# Master of Science in Secondary Science Teacher Education

# **Program Description**

The M.S. in Secondary Science Education is designed for teachers who have an Initial New York State Teaching Certificate in science. The M.S. degree consists of 30 graduate credits divided equally between advanced professional education courses and graduate courses in the traditional sciences.

### **Admission Requirements**

To be admitted to the M.S. in Secondary Science Education Program candidates must meet thefollowing criteria:

- Hold an undergraduate degree in science or science education with a minimum GPA of 3.0 or equivalent,
- Have a NYS Initial Certificate to teach secondary science.

# **Program of Study**

Candidates admitted to the M.S. in Secondary Science Education Program take 15 credits of SEYS 701 + level graduate education courses and 15 credits of graduate science courses in traditional science areas. Nine (9) of these graduate science credits must be in the candidate's science content area of initial certification. In addition, candidates must file a Program of Study Form, which must be up-dated each academic year of matriculation.

#### M.S Courses in Secondary Education

#### **Course Number Title Credits**

**Select one from: Educational Foundations 3** 

SEYS 701 A History of Ideas in Education

SEYS 702 The History of Education in the United States

SEYS 703 Philosophies of Education

SEYS 704 The Philosophy of Teaching

SEYS 705 School and Society

SEYS 706 Introduction to Comparative Education

SEYS 707 Major issues in Education

SEYS 720 The Education of Immigrant's Children in the United States

Select one from: Educational Psychology 3

SEYS 710 The Psychology of Adolescents

SEYS 717 Learning Theory in Education

SEYS 718 Classroom Management

SEYS 719 Understanding Group Behavior and Cultural Differences in Schools

**SEYS 738 The Teaching Process** 

SEYS 768 Measurement and Evaluation in Education.

Select one from: Curriculum & Methods Courses in Science Education 3

SEYS 753 Computer Applications in Science Education

SEYS 754 Curriculum Innovations in Science Education

SEYS 767.3 Workshop: Enhancing Inquiry in Science Instruction

#### **Educational Research 3**

SEYS 777 Research in Science Education [I] (\*\*\* Fall ONLY \*\*\*)

SEYS 778 Research in Science Education [II] (\*\*\* Spring ONLY \*\*\*)

# M.S. Courses in Science

This refers to graduate course work in Biology, Chemistry, Earth Science (Geology) and/or Physics undertaken by a candidate to fulfill his/her science content requirement. Candidates in the M.S. in Secondary Science Education must satisfy science content requirements that are determined with the science department adviser. Science content requirement refers to graduate science course work that a candidate undertakes in his/her field of certification. However, with written permission from his/her science adviser, a candidate may take up to six (6) graduate science coursework outside the certification area. Where possible, course work should incorporate understanding of the unifying concepts and processes in science, scientific processes and inquiry, science and its relationships to society, science and technology, and the history of science. A total of fifteen (15) graduate credits must be taken to satisfy the content requirement. At least nine of the graduate science credits taken should be in the candidates science content area of their initial certification.

To remain in the masters program, candidates are required to maintain a minimum GPA of 3.0. To obtain a Permanent/Professional New York State Teacher Certification, candidates must

successfully complete their degree requirements and meet all New York State regulations for the Permanent/Professional Teaching Certificate (see www.nysed.gov for further information about Permanent/Professional Certification)

### Advisers:

Dr. Stephen Farenga (Program Director)	Dr. Brian Murfin
Stephen.farenga@qc.cuny.edu	rian.murfin@qc.cuny.edu
(718) 997-5195	(18) 997-5066
Powdermaker Hall, Room 150V	Powdermaker Hall Room 135C