# Science Content Courses for Masters in Science Education Students

Candidates must take 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. Candidates must obtain approval from their science content adviser before taking graduate science courses.

# Earth Science (Advisor: Dr. Gregory O'Mullan):

Geol 501 (Earth Composition and Earth Processes); Geol 502 (Earth History and the Fossil Record); Geol 520 (Meteorology); Geol 521 (Oceanography); Geol 522 (Applied Geological Reasoning: Geology of NY State); Geol 552 (GLOBE Program and Environmental Research); Infrequently Scheduled: Geol 509 (Environmental Geology of the New York Metropolitan Region); Geol 510 (Coastal Geology); Geol 512 (Oceanography of New York and adjacent waters) Students with undergraduate Geology degrees will be expected to take our 700 level courses.

## **Biology (Advisor: Dr. Daniel Weinstein):**

All 500-, 600- and 700-level courses listed in the Graduate Bulletin in Biology.

## Chemistry (Advisor: Dr. Gopal Subramaniam):

Chem 650 (Biochemistry 1); Chem710 (Advanced Inorganic Chemistry); Chem770 (Chem. Thermo & Kinetics); Chem790.1 (Instrumental Methods in Chemistry); Chem750 (Advanced Organic Chemistry), Chem760 (Quantum Chemistry); Bioch710 (Biochemistry 2); Chem786 (Spectroscopic Methods), Bioch770 (Physical Biochemistry); Chem793 (Tutorial in Chemistry: ADVISOR APPROVAL); Chem795 (Advanced Research: ADVISOR APPROVAL).

Students who have not completed an undergraduate degree in chemistry and certified to teach a discipline other than chemistry can also take the following courses with the approval of the advisor: Chem501 (Modern concepts of Gen. Chem 1); Chem502 (Modern concepts of Gen. Chem 2); Chem503 (Special Topics in Chemistry).

#### Physics (Advisor: Dr. Lev Deych):

Phys 501 (Modern Aspects of Physics), Phys. 503 (Selected Topics in General Physics), Astr. 501 (Modern Aspects of Astronomy) and all 600-level courses listed in the Graduate Bulletin in Physics.

#### Science Education Advisers:

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