



ROCHESTER UNIVERSITY

BIOLOGY

Have you always been curious about how living things function and grow? Biology is the science of living organisms (plants and animals), including their structure, function, growth and evolution. A bachelor of science degree in biology can prepare you to work in research, biotechnology, forensics, pharmacology, ecology, teaching and more – or continue to a graduate program.

Our biology major provides you with a fundamental knowledge of biological sciences. You'll receive a strong foundation to pursue biology-related fields. This degree can also prepare you to pursue graduate studies in medicine, research, veterinary science and environmental fields.

YOU HAVE AN EPIC STORY TO TELL

College should be more than just getting a degree. At RU, we prepare you for your professional and personal future. Our combination of general education classes — in addition to your major courses — will give you **equipment for living** so that you can live an **EPIC** life.

- EXPLORE.** Understand the world in all its beauty, diversity and complexity.
- PREPARE.** Gain knowledge and skills to serve in your business or organization.
- INTEGRATE.** Connect and apply knowledge in your professional and personal life.
- CALLING.** Discern what God has called you to be and do.



WHAT CAN I STUDY?

The major includes a 31-credit hour core and two tracks: an 18-19 hour cellular/molecular biology track, and a 12-hour environmental biology track. Only one track needs to be selected. This major is often paired with a chemistry minor. This program includes various lab courses including biology, ecology, microbiology, and biochemistry.

CELLULAR/MOLECULAR BIOLOGY TRACK

This track gives you the opportunity to take courses such as human anatomy, botany and zoology, nutrition, exercise physiology, genetics and cell biology.

ENVIRONMENTAL BIOLOGY TRACK

This track gives you the opportunity to take courses in environmental biology, earth's waters, general physics, and a field study in natural science.



WHAT WILL I LEARN?

The following learning outcomes are linked to assignments and activities throughout this program. After completing program requirements,



Graduates will possess a comprehensive knowledge base of the biology and chemistry of organisms.



Graduates will demonstrate critical thinking processes and the ability to analyze scientific literature.



Graduates will apply proper safety and ethical practices in laboratory, clinical and work environments.



Graduates will be able to communicate effectively in written, oral and visual forms.



Graduates will employ appropriate experimental design and methodology to answer scientific questions with attention to validity of information.



Graduates have considered their vocational goals and are reflective of how these may be embodied in their professional and/or personal lives.

WHAT ABOUT MY CAREER?

According to the U.S. Bureau of Labor Statistics, occupations in the STEM (science, technology, engineering and mathematics) field are expected to grow 8% by 2029 – but the supply of talent is shrinking. We aim to help fill that talent gap.

After you graduate, you can pursue various positions, including:

- Lab Technician
- Agriculture/Park Services
- Food Safety Inspector
- Science Writing
- Environmental Science/Remediation
- Water Treatment
- Medical Fields
- Research
- Veterinary Medicine and Environmental Fields

WHAT OUR ALUMNI SAY:



KATY PEACOCK
Class of 2013

“Although RU’s science program is not traditionally based, I highly recommend it. The small class sizes offer access to professors that you don’t get at larger schools. This allowed me to learn according to my individual interests, strengths and weaknesses. It also meant I was able to pursue research opportunities that ultimately helped me achieve my goal of attending medical school and has given me a knowledge base that has served me well.”



COMBINING CURIOSITY & CRITICAL ANALYSIS WITH CHRISTIAN VALUES