The undergraduate biology program at the University of Utah offers a comprehensive modern biology curriculum that prepares students for a wide range of rewarding careers in the life sciences.

**A Sample of Educational, Professional and Career Opportunities**

<table>
<thead>
<tr>
<th>Graduate School</th>
<th>Professional School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters Degree (M.S.) (~2-4 years)</td>
<td>Medical School</td>
</tr>
<tr>
<td>Doctor of Philosophy (Ph.D.) (~4-6 years)</td>
<td>Dental School</td>
</tr>
</tbody>
</table>

Graduate study prepares students for careers in university research and teaching and for public service or industry research.

Students wishing to combine biology research and medicine can apply for admission to MD/Ph.D programs.

Graduate study may be used to prepare for careers in areas such as biochemistry, physiology, genetics, cellular biology, taxonomy, botany, zoology, molecular biology, genetic engineering, conservation biology, evolution, neurobiology, ecology, developmental biology, restoration ecology, wildlife biology, fisheries biology, marine biology, paleoecology, entomology, limnology, forestry, ornithology, ichthyology, mammalogy, herpetology, environmental biology, anatomy, mathematical biology, etc.

**Employment Opportunities with a Bachelor's Degree in Biology**

Health-related Employment:
- Lab Technician (Hospitals, Clinics, Public Health Departments, etc.)
- Biological Technician (Biological, Biomedical, Agricultural Industry, etc.)
- Biological Technician (Medical Research University, Institute or Department of Health, etc.)
- Sales & Marketing (Pharmaceutical, Biomedical, & Agribusiness Sales, etc.)

Research-related Employment:
- Biologist, Biological Technician (University, Museum, Industry, etc.)

Environmental and Natural Resource-related Employment:
- Biological Technician, Botanist, Ecologist, Zoologist, Naturalist, Forester, etc.
- (State Natural Resource Agency, Federal Agency, e.g. USFS, NPS, BLM, etc.)
- Environmental Scientist (U. S. Environmental Protection Agency, State & Local Departments of Environmental Quality, etc.)

**Other Post-graduate Educational Possibilities**

- College of Education (Elementary & Secondary Teaching) | Dental Hygienist
- College of Nursing (Nurse) | Physical Therapy (Physical Therapist)
- College of Pharmacy (Pharmacist) | Physician's Assistant Programs, etc.

For additional information on careers in the Biological Sciences, see http://careers.utah.edu/students/research-major/biology.php
Univ of Utah WORKSHEET AND CHECKLIST FOR BIOLOGY MAJOR May 2015

1. UNIVERSITY GENERAL EDUCATION & BACHELOR OF SCIENCE/ARTS requirements:

   _____ AM INSTITUTIONS²: ECON 1740 (3) or HIST 1700 (3) or POLSC 1100 (3) or HON 2212 (3)

   WRITING.a WRTG 2010 (3)  QA'(math) & QB' (stat/logic) is covered by CALCULUS

   INTEL.  Fine Arts (FF/FI or F; 2 reqd): ______________________ (____) + ______________________ (____)

   EXPLOR. c Humanities (HF/HI or H; 2 reqd): ______________________ (____) + ______________________ (____)

   Soc/Behav (BF/BI or B; 2 reqd): ______________________ (____) + ______________________ (____)

   Minimum grades: a. C- (no cr/nc) b. C- or cr. c. D- or cr.

   2. UNIVERSITY BACHELORS OF SCIENCE/ARTS (note min. grade rqmts):

      CWb (UD wrtg/com.):________________ (____) ____ B.A.: 4 semesters languageb____________________________

      DIVERSITYb __________________ (____) ____    or

      INTERNATIONALb __________________ (____) ____  B.S.: QI ________ (____)b ___  +  QI ________ (____)b ___

      UPPER DIVISION CREDITSc (40 cr. min. of 3000-, 4000- and 5000-level courses)

      RESIDENCY: 30 cr from U of U. 20 of the last 30 credits must be from the U of U.

3. SCIENCE CORE (30 cr). Complete the following courses (C- or better; no cr/nc):

   ___ MATH 1170 or 1210 (4) or 1250 (4)  ___ CHEM 1210 (4)  ___ CHEM 2310 (4)

   ___ MATH 1180 or 1220 (4) or 1260 (4)  ___ CHEM 1215 (1)  ___ CHEM 1220 (4)

   ___ PHYCS 2010 or 2110 or 2210 or 3210 (4)  ___ CHEM 1225 (1)  ___ CHEM 1225 (1)

   Note: Some pre-professional programs require 2 semesters of O Chem + labs.

4. BIOLOGY CORE (18-20 cr). Complete the following courses (C- or better; no cr/nc):

   BIOL 1210 (4) Principles of Biology

   is waived with AP Biology score of 4 or 5.

   ___ BIOL 2010 (3) Evol and Div of Life (F/S)

   ___ BIOL 2020 or 2021 (3 or 4) Princ Cell Biol (F/S)

   ___ BIOL 2030 (3) Princ of Genetics (F/S)

   ___ BIOL 3410 (3) Ecology and Evolution (S only)

   ___ BIOL 3510 (3) Biological Chemistry I (F/S)

   Complete one FORM & FUNCTION Course

   ___ BIOL 3310 (3) Comp.Vert. Morph (Fall)

   ___ BIOL 3320 (3) Comp. Physiology (Fall)

   ___ BIOL 3330 (3) Behav. Neurobiol (Fall)

   ___ BIOL 3380 (3) Evol & Phys Basis Hlth (Fall).

   ___ BIOL 3350 (3) Plant Physiology (Odd springs)

   ___ BIOL 3370 (3) Microbial Biology (Every spring)

   ___ BIOL 5365 (4) [L1] Plant Structure (Even springs)

5. Complete BIOLOGY ELECTIVES (16-18 cr) to total 36 cr BIOLOGY incl. two 5000-level courses and 4 LABS

   with 5 LAB UNITS (C- or better; no cr/nc):

   ___ BIOL _________ (___) [___]  ___ BIOL _________ (___) [___]  ___ BIOL _________ (___) [___]

   ___ BIOL _________ (___) [___]  ___ BIOL _________ (___) [___]  ___ BIOL _________ (___) [___]

   ___ BIOL _________ (___) [___]  ___ BIOL _________ (___) [___]

   ___ BIOLOGY ELECTIVES (16-18 cr) to total 36 CR of BIOLOGY¹,²

   ___ 12 CREDITS of UPPER DIVISION BIOL electives (course numbered 3000+).¹,²

   ___ TWO 5000-level BIOL courses (each must be 2+ credits).

   ___ FOUR BIOLOGY LABS totaling 5 LAB UNITS [L]. Two labs (3 units) U of U Biology. (See list of courses).³

   ¹A maximum of 6 credits of approved 2000-level biology courses may count for Biol electives (addtl credits applied to sci ele).

   ²A max of 3 hours of Biol 5312 - 5316 apply towards the rqd 36 hrs of Biology (addtl credits apply to sci ele).

   ³BIOL 4955 may count for 3 credits max. and one lab course (max. 2 lab units)

6. Complete APPROVED SCIENCE ELECTIVES to meet reqmt for 72 credits science (if needed; C-, no cr/nc):

   ____________________________________________ (___) ______________ (___) ______________ (___) ______________ (___)

   Term to Graduate  Deadline to Apply for Graduation  122 CREDITS REQD TO GRADUATE (72 CR SCIENCE)

   Spring:         Nov 1 of the preceding Fall Semester  Students are responsible for meeting all graduation requirements.
   Summer:        Feb 1 of the preceding Spring Semester  Biology Advising is available to help you plan your curriculum.
   Fall:          June 1 of the preceding Summer Semester.

   122 CREDITS REQD TO GRADUATE (72 CR SCIENCE)