

# **Science Education**

## **Advanced Certificate**

This program is designed for candidates who already have a bachelor's and a master's degree in Biology, Chemistry, Geology, or Physics and who seek New York State Certification in one of the following content areas: Biology, Chemistry, Earth Science, and Physics, Grades 7-12.

#### **ADMISSIONS REQUIREMENTS**

- Official transcripts from all post-secondary institutions attended.
  - Possess a bachelor's degree (or its equivalent) from an accredited college or university that meets New York State's requirements for a general education core in liberal arts and sciences
  - ➤ Have attained a minimum undergraduate grade point average of 3.0
- Possess an approved master's degree in an appropriate content area. Have completed a minimum of 36 credits in biology, chemistry, geology, or physics
  - Master's Grade Point Average of 3.0 or better
- Submit two (2) letters of recommendation
- A 500-word essay that explains interest in pursuing this area of study and future career plans
- Satisfy the content requirements for New York State initial certification
- Submit scores on the NYS Content Specialty Test (CST.)
- Participate in an interview
- Meet additional Departmental, divisional, and New York State requirements, if any
- If conditionally admitted, make up requirements starting in the first semester and finishing in no more than three consecutive semesters

## **CURRICULUM**

## The 24-credit certificate curriculum consists of two instructional areas:

I. Core Education Sequence (15 credits):		Credits
ESC 501	Psychological Foundations of Education	3
ESC 502	Historical Foundations of Education: A Multicultural Perspective	3
ESC 529/EDR 529/ESC 529	Language and Literacies Acquisition in Secondary Education	3
ESC 596	Student Teaching in the Middle and High School Grades	3
ESC 612	Seminar in Secondary Student Teaching	3
II. Methods, Curriculum, and Instruction (9 credits):		Credits
ESC 595*	Internship in Classroom Teaching	1-3
ESC 611	Teaching Internship Seminar in Secondary Education	3
And 3 additional credits to be selected in consultation with the Program Coordinator from the following courses:		Credits
ESC 767	The Museum as a Resource for Teaching Science	3
ESC 770	Methods of Teaching Science in Secondary Schools: Selected Topics	3
ESC 767: Or equivalent.		