

An introduction to the Cell Biology & Physiology Emphasis

Biological Sciences Department, University of Wisconsin – Whitewater



Students at the University of Wisconsin – Whitewater can earn a Bachelor of Arts or Bachelor of Science degree in Biology with an emphasis in Cell Biology & Physiology. This is a great emphasis for students interested in careers featuring laboratory work, biomedical research, or a foundation in cell biology for further studies.

Opportunities for student involvement

- Student organizations
 - Beta Beta Beta Biological Honor Society
 - Pre-Health Associates of Today
 - Pre-Veterinary Club
 - Terrestrial and Aquatic Ecology Club
- Undergraduate research



What can you do with a Biology major with a Cell Biology & Physiology Emphasis?

Some of our graduates start their careers right after graduation in a number of fields, including biotechnology, health careers, and other lab-based industry positions. Other graduates move on to graduate programs, including physician's assistant, genetic counseling, and biomedical research programs. Here is a list of where just a few of our graduates have landed:

- Exact Sciences
- PPD Laboratories
- PA programs at Concordia, Carroll College, and UW-Madison
- A variety of masters and PhD research programs at UW-Madison, Medical College of WI, and others



Basic curriculum

- Unique (non-biology content) requirements
 - 1 advanced math course (Math 152 or higher)
 - 2 semesters General Chemistry with labs
 - 2 semesters Organic Chemistry (lecture only)
 - 1 scientific writing course
 - 1 applied statistics course
- Biology major requirements
 - 2 semesters introductory biology with labs
 - These are general survey courses that introduce students to the many sub-disciplines within biology.
 - 1 semester Biology Forum
 - A seminar course on current research and career opportunities.
 - 4 200-level courses (Genetics, Cell Biology, Ecology, Lab techniques)
 - These provide a more in-depth look at the three primary sub-disciplines of biology, along with a hands-on lab course on current biotechnology techniques, to provide a breadth of biological knowledge.
 - 1 upper-level cellular course (Molecular or Micro)
 - A deeper dive into biological principles at the cellular and subcellular level.
 - 3 upper-level cell/physiology elective courses
 - These electives allow students to focus on their area of interest. Options include anatomy & physiology, neuroscience, immunology, and others.
 - 1+ credits of experiential learning (internship, travel study, undergraduate research)
 - This requirement provides students an opportunity to apply their course learning outside of the classroom environment.
 - Additional upper-level electives if needed
- Minor requirements
 - Students with a Cell Biology & Physiology Emphasis are required to also declare and complete minor coursework. See the College of Letters & Sciences Degree Planning Guide for a complete listing of approved minors (page 15). Students choose a minor to complement their interests or future career plans. Common minors with this emphasis are Chemistry, Spanish, Public Health, and Psychology.

