

2009-2010

# *B.A. in Biology*

## College of Sciences and Technology

### *What Is the Study of Biology?*

Biology, as the study of living things, is an academic endeavor with a basic research focus on seeking answers to questions rather than on applying biological knowledge to solve problems. As scientists, biologists have two prime motivations: (1) intellectual curiosity about biological systems, and (2) the philosophy that creating and disseminating reliable knowledge has intrinsic worth.

But you may simply want to make Biology the focus of a liberal arts education and are not directly interested in post-graduate study or professional careers in biology or teaching. The number of required courses in the Biology B.A. degree has been kept low to permit you to add other areas of study and courses suited to your needs and interests.

If you would like to pursue a Bachelor of Arts degree, you may wish to combine your interest in Biology with a focus of course work in areas such as History or Political Science. Other disciplines such as Art, Journalism, Sociology, Economics, Philosophy, Business, Physical Education, Psychology or Speech are also beneficial to you if pursuing a Bachelor of Arts in Biology.

### *Why Should I Consider This Major?*

Are you interested in Biology but do not want a career in biology? Do you want a liberal arts education with a focus on Biology? Do you want to know all about the life that you see, hear, touch, taste and smell and how this affects us? But you have interests in other scholastic areas as well? Consider a Bachelors of Arts in Biology!

### *How to Declare:*

Declare your Biology major as soon as you think you may want to be a Biology major. Contact Kim Kolb Ayre in the Biology Department Office, BI 315 for details. Freshmen, your first quarter is not too soon.

### *Mid-Program Checkpoint:*

Students intending to complete a Bachelor of Arts degree in Biology within four years should complete the following courses by the start of their junior year. Students are expected to follow all prerequisite requirements for courses and seek early departmental advisement.

#### **Coursework:**

CHEM 121, 122, 123  
BIOL 204, 205, 206  
MATH 240

#### **Other Activities:**

Attend Biology Seminars.

### *Contact Information:*

**Biology Department Website:**  
<http://www.wvu.edu/biology/>

**Department Chair:**  
Dr. Joann Otto  
BI 315  
(360) 650-4044  
[Joann.Otto@wwu.edu](mailto:Joann.Otto@wwu.edu)

**Undergraduate Advisor:**  
Kim Kolb Ayre  
BI 315  
(360) 650-6165  
[Kim.Kolb@wwu.edu](mailto:Kim.Kolb@wwu.edu)

### *Sample Careers:*

Health Administrator  
Lobbyist  
Scientific Illustrator  
Science Writer  
Public Outreach  
Nursing  
Chiropractor  
Physician Assistant  
Dental Assistant  
Regulatory Affairs  
Pathology Assistant  
Biological Photographer



# Biology Major Requirements: 74 Credits

## Supporting Courses: 23 credits

CHEM 121 General Chemistry I (5)

CHEM 122 General Chemistry II (5)

CHEM 123 General Chemistry III (4)

Or CHEM 125, 126 and 225 General Chemistry Honors (5ea)

CHEM 251 Elementary Organic Chemistry (5)

MATH 240 Statistics (4) or equivalent

## Required Biology Courses: 28 credits

BIOL 204 Intro to Evolution, Ecology, & Biodiversity (4)

BIOL 205 Intro to Cellular and Molecular Biology (5)

BIOL 206 Intro to Organismal Biology (5)

BIOL 321 Genetics (4)

BIOL 323 Cell and Molecular Biology (4)

BIOL 325 Ecology (3)

BIOL 432 Evolutionary Biology (4)

## Physics Requirements:

PHYS 101 Introduction to Physics (4)

Or PHYS 114 Principles of Physics I (5)

[PHYS 115 recommended (5)]

## Electives: 18 credits

Upper division (300 or 400 level) Biology courses approved by faculty advisor

These courses are offered within this major and may be used to satisfy GUR or Writing Proficiency requirements.

QSR: MATH 240

LSCI: CHEM 121, 122, 123

BIOL 204, 205, 206

PHYS 101

SCI: PHYS 114

WP: Three Writing Proficiency points are required for graduation (they are noted as WP1, WP2, and WP3). Check [Classfinder](#) or [Online Timetable](#) for departmental offerings each quarter.

## Other Biology Options:

B.A. Anthropology/Biology (89 credits)

B.A. Behavioral Neuroscience (110-111 credits)

B.S. Biology (90-95 credits)

B.S. Biology/Anthropology (101-104 credits)

B.S. Biology/Mathematics (104-105 credits)

B.S. Cellular and Molecular Biology/Biochemistry (106 credits)

B.A.Ed. Biology/Chemistry—Secondary (103-104 credits plus certification program)

Minor in Biology (43 credits)