All Bachelor Programs require a minimum of 128 credits and a 2.00 cumulative average.

SCHOOL OF NATURAL SCIENCES AND MATHEMATICS MINORS

Courses for a minor must be earned with a grade of C or better.

Academic Year **Fall 2019-Fall 2020**

BIOLOGY

Minimum 22 credits excluding CHEM

BIOL 1200/05 Cells & Molecules w/lab (5)
CHEM 2110/15 General Chemistry I w/lab (5)
BIOL 1400/05 Biodiversity & Evolution (5)
CHEM 2120/25 Chemistry II Organic w/lab (5)
BIOL 2110/15 Genetics w/lab (4)
BIOL 4600 Biology Seminar (1)
BIOL Elective 3000 level _____
BIOL Elective 3000 level _____

CHEMISTRY

Minimum 26 credits

Introductory Core: (18 credits)
CHEM 2110/15 Chemistry I w/lab (5)
CHEM 2120/25 Chemistry II w/lab (5)
CHEM 2130 Chemistry III w/lab (4)
CHEM 2140/45 Chemistry IV w/lab (4)

Choose ONE of the following laboratory intensive courses (4 credits)

CHEM 3035 Survey of Instrumentation (4)
CHEM 3110 Inorganic Chemistry (4)
CHEM 3310 Laboratory methods I (4)
CHEM 3120 Lab Methods II (4)
CHEM 3420/3425 Physical Chemistry III /lab (4)
CHEM 3350 Biochemical Lab Methods (4)
CHEM 3520 Advanced Organic Chemistry w/lab (4)

Elective: One, 4 credit CHEM course at the 3000 or 4000 level

Appropriate elective courses for the CHEM minor are: Inorganic, Physical, Environmental or Biochemistry, Laboratory Methods II, and topics in Chemistry or in Chemistry or Independent Study offerings

Intermediate/advanced Elective (4 credits)

CHEM acronym independent studies and/or internships may be used to satisfy this requirement.

Transfer students must complete credits beyond the introductory core at Stockton.

ENVIRONMENTAL STUDIES

Minimum Credits 24. All courses must be selected in consultation with an ENVL faculty member and must be approved in advance.

ENVL _____(4)
ENVL _____(4)
ENVL _____(4)
ENVL _____(4)
ENVL _____(4)
ENVL _____(4)

MARINE SCIENCE

Minimum Credits 20. Required courses: 8 credits

MARS 1100 Survey of Ocean Life (4) **OR** MARS 1200 Introduction to Marine Biology (4) **OR** MARS 2100 MARS

1300 Introduction to Oceanography (4) **OR** MARS 2202 Introduction to Oceanography (4)

Electives: At least 12 MARS credits, 8 of which **MUST** be at the 3000 or 4000 level. Students **MUST** complete all prerequisites for any MARS electives.

MARS _____(4)
MARS 3000 level or greater (4)
MARS 3000 level or greater (4)

PHYSICS

Minimum Credits 22. Required courses: 14-16 credits

PHYS 2220/25 Physics I w/lab (6) **OR**
PHYS 2110/15 Physics for Life Sciences I w/lab (5)
PHYS 2230/35 Physics II w/lab (6) **OR**
PHYS 2120/25 Physics for Life Sciences II w/lab (5)
PHYS 3010 Physics III (4)
A choice of any two 3000 level physics courses (8 credits)
PHYS 3000 level _____(4)
PHYS 3000 level _____(4)

"The student is responsible for insuring that all graduation requirements are met" (Bulletin). Consult with your preceptor and/or the Center for Academic Advising on a regular basis.

All Bachelor Programs require a minimum of 128 credits and a 2.00 cumulative average.

SCHOOL OF NATURAL SCIENCES AND MATHEMATICS MINORS

Courses for a minor must be earned with a grade of C or better.

Academic Year **Fall 2019-Fall 2020**

MATHEMATICS

Minimum 23

MATH 2215 Calculus I (5)
MATH 2216 Calculus II (5)
MATH 2217 Calculus III (5)
MATH 3323 Linear Algebra (4)
MATH 3000 Level or greater

GEOLOGY

Minimum 22 credits Required courses: 10 credits

GEOL 2101/05 Physical Geology w/lab
GEOL 2102/06 Historical Geology w/lab

At least 8 credits from the following:

GEOL 3000-4999
BIOL/GEOL 3242 Vertebrate Paleontology (4)
ENVL/GEOL 3430 Geomorphology (4)

No more than 6 credits from the following:

GEOL 4391 Field Studies: Selected Area (4-6)
ENVL 3432 Soil Science (4)

GEOGRAPHIC INFORMATION SYSTEMS GIS CERTIFICATE PROGRAM

17-18 Credits

Prerequisites for non-ENVL majors:

GNM 1242 Mapping the World's Natural Resources
ENVL 2400 Intro to Statistics and Computers (4)

Common Core (10 credits)

ENVL 3302 Geographic Information Systems (Fall) (3-4)
ENVL 3303 Advanced GIS (Spring) (4)
ENVL 4622 Global Positioning Systems for GIS (Fall) (2)

Select ONE or TWO from the following courses (4 credits)

ENVL 3304 Remote Sensing
ENVL 3307 Geodatabase (Spring) (4)
CSIS 3222 Database System (4)
GIS Sr. Project or Internship (4)
ENVL 48/4900 GIS Project (4)

ENERGY CERTIFICATE PROGRAM

Common Core (21 credits)

CHEM 2110/15 Chemistry I w/lab (5)
Energy-related senior project / internship (4)

Choose TWO of the following courses (8 credits)

PHYS/ENVL 3343 Energy Planning (4)
PHYS/ENVL 3444 Energy Management (4)
PHYS Energy Phys. (Independent Study) (4)
PHYS Alternate Energy Sources (Independent Study) (4)

Choose ONE emphasis from the following (14-22 credits)

Environmental Sciences (14)
PHYS 2110/15 Physics for Life Sciences I w/lab (5)
PHYS 2120/25 Physics for Life Sciences II w/lab (5)
Energy-related senior project / internship (4)
Physical Science (22)
MATH 2215 Calculus I (5)
MATH 2216 Calculus II (5)
PHYS 2220/25 Physics I w/lab (6)
PHYS 2230/35 Physics II w/lab (6)

"The student is responsible for insuring that all graduation requirements are met" (Bulletin). Consult with your preceptor and/or the Center for Academic Advising on a regular basis.