field(s) of study (major, minor or concentration):
    • Adolescence Ed:Mathematics (107B)
    • Adolescence Ed:Mathematics (037B)
    • Adolescence Ed: Mathematics (107A)
    • Adolescence Ed: Earth Science (033A)
    • Adolescence Ed: Mathematics (037A)

SED761. Instruction and Curriculum in Secondary Mathematics . 3 Credits.
Restrictions:
• Must have the following level: Graduate
  • Must have the following field(s) of study (major, minor or concentration):
    • Adolescence Ed:Earth Science (033B)
    • Adolescence Ed:Mathematics (107B)
    • Adolescence Ed:Mathematics (037B)
    • Adolescence Ed: Mathematics (107A)
    • Adolescence Ed: Earth Science (033A)
    • Adolescence Ed: Mathematics (037A)

SED748. Teaching Literature in the High School Spring . 3 Credits.
Students will examine and research quality literature appropriate for in-depth study at the high school level. Topics include pedagogies that support literary thinking; curriculum development for heterogeneous, multicultural classrooms; using writing, the arts, and various media to teach literature; assessing and grading literature learning; developing school-wide literature programs.
Restrictions:
• Must have the following level: Graduate
SED793. Secondary Ed Selected Topic. 3-12 Credits.  
Restrictions:
• Must have the following field(s) of study (major, minor or concentration):
  • Adolescence Ed: Biology (031B)
  • Adolescence Ed: Chemistry (032A)
  • Adolescence Ed: Chemistry (032B)
  • Adolescence Ed: Earth Science (033A)
  • Adolescence Ed: Earth Science (033B)
  • Adolescence Ed: English (034A)
  • Adolescence Ed: English (034B)
  • Adolescence Ed: French (035A)
  • Adolescence Ed: French (035B)
  • Adolescence Ed: Mathematics (037A)
  • Adolescence Ed: Mathematics (037B)
  • Adolescence Ed: Spanish (039A)
  • Adolescence Ed: Spanish (039B)
  • Adolescence Ed: Social Studies (040B)
  • Adolescence Ed: Biology (101A)
  • Adolescence Ed: Biology (101B)
  • Adolescence Ed: Earth Science (102A)
  • Adolescence Ed: Earth Science (102B)
  • BA/MAT Earth Science (102E)
  • Adolescence Ed: English (103A)
  • Adolescence Ed: English (103B)
  • Adolescence Ed: Chemistry (104A)
  • Adolescence Ed: Chemistry (104B)
  • BA/MAT Chemistry (104C)
  • Adolescence Ed: French (105A)
  • Adolescence Ed: French (105B)
  • Adolescence Ed: Mathematics (107A)
  • Adolescence Ed: Mathematics (107B)
  • Adolescence Ed: Social Studies (109A)
  • Adolescence Ed: Social Studies (109B)
  • Adolescence Ed: Spanish (110A)
  • Adolescence Ed: Spanish (110B)
  • Chemistry (50CH)
  • Geology/Earth Science (51ES)
  • Adolescence Ed: Biology (031A)

SED795. Indep Study Secondary Ed. 1-12 Credits.  
Restrictions:
• Must have the following level: Graduate
• Must have the following field(s) of study (major, minor or concentration):
  • Adolescence Ed: Biology (031B)
  • Adolescence Ed: Chemistry (032A)
  • Adolescence Ed: Chemistry (032B)
  • Adolescence Ed: Earth Science (033A)
  • Adolescence Ed: Earth Science (033B)
  • Adolescence Ed: English (034A)
  • Adolescence Ed: English (034B)
  • Adolescence Ed: French (035A)
  • Adolescence Ed: French (035B)
  • Adolescence Ed: Mathematics (037A)
  • Adolescence Ed: Mathematics (037B)
  • Adolescence Ed: Spanish (039A)
  • Adolescence Ed: Spanish (039B)
  • Adolescence Ed: Biology (101A)
  • Adolescence Ed: Biology (101B)
  • Adolescence Ed: Earth Science (102A)
  • Adolescence Ed: Earth Science (102B)
  • BA/MAT Earth Science (102E)
  • Adolescence Ed: English (103A)
  • Adolescence Ed: English (103B)
  • Adolescence Ed: Chemistry (104A)
  • Adolescence Ed: Chemistry (104B)
  • BA/MAT Chemistry (104C)
  • Adolescence Ed: French (105A)
  • Adolescence Ed: French (105B)
  • Adolescence Ed: Mathematics (107A)
  • Adolescence Ed: Mathematics (107B)
  • Adolescence Ed: Social Studies (109A)
  • Adolescence Ed: Social Studies (109B)
  • Adolescence Ed: Spanish (110A)
  • Adolescence Ed: Spanish (110B)
  • Chemistry (50CH)
  • Geology/Earth Science (51ES)
  • Adolescence Ed: Biology (031A)