STEM Variant Policies

- Any student can, at his or her discretion, take a STEM variant course approved for his or her college.
- STEM variant courses must satisfy major requirements.
- Colleges can submit STEM variant courses in any or all of three areas of the Common Core: Life and Physical Sciences, Mathematics & Quantitative Reasoning, and the Scientific World.
- Colleges must insure that STEM variant courses are clearly coded in DegreeWorks and other university systems as meeting the appropriate Common Core requirements.
- STEM variant courses can be three or more credits and contact hours.
- STEM variant courses do not need to be submitted to the CUNY Common Core Course Review Committee and so do not need to have been explicitly assessed as meeting Common Core learning outcomes.
- Colleges will submit to the central Office of Academic Affairs a list of the courses they plan to offer as STEM variant courses within the Common Core. The submission will include information on the Common Core area(s) that each course fulfills and the major or degree requirement or requirements that each course satisfies.
- Colleges must have sufficient numbers of "regular" (non-STEM variant), approved courses available in each area of the Common Core to meet student demand before offering STEM variant courses.
- Colleges may submit STEM variant courses as satisfying more than one Common Core area. In such cases, students will choose which area they want the course to fulfill. Each college that has one or more STEM variant courses that can satisfy more than one area of the Common Core will decide what procedure a student needs to follow (if any) if the student originally enrolled in a STEM variant course to satisfy one area of the Common Core, but subsequently decides that s/he wants to use that course to satisfy a different area of the Common Core.
- Colleges cannot require students in particular programs to take STEM variant courses without explicit approval from the central Office of Academic Affairs. However, colleges can always recommend STEM variant courses to students in particular programs as simultaneously satisfying both Common Core and major requirements.

Course	Required for Major(s)	LPS SW MQR	Comments
BIOL 11. Introduction to College Biology. 3 lec., 3 lab. hr.; 4 cr.	FNES	LPS or SW	
BIOL 105. General Biology: Physiology and Cell Biology. 3 lec., 3 lab. hr.; 4 cr	BIOL ENSCI-BA FNES MATH NEUROSCI CSCI	LPS or SW	

BIOL 106. General Biology: Life-forms and Ecosystems. (formerly Biology 107) 3 lec., 3 lab. hr.; 4 cr	BIOL ENSCI-BS MATH NEUROSCI CSCI	LPS or SW	
CHEM 101.3 CHEM 101.3. Basic Chemistry. 2 lec., 1 rec. hr.; 3 cr. Coreq.: CHEM 101.1. CHEM 101.1 CHEM 101.1. Basic Chemistry Laboratory. 3 lab. hr.; 1 cr. Prereq. or coreq.: CHEM 101.3.	FNES BIOL-Education	LPS or SW	Must take both
CHEM 102.3 CHEM 102.3. Basic Organic Chemistry. 2 lec., 1 rec. hr.; 3 cr. CHEM 102.1 CHEM 102.1. Basic Organic Chemistry Laboratory. 3 lab. hr.; 1 cr.	FNES BIOL-Education	LPS or SW	Must take both
CHEM 103.3 CHEM 103.3. Basic Biochemistry. 2 lec., 1 rec. hr.; 3 cr. CHEM 103.1 CHEM 103.1. Basic Biochemistry Laboratory. 3 lab. hr.; 1 cr.	FNES	LPS or SW	Must take both
CHEM 113.4. General Chemistry I. 3 lec., 1 rec. hr.; 4 cr. CHEM 113.1. Introduction to Chemical Techniques. 3 lab. hr.; 1 cr.	CHEM ENSCI-BA NEUROSCI CSCI BIOL BIOL-Education GEOL-BA GEOL-BS	LPS or SW	Must take both
CHEM 114.4. General Chemistry II . 3 lec., 1 rec. hr.; 4 cr. CHEM 114.1. Quantitative and Qualitative Analysis. 3 lab. hr.; 1 cr	CHEM ENSCI-BS NEUROSCI CSCI BIOL BIOL-Education GEOL-BS	LPS or SW	Must take both
CHEM 251.4. Organic Chemistry I. 3 lec., 1 rec. hr.; 4 cr. CHEM 251.1. Organic Chemistry Laboratory I. 4 lab. hr.; 1 cr.	BIOL	LPS or SW	Must take both
CSCI 111. Introduction to Algorithmic Problem-Solving. 2 lec., 2 lab. hr.; 3 cr.	CSCI MATH	MQR	
CSCI 112. Introduction to Algorithmic Problem-Solving in Java. 2 lec., 2 lab. hr.; 3 cr	TIME 2000 program	MQR	
CSCI 12. Understanding and Using Personal Computers. 2 lec., 2 lab. hr.; 3 cr.	MATH	MQR	
CSCI 48. Spreadsheet Programming. 2 hr. lec., 2 lab. hr.; 3 cr.	BBA BALA	MQR	
CSCI 80. Problem Solving with Computers. 2 hr lec., 2 lab hr.; 3 cr.	CIT	MQR	
CSCI 211. Object-Oriented Programming in C++. 2 lec., 2 lab hr.; 3 cr.	CSCI	MQR	
CSCI 212. Object-Oriented Programming in Java. 2 lec., 2 lab hr.; 3 cr.	CSCI	MQR	

ENSCI 100. Our Planet in the 21st Century: Challenges to Humanity. 3 lec., 3 lab. hr.; 4 cr.	ENSCI-BA ENSTU	LPS or SW	
FNES 101. The Science of Foods. 2 class hr., 3 lab. hr.; 3 cr.	FNES	LPS or SW	
FNES 126. Apparel Science I. 2 class hr., 2 lab. hr.; 3 cr.	FNES	LPS or SW	
GEOL 101. Physical Geology. 3 lec., 3 lab. hr.; 4 cr.	GEOL	LPS or SW	
GEOL 102. Historical Geology. 3 lec., 3 lab. hr.; 4 cr.	GEOL	LPS or SW	
MATH 114. Elementary Probability and Statistics. 3 hr.; 3 cr.	ENSCI-BS Teacher Ed	MQR	
MATH 119. Mathematics for Elementary School Teachers. 3 hr.; 3 cr.	Teacher Ed	MQR	
MATH 120. Discrete Mathematics for Computer Science. 3 hr.; 3 cr.	CSCI	MQR	
MATH 122. Precalculus. 4 hr.; 4 cr.	CHEM	MQR	
MATH 131. Calculus with Applications to the Social Sciences I. 3 hr.; 3 cr.	ECON	MQR	
MATH 141. Calculus/Differentiation. 3 hr.; 3 cr.	CHEM CSCI GEOL	MQR	
MATH 142. Calculus/Integration. 3 hr.; 3 cr.	BIOL CSCI GEOL	MQR	
MATH 143. Calculus/infinite Series. 3 hr.; 3 cr.	CHEM CSCI GEOL	MQR	
MATH 151. Calculus/Differentiation & Integration. 4 hr.; 4 cr.	MATH ENSCI-BA CSCI GEOL	MQR	
MATH 152. Calculus/Integration & Infinite Series. 4 hr.; 4 cr.	MATH ENSCI-BS CSCI GEOL-BS	MQR	
MATH 157, 158. Honors Calculus I, II . 4 hr.; 4 cr. each semester.	MATH	MQR	
MATH 201. Calculus. 4 hr.; 4 cr.	MATH	MQR	
MATH 202. Advanced Calculus. 4 hr.; 4 cr.	MATH	MQR	
MATH 231. Linear Algebra I. 4 hr.; 4 cr.	MATH	MQR	
MATH 237. Honors Linear Algebra. 4 hr.; 4 cr.	MATH	MQR	
MATH 241. Introduction to Probability and Mathematical Statistics. 3 hr.; 3 cr.	MATH	MQR	
PHYS 103. Physics for Computer Science I. 3 lec., 1 rec., 2 lab. hr.; 4 cr.;	MATH	LPS or SW	

PHYS 121.4. General Physics I. 4 lec. and rec.; 4 cr. PHYS 121.1 General Physics I Laboratory. 2 hr.; 1 cr.	ENSCI-BA MATH GEOL-BS	LPS or SW	Must take both
PHYS 122.4. General Physics II . 4 lec. and rec.; 4 cr. PHYS 122.1 General Physics II Laboratory. 2 hr.; 1 cr.	ENSCI-BS MATH GEOL-BA	LPS or SW	Must take both
PHYS 145.4. Principles of Physics I. 4 lec. and rec.; 4 cr. PHYS 145.1 Principles of Physics I Laboratory. 2 hr.; 1 cr.	MATH PHYS GEOL-BS	LPS or SW	Must take both
PHYS 146.4. Principles of Physics II . 4 lec. and rec.; 4 cr. PHYS 146.1 Principles of Physics II Laboratory. 2 hr.; 1 cr.	MATH PHYS GEOL-BA	LPS or SW	Must take both
PHYS 204. Physics for Computer Science II . 3 lec., l rec., 2 lab. hr. (every other week); 4 cr.	MATH	LPS or SW	
PSYCH 101. General Psychology. 4 hr.; 4 cr.	PSYCH MATH NEUROSCI	SW or LPS	
PSYCH 107. Statistical Methods. 4 lec./lab. hr.; 4 cr.	PSYCH MATH NEUROSCI	MQR	
PSYCH 213W. Experimental Psychology. 2 lec., 4 lab. hr.; 4 cr.	PSYCH MATH NEUROSCI	LPS or SW	