Discovery within classrooms, laboratories and outside in the field
Seek to Discover

- Explore complex, biological systems that challenge the best and brightest minds
- Exchange of ideas and discoveries
- Reveal the answers to some of the world’s most enduring mysteries
- Open new possibilities in agriculture and industry
- Preserve the environment and endangered species
- Ask questions that inspire & encourage
- Make a difference
A Foundation for Rewarding Careers

- **Biomedical Field**
  - Medical doctor (incl. Veterinary, Ophthalmology, Dental)
  - Laboratory Technician
  - Genetic Counselor
  - Physical Therapist
  - Pharmacist
  - Physician Assistant
  - Nurse

- **Biotechnology**
  - Agriculture
  - Pharmaceutical research
  - Chemical and health diagnostics
  - Computer science

- **Engineering**
  - Bioengineering
  - Biomedical engineering

- **Other**
  - Forensic science and pathology
  - Natural resources
  - Environmental Protection
  - Ethics, Law and Legislation
  - Entrepreneurs
  - Biostatistics
Biology Degree Programs

- Biology, B.S.
- Biology, B.A.
- Biomedical Sciences, B.S.
- Bioengineering
- Biochemistry
- STEP Biology
- Biology, B.S. Specializations: Cell-molecular biology, anatomy, microbiology
Which Degree is Right for You?

• **Biomedical Sciences:**
  • An intensive, structured program
  • Integrates core disciplines including:
    • Basic sciences, math
    • Psychology, social sciences & ethics
  • Uniquely prepares students for medical, professional or graduate degrees in the biomedical sciences
  • Students can be admitted to the program after completing BIO 111 and CHM 144/147 with an average grade of 3.5
• **Find us on Facebook!**
  • [https://www.facebook.com/biomedicalsciences.majorOU.edu](https://www.facebook.com/biomedicalsciences.majorOU.edu)
Which Degree is Right for You?

• **Bachelor of Arts in Biology:**
  • Fewer math and science courses
  • More available general education elective courses
  • Ideal for students desiring a liberal arts degree with strong training in the biological sciences

• **Bachelor of Science in Biology:**
  • Additional math, chemistry, biology and biology laboratory courses
  • Designed for students preparing for a career in science
  • Options for specialized work in cell-molecular, microbiology, and anatomy
What is a specialization?

- Biology is a diverse field! Our specializations will narrow your focus to a particular sub-discipline.

- Why add a specialization to my major?
  - Access to a specialization-specific academic advisor
  - Specializations are beneficial when you plan on:
    - pursuing employment in that field after you graduate
    - furthering your studies in graduate school
    - attending other post-secondary training
Your personal interests, likes and dislikes, and academic strengths will help guide you when choosing the right track in Biological Sciences!
Biology as a Route to Pre-medical Sciences

- There is no "Pre-Med" major!
- **Biology BS and Biomedical Sciences BS** are the most direct routes to advanced medical training
  - All prerequisites are included in the BMS degree (including all the 2015 changes in the MCAT and Medical School competencies)
  - Biology BA & BS allow more flexibility while filling requirements
- Choosing a major allows you access to expert advising and plan wisely
  - Pre-med advising available within Biology department and through pre-professional advising
  - [http://www.oakland.edu/casadvising/preprofessional](http://www.oakland.edu/casadvising/preprofessional)
Diversity in Modern Biology

Laboratory Experiences:
- Microbiology
- Biochemistry
- Genetics
- Cell Biology
- Histology
- Ecology
- Field Biology

Microbial Biotechnology
- Botany
- Neuroanatomy
- Medical Parasitology
- Virology
- Stem Cell Biology

Functional Genomics & Bioinformatics
- Advanced Regional Dissection
- Stream Ecology

Integrative Pharmacology
- Animal Behavior
Biology Faculty- Get Involved in Independent Research!

Biology is one of OU’s top departments in external funding!

- Biochemistry: Dvir, Govind, Liu, Song
- Bioinformatics: Battistuzzi, Lal
- Cell Biology: Gordon
- Developmental Biology: Jiang
- Ecology: Raffel, Tiegs, Hansen, Jamieson
- Genetics: Westrick, Wendell
- Microbiology: Walia, Blumer-Schuette
- Immunology: Rhee
- Physiology and Pharmacology: Banes-Berceli
- Population Biology: Berven
- Stem Cell Biology: Chaudhry, Madlambayan, Villa-Diaz
How Do I Get Involved in Research?

- Ask fellow students who do research
- Look at our website at the faculty research
- Email or talk with professors
- Ask an adviser or professor for recommendations
- Check the Biology Advising website for links

- START EARLY! Many professors have waiting lists and limited numbers of spaces in their labs.
Visit the Biology Website

http://www.oakland.edu/biology
Biology Department Advising - We are Here to Help!

• Advisers:
  • Dr. Sarah Hosch
  • Dr. Keith Berven (Pre-Prof)
  • Holly Greiner-Hallman (minors)
  • Dr. Amy Banes-Berceli (BMS)
  • Dr. Fabia Battistuzzi (STEP)
  • Bioengineering, Biochemistry & specialization advisers

• How to reach us: check the website!
  • For quick questions contact us by email
  • Walk-in hours
  • Appointments - schedule an appointment online
Biology Department Advising - Some of the things we do:

- Information about degree program
- Questions about degree evaluations
- Transfer biology course evaluations
- Petitions of exception
- Registration overrides - Biology courses only
- Senior audits
- Pre-professional advising for biology majors
- Career preparation, questions and guidance
- Direction to potential research mentors
- Help identifying volunteer experiences
- Approval of *Occupational Experience in Bio*
Students interested in pursuing a degree in Biological or Biomedical Sciences are encouraged to consult with departmental faculty advisers to plan coursework or to discuss any aspect of their undergraduate career. We are committed to providing you with the resources you need for a successful education within the Department of Biological Sciences.

We suggest meeting with a departmental undergraduate faculty adviser at least once per year, in addition to meeting with the College of Arts and Sciences advisers for your general education requirements.

Walk-in advising hours for quick questions change each semester. Scheduling an appointment is highly recommended during busy times such as registration. Quick questions can also often be answered by emailing the faculty advisers.

**Biology Advising Scheduling Link**

*NOTE: You must have an active Oakland University email address to use the “Biology Advising Scheduling Link”*

**Services we offer**

- Research Opportunities
- Volunteer Opportunities
- Biological Sciences's Course Schedule
- Registrar
- Transfer Students
- The Writing Center
- Career Services
Success in Biology!

- Pick a major!!
- Visit an adviser - know your degree requirements
- Use your time wisely
- Find/build a support system and **DO NOT** allow yourself to be behind on material
- Attend supplemental instruction or tutoring
- **Listen to your professor's advice** on study habits and exam preparation
- Make and maintain personal connections.
- **Take responsibility for your own learning & success**
- **Experience** all that OU and the Department of Biological Sciences has to offer!
Tropical Field Ecology, COSTA RICA