What to do with a degree in...

# Physiology

Physiology is a specialized life science degree which includes coursework in general zoology, genetics, gross and comparative anatomy, general and mammalian physiology and biochemistry. Physiology majors take intensive laboratory and seminar coursework for advanced study in the field. The degree program prepares students applying to professional school (including medical, dental, or veterinary school), graduate school and for research positions with universities, government agencies or industry.

## Curriculum

- **Core content of knowledge including understanding of the basic principles of ecology, genetics and cell biology.**
- **Advanced knowledge concerning animal and human physiology**
- **Critical thinking ability to summarize and evaluate basic information concerning biological systems**
- **Ability to present scientific information clearly and concisely**
- **Prepared for admission into programs of schools of human and veterinary medicine and related health professions, graduate study or for entry into the job market in fields related to the life sciences**

## Physiology majors develop the following skills:

- American Physiological Society
  [http://www.the-aps.org/mm/Careers](http://www.the-aps.org/mm/Careers)
- Centers for Disease Control and Prevention
- Human Kinetics
- Indeed
  [http://www.indeed.com/q-Physiology-jobs.html](http://www.indeed.com/q-Physiology-jobs.html)
- Navy
- New Scientist Jobs
- Mayo Clinic
  [http://www.mayoclinic.org/jobs](http://www.mayoclinic.org/jobs)
- Monsanto
- Science Careers
  [http://jobs.sciencecareers.org/jobs/physiology/](http://jobs.sciencecareers.org/jobs/physiology/)
- Society for Integrative & Comparative Biology Educational Council
  [http://www.sicb.org/careers](http://www.sicb.org/careers)
- Simply Hired
- Stevenson Cancer Center (OU Medicine)
  [http://stephensoncancercenter.org/Research/ResearchEventsandOther/SummerResearchScholarsProgram.aspx](http://stephensoncancercenter.org/Research/ResearchEventsandOther/SummerResearchScholarsProgram.aspx)
- The Physiological Society
  [http://www.physoc.org/physiology-jobs](http://www.physoc.org/physiology-jobs)

## Advancing Women in Science
- American Medical Student Association
- American Student Dental Association
- Pre-Health Professionals Club
- Pre-Health Shadowing Network
- Pre-Occupational Therapy Club
- Pre-Optometry Student Association
- Pre-Pharmacy Student Association
- Pre-Physician’s Assistant Club
- Pre-Veterinary Club
- [https://campuslink.okstate.edu](https://campuslink.okstate.edu)

## College of Arts & Sciences Career Services

213 Life Science East
Tel: 405 744 5658

For appointments and resources: [http://cascareers.okstate.edu](http://cascareers.okstate.edu)
Physiology is the study of the functioning of living things. This includes examining how the mechanics of the body perform, from the molecular level to the whole system, helping us better understand how different parts of an organism work together.

Physiologists can work in a variety of settings such as laboratories, medical and research facilities or out in the field to answer important questions such as how a single cell functions or how living things interact with their environments. Some related disciplines are biology, biochemistry, cell biology, neurophysiology and pharmacology.

**Health Care:** Physiologists frequently continue their education with specialized training and pursue careers in medicine, dentistry, optometry, physical therapy, nursing, pharmacy, veterinary medicine and other related fields.

**Research:** Researchers study animal and human physiology using the latest scientific tools and practices. Research can focus on natural systems or be applied to human health issues and challenges.

**Education:** Educators can work with students of all ages in a variety of settings. Physiologists can find opportunities in the classroom, in the field or in a research laboratory. Physiologists may also communicate science to the public. For example, they might create educational exhibits for museums or health centers, serve as consultants, write science articles published in newspapers, magazines and books or develop educational films and television programs.

**Biotechnology:** Physiologists apply scientific principles to develop and enhance products, tools and technological advances in fields such as agriculture, food science and medicine. Scientists may work in genetic engineering, pharmaceutical development or medical technologies, such as nanomedicine, or as a lab technician. Scientists can work with drug companies, manufacturers or developers of products and services in the testing, development and production stages.

**Politics and policy:** Physiologists may work with congressional representatives to facilitate the development of new legislation on a variety of topics including conservation and preservation, biomedical research and other related areas as consultants or political advisors.

Adapted from: American Institute of Biological Sciences http://www.aibs.org/careers, The Society for Integrative and Comparative Biology

### Types of Employers

#### Health and Fitness
- Cancer Centers
- Centers for Disease Control and Prevention
- Children’s Hospitals
- Gyms or Weight Loss Centers
- Healthcare Organizations
- Hospitals and Clinics
- Medical Centers
- Pharmaceutical Companies
- Sports Training Facilities
- Rehabilitation Centers
- US Navy

#### Science, Technology and Education
- Biotechnology Companies
- Colleges or Universities
- Food Manufacturers or Developers
- Forensic Science Labs
- Government Agencies
- Nonprofit Research Foundations
- Private or Public Schools
- Red Cross
- Research Laboratories