

BIOLOGY

undergraduate program

Consistent with the overall mission of the University of Pittsburgh at Bradford, the Bachelor of Science degree in Biology includes a liberal arts core curriculum, much of which is taken during the first two years of study.

Employment Opportunities:

Bacteriologist
 Biochemist
 Biological Photographer
 Biological Researcher
 Biostatistician
 Botanist
 College Professor
 Dietetic & Nutrition Tech.
 Drug Inspector
 Ecologist
 Environmental Impact Specialist
 Fishery Research Biologist
 Health Information Specialist
 Horticulturist
 Hospital Administrator
 Insurance Claim Examiner
 Marine Biologist
 Medical Illustrator
 Nuclear Medicine Technician
 Park Naturalist/Ranger
 Pharmaceutical Researcher
 Physical Therapist
 Plant Pathologist
 Public Health Officer
 Range Conservationist
 Science Columnist
 Toxicologist
 Veterinarian
 Zoo Keeper
 Zoological Researcher



Biologists have exciting and rewarding careers in areas such as medicine, biotechnology, ecological conservation, and environmental management. Biologists study living things to understand how they function, survive, and evolve. They may study bacteria and viruses that

threaten human health, and/or larger organisms such as red-spotted newts or brown bears. Whatever the scale, biological research increases our understanding of health and wellness and the threats to our environment.

Biology majors at Pitt-Bradford take courses in Anatomy and Physiology, Cell & Molecular Biology, Ecology and Evolution, Genetics, Chemistry, Biodiversity and Physics. Students learn how life works by asking questions, making observations, and evaluating evidence. Besides lectures, biology majors take classes that include hands-on activities in the laboratory and outdoors

Required Skills:

- Ability to Work Independently
- Analytical and Quantitative Skills
- Knowledge of Biology Theory
- Innovative talent
- Ability to Operate Scientific Equipment
- Problem Solving Techniques
- Proficiency in Written Communication
- Research Capabilities
- Ability to Work in Teams

Possible Employers:

- Medical Corporations
- Device Companies
- Veterinarian
- Engineering Firms
- Agricultural Chemical Companies
- Biological Testing Laboratories
- Business and Industry
- Pharmaceutical Companies
- State and Federal Government
- Colleges and Universities

PROFESSIONAL ORGANIZATIONS:

The American Society for Cell Biology
 The American Institute of Biological Sciences
 The Company of Biologists Limited
 International Biometric Society

www.ascb.org
www.aibs.org
www.biologists.com
www.tibs.org

FIND OUT MORE ABOUT CAREERS IN BIOLOGY AT:

Careers in Biological Science
 Science Careers Web
 Center for Health Careers
 Occupational Outlook Handbook
 Career Services

www.aibs.org
www.sciencecareerweb.net
www.chc.hcwp.org/occubull.htm
www.bls.gov/oco/ocos047.htm
www.upb.pitt.edu/career.aspx



Biology (BS) – Curriculum Guide

Student Name: _____

Advisor: _____

GENERAL EDUCATION REQUIREMENTS

COMPETENCIES

(Minimum grade of C- required in all competencies)

FS 0102 Freshman Seminar

(if transferring in fewer than 18 credits)

Writing

ENG 0101 English Composition I

ENG 0102 English Composition II

Mathematics

* MATH 0098 College Algebra II or Higher *(see major)*

THE HUMAN EXPERIENCE

Students are required to complete two courses designated

as "Global"

ARTS & LETTERS *(ONE course MUST be literature;*

ONE course MUST be a creative, fine or performing Arts course)

Literature

Arts

Literature, Arts, Language

BEHAVIORAL, ECONOMIC, & POLITICAL SCIENCES

(Two different categories must be represented)

HISTORY, CULTURES, & PHILOSOPHICAL INQUIRY

(ONE course MUST be History, and ONE course must be Cultures or Philosophical Inquiry)

HIST

PHYSICAL, LIFE, & COMPUTATIONAL SCIENCES

(ONE course must be a Physical Science, ONE must be a Life Science and ONE must include a lab)

(See Major)

(See Major)

(See Major)

Lab *(See Major)*

PHYSICAL EDUCATION

PEDC

Students interested in applying to schools of chiropractic, dentistry, medicine, optometry, podiatry, and veterinary medicine must complete:

*1 year of Organic Chemistry with labs

CHEM 0206, 0207, 0208, and 0209

*1 year of General Physics with labs

PHYS 0101 and 0102 or 0201, 0202, 0203, and 0204

*1 semester of Calculus *MATH 0140*

REQUIRED MAJOR COURSES:

BIOL 0101 Intro. to Cell and Molecular Biology *GE*

BIOL 0102 Introduction to Biodiversity *GE*

BIOL 0203 Genetics

BIOL 0217 Principles of Ecology & Evolution

BIOL 1451 Capstone

Upper Level Biology Electives (16 cr)

2 courses MUST include a Lab

Upper-Level Biology electives

Upper-Level Biology electives

Upper-Level Biology electives

Upper-Level Biology electives

Upper-Level Biology electives

Other Required Courses:

CHEM 0101 General Chemistry I *GE*

CHEM 0102 General Chemistry II *(GE)*

CHEM 0206 Organic Chemistry I

CHEM 0207 Organic Chemistry I Lab

Choose ONE of the following:

MATH 0132 Precalculus *GE*

MATH 0136 Applied Calculus *GE*

MATH 0140 Calculus I *GE*

Choose ONE of the following:

PHYS 0101 Introduction to Physics I *GE*

PHYS 0103 Concepts of Modern Physics *GE*

PHYS 0201 Foundations of Physics I *GE*

*MATH 0098 does not meet the mathematics competency
At the Pittsburgh campus

According to your Degree Progress Report in MY.PITT.EDU upon successful completion of the current term:

You will have EARNED _____ credit hours

You NEED _____ for 120 credit hours required for graduation.

You will have earned _____ credit hours of Upper Level course work.

You NEED _____ for the 30 credit hours required for graduation.

NOTE: This guide is unofficial. Completing the requirements on this sheet does NOT guarantee degree completion. Official degree completion information can be found in **MY.PITT.EDU**. Contact your Faculty Advisor and/or the Registrar's Office with questions or concerns.