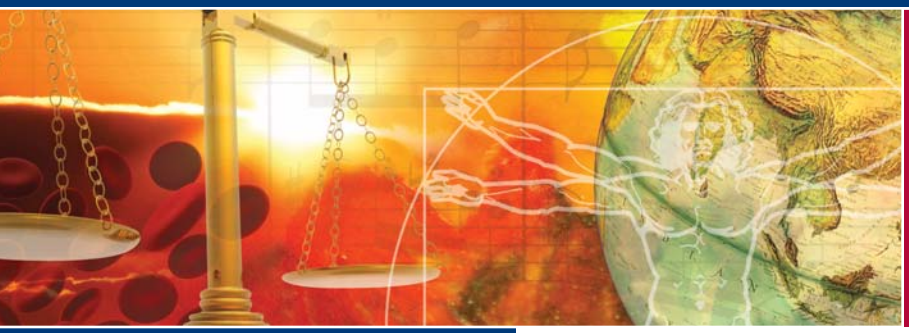
BIOLOGY



College of Arts & Sciences

Bachelor of Science
4-year program

sound like you?

Be a veterinarian

- **Work at the zoo**
- **Go to medical school**

did you know?

The surface area of your lungs is 1,000 square feet. That is 20 times greater than the surface area of your skin.

Biology at UT

Biology is the study of life. Biologists are concerned about every aspect of a living organism from its origin, to its development, to the causes of its aging and death. Life science research looks at many specific biological problems: identifying causes of cancer, discovering ways of combating autoimmune diseases and improving our understanding of how cells function and communicate. If you are interested in the nature of living things and want intellectual challenges and rewarding careers, this is the major for you.

UT biology majors address basic principles using both plant and animal systems. They use laboratories in the $33-million Wolfe Hall building; the College of Arts and Sciences Instrumentation Center, which holds $3 million of modern research instruments; and the new Center for Molecular Biology with a gene chip microarray unit and confocal microscope. Some students have the opportunity to become undergraduate teaching assistants in the introductory laboratories, peer mentors or study in England at the University of Salford.

The biology degree with an ecology/organismal biology concentration (BIOM) is administered by the Department of Environmental Sciences. The program is especially for students whose career goal is to work on environmental problems, yet it provides a balanced exposure to all aspects of biology, from molecules and cells to ecosystems and entire landscapes; thus, it prepares students for successful careers in any life science-related discipline. Contact the Department of Environmental Sciences for more information.

What to expect when you graduate

Biology graduates find jobs in biotechnology, health care, pharmaceutical and biomedical research laboratories or as veterinary assistants or staff in parks, zoos or museums. Many biology majors also go to medical schools or professional schools in veterinary medicine, dentistry, optometry, osteopathic medicine and physician assistant programs across the country.

Check out all our majors online @ *utoledo.edu/admission/majors.asp*

THE UNIVERSITY OF TOLEDO
1872

BIOLOGY

Arts and Sciences is an academically diverse college that offers 43 different majors and over 1,600 different courses each year from African-American History to Zen Philosophy. Its programs emphasize the critical thinking and communication skills necessary for every job in today's market.

College of Arts & Sciences

Group campus tours are available Monday through Friday at 10:30 a.m. or 2:30 p.m., and on Saturday at 11:15 a.m., year round, with the exception of national holidays. Individual admission appointments are available by request. Individualized college or department visits are also available weekdays at 1:15 p.m. by appointment.

utoledo.edu/admission/campusvisit
800.5TOLEDO

Sample Curriculum*

FIRST YEAR

Fall Semester

ARS 1000 Orientation	1
BIOL 2150 Fund of Life Science I	4
BIOL 2160 Fund of Life Science I Lab	1
CHEM 1230 General Chemistry I	4
CHEM 1280 General Chemistry I Lab	1
ENGL 1110 Composition I	3
A&S Distributive Elective (optional)	3

Spring Semester

BIOL 2170 Fund of Life Science II	4
BIOL 2180 Fund of Life Science II Lab	1
CHEM 1240 General Chemistry II	4
CHEM 1290 General Chemistry II Lab	1
ENGL 1130-1230 Composition II	3
A&S Distributive Elective	3

SECOND YEAR

Fall Semester

BIOL 3010 Molecular Genetics	3
BIOL 3020 Molecular Genetics Lab	2
CHEM 2410 Organic Chemistry I	3
CHEM 2460 Organic Chemistry I Lab	1
MATH 1750 Math for Life Sciences I or MATH 1850 Calculus I	4
English Literature Elective	3

Spring Semester

BIOL 3030 Cell Biology	3
BIOL 3040 Cell Biology Lab	2
CHEM 2420 Organic Chemistry II	3
MATH 1760 Math for Life Sciences II or MATH 1860 Calculus II	3-6

THIRD YEAR

Fall Semester

PHYS 2070 or 2130 General Physics I	5
BIOL 3090 Developmental Biology	3
BIOL/A&S/General Electives	6
Foreign Language Elective	4

Spring Semester

PHYS 2080 or 2140 General Physics II	5
BIOL 3070 Human Physiology	3
A&S Distributive Electives	3-6
Foreign Language Elective	4

FOURTH YEAR

Fall Semester

BIOL 4700 Biological Literature & Comm (fall or spring)	3
Biology Electives	0-8
General Electives (as needed)	0-8
Foreign Language Elective	3

Spring Semester

Biology Electives	0-8
General Electives (as needed)	0-8
Foreign Language Elective	3

ECOLOGY & ORGANISMAL CONCENTRATION

FIRST YEAR

Fall Semester

CHEM 1230 General Chemistry	4
CHEM 1280 Chemistry Laboratory	1
ENGL 1110 College Composition I	3
Fine Arts Elective	3
ARS 1000 Orientation	1
Foreign Language Elective 1110	4

Spring Semester

CHEM 1240 General Chemistry	4
CHEM 1290 Chemistry Laboratory	1
EEES 2150 Biodiversity	4
EEES 2160 Biodiversity Laboratory	1
Foreign Language Elective 1120	4

SECOND YEAR

Fall Semester

BIOL 2170 Fund of Life Science	4
ENGL 1130 College Composition II	3
CHEM 2410 Organic Chemistry	3
CHEM 2460 Organic Chem Laboratory	1
Foreign Language Elective 2140	3
General Elective	3

Spring Semester

CHEM 2420 Organic Chemistry	3
ENGL Literature Elective	3
MATH 1750 Calculus for Life Sciences	4
Foreign Language Elective 2150	3
Social Science Elective	3

THIRD YEAR

Fall Semester

EEES 3050 Introduction to Ecology	3
EEES 3060 Ecology Laboratory	1
BIOL 3010 Molecular Genetics	3
MATH 1760 Calculus for Life Sciences	3
Humanities Elective	3
Social Science Elective	3

Spring Semester

EEES Advanced Courses	6
U.S. Multicultural Elective	3
BIOL 3030 Cell Biology	3
History Elective	3

FOURTH YEAR

Fall Semester

PHYS 2070 General Physics	5
Social Sciences Elective	3
EEES Advanced Courses	5
Non-Western Multicultural Elective	3

Spring Semester

EEES 3900 Environment Literature and Communication	3
PHYS 2080 General Physics	5
EEES 4150 Evolution	3
Humanities WAC course	3

*Sample curriculum is subject to change. Please consult the department for up-to-date information. For more detailed program requirements, visit catalog.utoledo.edu.

For more information about Biology, contact:
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