Career Opportunities in the Biological Sciences

A degree in Biology from CSUB can be a stepping stone to many fascinating and rewarding careers. Opportunities for Biology majors abound in research, government, education, industry, and the medical professions. These are just some examples of the many exciting fields open to graduates in Biology, Biotechnology, Human Biological Sciences, Pre-Professional, or Natural Science:

- Environmental Research
- Environmental Consulting
- Water quality management
- Agricultural and Pest management
- Health Care
- Pharmaceutical Industry
- Secondary School Science Education
- Advanced Education
- Clinical Lab Sciences
- Biotechnology
- Wildlife biology
- Bio Chemistry
- Botany
- Ecology
- Marine biology
- Forestry
- Dentistry
- Optometry
- Veterinary medicine
- Physical Therapy

Faculty

- Todd McBride, Professor and Department Chair (Animal Physiology)
- David Germano, Professor (Herpetology, Mammalogy, and Terrestrial Ecology)
- Anna L. Jacobsen, Assistant Professor and Graduate Coordinator (Plant Anatomy, Ecology, and Evolutionary Biology)
- Carl T. Kloock, Associate Professor (Behavioral ecology, Arachnology, and Science Education)
- Maynard Moe, Professor (Plant Taxonomy and ecology)
- Antje Lauer, Assistant Professor (Plant Taxonomy and Ecology)
- R. Brandon Pratt, Associate Professor (Plant Ecology and Evolutionary Biology)
- Kathleen Szick-Miranda, Associate Professor (Molecular and Cellular Biology)
- Amber Stokes, Assistant Professor (Physiology and chemical ecology)
- Ted Weinheimer, Professor (Cell and Developmental Biology)

Full-Time Lecturers

- Dr. Michelle Engel
- Dr. Danielle Dodenhoff
- Dr. Robert Stark

Contact Information:

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Scholarships

- Fairie A. Decker Memorial Scholarship
- John Reed Memorial Scholarship
- Friends of Biology Scholarship
- Math and Science Teacher Initiative
- Robert Noyce Scholarship Program

Study the rich diversity of life in all its forms
Bachelor of Science (B.S.) in Biology
Bachelor of Science (B.S.) Biology-Biotechnology
Students seeking a degree in Biology must complete the following courses:

Bachelor of Science in Biology:

Biology Courses
65 units with a minimum GPA of 2.0
a. BIOL 201 Intro Biology: Cells*
   BIOL 202 Intro Biology: Animals
   BIOL 203 Intro Biology: Plants
b. BIOL 301 Research Design & Analysis
   BIOL 304 General Genetics
   BIOL 305 General Physiology
   BIOL 306 General Ecology
   BIOL 470 Evolution
   BIOL 490 Senior Seminar
c. At least 25 units of additional upper division coursework in Biology. At least three of these courses must be 5-unit courses with lab and at least one must be at the 400 level.

General Education Information
a. Areas B1-B3-Satisfied by Biology Majors
b. Theme 1- Satisfied by Senior Seminar
c. InSt 312-Recommended for Theme 2
d. Area B4- Recommended Math 140 or 211

Bachelor of Science in Biology with a Concentration in Biotechnology:

Biology Courses
a. Core Requirements:
   BIOL 201 Intro Biology: Cells*
   BIOL 202 Intro Biology: Animals
   BIOL 203 Intro Biology: Plants
   BIOL 301 Research Design & Analysis
   BIOL 304 General Genetics
   BIOL 305 General Physiology
   BIOL 470 Evolution
   BIOL 490 Senior Seminar
b. Concentration Specific:
   BIOL 312 Microbiology
   BIOL 330 Molecular Genetics
   BIOL 360 Bioinformatics
   CHEM 340 Biochemistry
   And one of the following:
   BIOL 412 Microbial Physiology
   BIOL 414 Medical Microbiology
   BIOL 424 Evolutionary Genetics
   BIOL 430 Advanced Molecular Genetics
   Or any 400 level course with lab by consent of advisor

Cognates
25 units with a minimum GPA of 2.0
a. CHEM 211 Principles of General Chemistry I
   CHEM 212 Principles of General Chemistry II
   CHEM 213 Principles of General Chemistry III
b. MATH 191 or equivalent
   At least 5 units in appropriate cognate areas subject to the approval of the advisor.

Cognates
CHEM 211 Principles of General Chemistry I
CHEM 212 Principles of General Chemistry II
CHEM 213 Principles of General Chemistry III
CHEM 331 Concepts of Organic Chemistry I
CHEM 332 Concepts of Organic Chemistry II
CHEM 333 Concepts of Organic Chemistry III
MATH 201 Calculus I or MATH 211 Calculus for Life Sciences & Medicine I
PHYS 201 Basic Principles of Newtonian Physics
PHYS 202 Basic Principles of Maxwellian Physics
PHYS 203 Basic Principles of Contemporary Physics

A minimum GPA for these 61 units is 2.0

Curriculum
General Education Information:
   a. Areas B1-3-Satisfied by Biology Majors
   b. Theme 1- Satisfied by Senior Seminar
   c. InSt 312-Recommended for Theme 2
   d. Area B4- Recommended Math 140 or 211

*A grade of C- or better in BIOL 201 is required to advance into upper division biology courses.