

# GENERAL SCIENCE PROGRAM PLANNER

Effective for Students Entering Fall 2008

## MAJOR SEQUENCE REQUIREMENTS

- \_\_\_ BIO 111 General Biology I (4)
- \_\_\_ BIO 112 General Biology II (4)
- \_\_\_ CHEM 113 General Chemistry I (4)
- \_\_\_ CHEM 114 General Chemistry II (4)
- \_\_\_ PHYS 111 General Physics I (4)
- \_\_\_ PHYS 112 General Physics II (4)
- \_\_\_ CARP 211 (Career Planning I (1) – Freshman Year)\*
- \_\_\_ CARP 412 (Career Planning II (1)– Junior Year)\*

\*(Recommended)

*One of the following groups:*

1. \_\_\_ MATH 125, Calculus (4)
- \_\_\_ MATH 128, Introduction to Statistics Data Analysis and Applications to Life Science (4)

*OR*

2. \_\_\_ MATH 129, Analytic Geometry and Calculus I (4)
- \_\_\_ MATH 130, Analytic Geometry and Calculus II (4)

*The Sophomore/Junior Diagnostic Project and Senior Integrated Assessment in the area of chosen minor concentration, or in an alternative area, approved by the Chair of the Department of the area of minor concentration and by the Program Director.*

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*Select one of the following minor concentrations.*

### 1) Biology

Minimum of four (4) Biology electives approved by the departmental advisor

- \_\_\_ BIOL 370 Biology Seminar (2) S/JDP
- \_\_\_ BIOL 490 Biological Research (4) SIA

Elective courses in Science and/or Math to accumulate a minimum of 60 credits in Science and Math.

### 2) Chemistry

- \_\_\_ CHEM 241 Organic Chemistry I (4)
- \_\_\_ CHEM 242 Organic Chemistry II (4)
- \_\_\_ CHEM 243 Analytical Chemistry (4)
- \_\_\_ CHEM 493, 494 Senior Colloquium (1,1) SIA

One Chemistry elective, excluding Chem 197 and Chem 351

Elective courses in Science and/or Math to accumulate a minimum of 60 credits in Science and Math.

### 3) Mathematics

- \_\_\_ MATH 127 Logic and Axiomatics (3)
- \_\_\_ MATH 128 Introduction to Statistics and Data Analysis (4)
- \_\_\_ MATH 129 Analytic Geometry and Calculus I (4)
- \_\_\_ MATH 130 Analytic Geometry and Calculus II (4)
- \_\_\_ MATH 250 Linear Algebra (4) SIA
- \_\_\_ MATH 490 Junior Seminar (1) S/JDP

Elective courses in Science and/or Math to accumulate a minimum of 60 credits in Science and Math.

### 4. Neuroscience

- \_\_\_ CORE 154 Psychological Foundations (3)
- \_\_\_ NEUR 211 Neuroscience I (3)
- \_\_\_ NEUR 212 Neuroscience II (3) S/JDP
- \_\_\_ NEUR 310 Neuroscience methods (3) SIA
- \_\_\_ NEUR 480 Senior Seminar (3) SIA

*Two of the following:*

- \_\_\_ NEUR/PSYC 342 Drugs and Behavior (3)
- \_\_\_ NEUR/PSYC 346 Psychopharmacology (3)
- \_\_\_ NEUR/PSYC 348 Sensation and Perception (3)
- \_\_\_ NEUR/PSYC 349 Animal Behavior (4)
- \_\_\_ NEUR 390 Topical Seminar in Neuroscience

Elective courses in Science and/or Math to accumulate a minimum of 60 credits in Science and Math.

**5) Environmental Studies**

\_\_\_ ENST 201 Environmental Studies I (4)

\_\_\_ ENST 202 Environmental Studies II (4)

*One of the following:*

\_\_\_ ENST 490 Independent Study in Environmental Issues (3)

\_\_\_ ENST 499 Environmental Internship (3)

*Three of the following:*

\_\_\_ CORE 265 Christian Environmental Ethics (3)

\_\_\_ ENST 200 Earth and Space Science (3)

\_\_\_ ECON 491 Economics of Women, Poverty, and the Environment (3)

\_\_\_ HCA 211 Principles of Epidemiology (3)

\_\_\_ ENST 452 Environmental Policy (3)

\_\_\_ ENST 401 Special Environmental Topics A-F (3or4) See Environmental Program section of college catalog.

Elective courses in Science and/or Math to accumulate a minimum of 60 credits in Science and Math

**6) Molecular Biology**

\_\_\_ BIOL 450 DNA Science (4)

\_\_\_ BIOL 451 RNA Science (4)

\_\_\_ BIOL 452 Eukaryotic Molecular Biology (4)

*Two of the following:*

\_\_\_ BIOL 326 Immunology (4)

\_\_\_ BIOL 330 Evolutionary Analysis and Bioinformatics (3)

\_\_\_ BIOL 336 Cell Biology (4)

\_\_\_ BIOL 448 Microbiology (4)

Elective courses in Science and Math to accumulate a minimum of 60 credits in Science and Math.

**7) Physics**

\_\_\_ PHYS 231 Modern Physics (4)

Three PHYS elective courses numbered 233 or higher (6-8)

*One of the following mathematics sequences:*

\_\_\_ MATH 129 Analytic Geometry and Calculus I (4)

\_\_\_ MATH 130 Analytic Geometry and Calculus II (4)

\_\_\_ MATH 231 Analytic Geometry and Calculus III (4)

*OR*

\_\_\_ MATH 125 Calculus (4)

\_\_\_ MATH 237 Mathematics for the Physical Sciences I (3)

\_\_\_ MATH 238 Mathematics for the Physical Sciences II (3)

**\* Some courses required for certain minor programs will have prerequisites that must be fulfilled.**