

STEM Gateway Course List Details

For purposes of the STEM Gateway Title V Program, STEM Gateway Courses are defined as those which meet at least one of the following criteria:

- Entry level (100 and 200 level) program-requirement courses that lead to degrees in the approved STEM disciplines
- Companion courses (labs, problem solving courses, etc) that are connected to Core Requirement or Program Requirement courses (as specified above)
- Pre-requisite courses that are required by students to take Core Requirement or Program Requirement courses (as specified above)
- Large-enrollment (>500 students/year) courses required for degrees in the approved STEM disciplines and typically taken within the first two years in the field.

In placing priority upon STEM Gateway Courses that will receive support from the STEM Gateway Title V Program, the following factors will be considered:

- What percent of students enrolled in the course are intending to earn STEM degrees?
- How many STEM degrees are served by this course?
- How many STEM students are served by this course?
- To what extent is this course instrumental to improving degree completion among Hispanic and Low-Income students?

STEM Gateway Title V List of Approved STEM Disciplines (BA/BS Degrees Only):

- Biology
- Astrophysics
- Biochemistry
- Biology
- Chemistry
- Earth & Planetary Sciences
- Environmental Sciences
- Mathematics
- Physics
- Statistics
- Any Engineering discipline

STEM Gateway Project – Gateway Course List

Biology

- BIOL 201 Molecular and Cell Biology
- BIOL 202 Genetics
- BIOL 203L Ecology and Evolution

Chemistry and Chemical Biology

- CHEM 121 General Chemistry I (CHEM123L)
- CHEM 122 General Chemistry II (CHEM 124L)
- CHEM 301 Organic Chemistry (CHEM 303L)
- CHEM 302 Organic Chemistry (CHEM 304L)

Earth and Planetary Sciences

- EPS 101 How the Earth Works – Introduction to Geology (EPS 105L)

- EPS 201L Earth History

Engineering

- *CS 152L Computer Programming Fundamentals*
- *ECE 131 Programming Fundamentals*

Environmental Science

- ENVS 101 The Blue Planet (ENVS 102L)

Mathematics and Statistics

- MATH 121 College Algebra
- MATH 107 Problems in College Algebra
- MATH 123 Trigonometry
- MATH 150 Pre-Calculus Mathematics
- MATH 162 Calculus I
- MATH 163 Calculus II
- MATH 180 Elements of Calculus I
- MATH 110 Problems in Elements of Calculus I
- MATH 181 Elements of Calculus II
- *MATH 275 Honors Calculus*

Physics and Astronomy

- PHYC 151 General Physics (PHYC 151L)
- PHYC 157 Problems in General Physics
- PHYC 152 General Physics (PHYC 152L)
- PHYC 158 Problems in General Physics
- PHYC 160 General Physics (PHYC 160L)
- PHYC 167 Problems in General Physics
- PHYC 161 General Physics (PHYC 161L)
- PHYC 168 Problems in General Physics

*List & definitions compiled by; The STEM Gateway team- Gary Smith, Tim Schroeder, Mary Romero, Vicky Dueer
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