

# **An introduction to the Cell Biology & Physiology Emphasis**

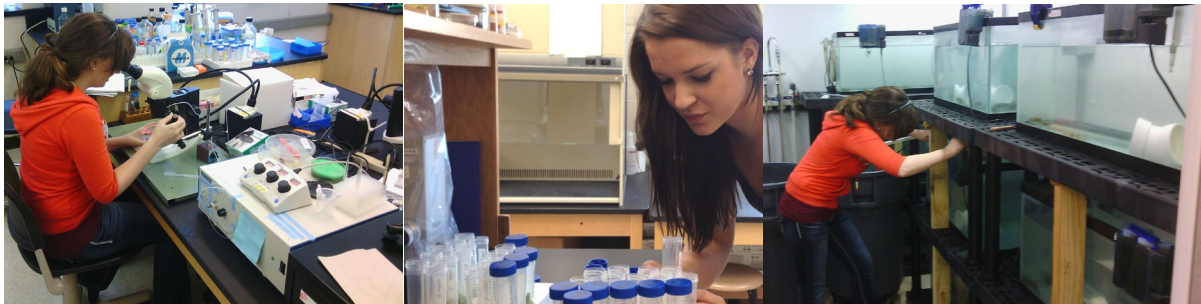
Biological Sciences Department, University of Wisconsin – Whitewater



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.

