2026-27 Academic Year

WAYNE STATE COLLEGE

## LIFE SCIENCES>

# BIOMEDICAL SCIENCE

The Biomedical Science program is an excellent route for students preparing for further study in the field of health — medicine, dentistry, nursing, physical or occupational therapy, medical laboratory science, mortuary science, respiratory therapy, and other allied health science fields. Biomedical scientists specialize in the research, identification, and treatment of human diseases. Proficiency and confidence with scientific tools, gained from WSC's outstanding lab facilities, are important as graduates will work with computers, automated equipment, microscopes, and other advanced laboratory instruments. Biomedical Science at Wayne State will set you up to pursue your passion in the health sciences, with excellent faculty, cutting-edge equipment, and personalized support.

## fast facts

**Credit hours:** 52-59

*Students must also take 30 credit hours of General Studies courses. A total of 120 credit hours are needed to graduate from WSC. Additional majors or minors can be added to help meet graduation requirements.*

**Degree options:** B.A. or B.S.

**Department:** Life Sciences

**School:** Science, Health, and Criminal Justice

**Popular pairings:** Chemistry, Environmental Studies, Public and Global Health

## focus on results

### Skills Learned

- Evolutionary processes
- Biological systems and structures
- Research, data collection, and analysis
- Modern lab techniques
- Observation
- Critical thinking and problem-solving
- Communication

### Possible Careers Fields

- Medicine
- Dentistry
- Allied health
- Science research
- Microbiology/virology
- Food safety
- Public health

### Types of Employers

- Hospitals/clinics
- Research laboratories
- Food industry
- Pharmaceutical industry
- Medical research facilities
- Public health agencies

## outside the classroom

Visit www.wsc.edu/clubs to learn more about clubs and organizations on campus.

### Activities / Opportunities

- Conduct research projects
- Conferences and presentations
- Nebraska S-STEM Scholars Program
- Peer mentoring and tutoring
- Service-Learning
- Study Abroad

### Clubs / Organizations

- Biology Club
- Health Science Club
- Pre-Physical Therapy / Pre-Occupational Therapy Club

# Courses and outcomes

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*The following courses are required for the program of study described on this sheet. Every effort is made to ensure this information is current, but please be aware that some content may have changed. To develop a plan for registering and taking these courses, please consult the current academic catalog and your advisor.*

## Program courses

For CAT 3, take MAT 180 Applied Probability and Statistics.

**Life Sciences Core Courses**

BIO 110 Biology Concepts ..... 4
CHE 106 General Chemistry I ..... 4
PHY 321 Physics Laboratory I ..... 1
Select one of the following ..... 3-4
PHY 201 General Physics I (3)
PHY 301 University Physics I (4)

**Biomedical Science Concentration Courses**

CHE 107 General Chemistry II ..... 4
BIO 200 Zoology ..... 4
BIO 210 Experimental Plant Science ..... 4
BIO 301 Biology Seminar ..... 1
BIO 320 Molecular Genetics ..... 4
BIO 370 Introduction to Research ..... 2
BIO 425 Evolution ..... 3
*Upper-level BIO electives ..... 4-7
Select two of the following ..... 6-7
BIO 336 Cancer Biology (3)
BIO 385 Microbiology (4)
BIO 430 Parasitology (3)
BIO 486 Immunology (3)
Select two of the following ..... 6-8
BIO 330 Histology (3)
BIO 340 Human Physiology (4)
BIO 411 Vertebrate Reproduction and Development (3)
BIO 434 Advanced Cellular Biology (3)
BIO 443 Advanced Human Anatomy (3)
Select one of the following ..... 1
BIO Internship (1)
BIO 465 Continuing Research (1)
Select one of the following ..... 1
BIO 469 Senior Seminar in Biology (1)
BIO 470 Research Project (1)

*Choose any upper-level BIO electives, excluding BIO 399 International Study and/or CHE 326 Biochemistry I, that are not repeat courses. BIO 301 may be taken up to two times for a maximum of 2 credit hours with no topic repeat.

## Student learning outcomes

1. Students will be able to interpret core concepts in biology
2. Students will be able to apply concepts in biology to internships and/or student research
3. Students will be able to accurately communicate core concepts in biology

# biology faculty

Visit www.wsc.edu/life-sciences-department to learn more about the Department of Life Sciences.

**Doug Christensen, Ph.D.**
***Department Chair***
Carhart Science 207G
402-375-7345
dochris1@wsc.edu

**Buffany DeBoer, MSE**
**Mark Hammer, Ph.D.**
**Michael Mutehart, Ph.D.**
**Shawn Pearcy, Ph.D.**
**Danielle Peekenschneider, Ph.D.**
**Jillian Wormington, Ph.D.**

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