

SOUTHERN UTAH UNIVERSITY

Walter Maxwell Gibson College of Science & Engineering

BS/BA in Biology/Education (2013-2014)

GENERAL EDUCATION (CORE COURSE REQUIREMENTS)

English Requirements (C): (6)

- ENGL 1010
- ENGL 2010

Quantitative Literacy Requirements (C): (4)

- MATH 1050* (*Recommended*)
- Pre-req: C or better in MATH 1010 or ACT 23+*

Information Literacy Requirement (C): (1)

- LM 1010

Computer Literacy Requirement (C): (3)

- CSIS 1000

American Institutions Requirement (I): (3)

- HIST 1700 *or* POLS 1100 *or* ECON 1740

GENERAL EDUCATION (KNOWLEDGE AREA REQUIREMENTS)

Fine Arts (F): (3)

- Select one

Humanities (H): (3)

- Select one

Social and Behavioral Sciences (S): (3)

- Select one

Life Science (L): (4)

- BIOL 1610/1615* (*Recommended*)

Physical Science (P): (4-5)

- CHEM 1110/1115* (*Recommended*)

Pre-req: MATH 1010 or above

OR

- CHEM 1210/1215* (*Recommended*)

Pre-req: MATH 1050 or 2 yrs HS Algebra

TOTAL: 34-35 CREDITS

EDGE PROGRAM (3 CREDITS)

- UNIV 1010 – EDGE Program Introduction (1)
- UNIV 3925 – EDGE Project Proposal (1)
- UNIV 4925 – EDGE Program Completion (1)

Students will choose one of five tracks to work in to complete this requirement. These include Global, Community, Leadership, Outdoor, & Creativity and Innovation.

BIOLOGY CORE REQUIREMENTS (24 CREDITS)

- BIOL 1610/1615* General Biology I/Lab (4) (F/S)
- BIOL 1620/1625 General Biology II/Lab (4) (F/S)
Pre-req: C or better in BIOL 1610/1615
- BIOL 3010/3015 General Microbiology/Lab (4) (F/S)
Pre-req: C or better in BIOL 1610/1615
- BIOL 3030/3035 Ecology/Lab (4) (F)
Pre-req: C or better in BIOL 1620/1625 & MATH 1040
- BIOL 3060/3065 Genetics/Lab (4) (F/S)
Pre-req: C or better in BIOL 1620/1625, MATH 1050, & CHEM 1110/1115 or CHEM 1210/1215
- BIOL 3110 Evolution (3) (F/S)
Pre-req: C or better in BIOL 3030/3035 & BIOL 3060/3065
- BIOL 4990 Seminar (1) (F/S)
Pre-req: C or better in BIOL 1620/1625

REQUIRED SUPPORT COURSES (18 OR 28 CREDITS)

(CHEM 1200 Series Recommended for Advanced Degrees)

- MATH 1040* Statistics (4) (F/S/M)
Pre-req: C or better in MATH 1010 or ACT 23+
- MATH 1050* College Algebra (4) (F/S/M)
Pre-req: C or better in MATH 1010 or ACT 23+
- AND**
- CHEM 1110/1115* Elementary Chem./Lab (4) (F/S/M)
Pre-req: C or better in MATH 1010 or above
- CHEM 1120/1125 Elementary Org. Bio-Chem. (6) (F/S/M)
Pre-req: C or better in CHEM 1110/1115
- OR**
- CHEM 1210/1215* Principles of Chemistry I/Lab (5) (F/M)
Pre-req: C or better in MATH 1050 or 2 yrs HS Algebra
- CHEM 1220/1225 Principles of Chemistry II/Lab (5) (S/M)
Pre-req: C or better in CHEM 1210/1215
- CHEM 2310/2315 Organic Chemistry I/Lab (5) (F/M)
Pre-req: C or better in CHEM 1220/1225
- CHEM 2320/2325 Organic Chemistry II/Lab (5) (S/M)
Pre-req: C or better in CHEM 2310/2315

TEACHING EMPHASIS COURSES (21-23 CREDITS) (listed on next page)

- Required Biology Teaching Courses (15 credits)
- One animal and one plant-based course (6-8 credits)

REQUIRED EDUCATION COURSES (38-41 CREDITS)

See Education Advisor.

Please note that this degree does not include the requisite number of upper division hours. Students completing this degree will fill the upper division requirements while completing coursework for the Secondary Teaching Certificate.

F: Fall courses

S: Spring courses

M: Maymester/Summer courses

* Courses that fulfill both Gen. Ed. and major requirements

TEACHING EMPHASIS COURSES (21-23 CREDITS)

Required Biology Teaching Courses (15 credits):

- ___ **BIOL 2420/2425** Human Physiology/Lab (4) (F/S)
Pre-req: C or better in BIOL 1610
- ___ **BIOL 4070** Capstone: History and Literature of Biology (3) (S)
Pre-req: C or better in BIOL 3110
- ___ **BIOL 4650** Capstone: Conservation Biology (3) (S)
Pre-req: C or better in BIOL 3110
- ___ **BIOL 4900** Biology Teaching Methods (3) (F)
Pre-req: C or better in BIOL 3110
- ___ **BIOL 4980** Student Teach. (for Secondary Licensure) (2) (F/S)
Co-req: EDUC 4980

Complete one animal and one plant-based course listed below (6-8 credits):

- ___ **BIOL 2500** Environmental Biology (3) (F)
- ___ **BIOL 3250/3255** Histology/Lab (4) (F)
Pre-req: C or better in BIOL 1620/1625
- ___ **BIOL 3270/3275** Vertebrate Physiology/Lab (4) (S)
Pre-req: C or better in BIOL 1620/1625 & MATH 1040
- ___ **BIOL 3290/3295** Embryology/Lab (4) (S)
Pre-req: C or better in BIOL 1620/1625
- ___ **BIOL 3310/3315** Cell & Molecular Biology/Lab (4) (S)
Pre-req: C or better in BIOL 3060/3065
- ___ **BIOL 3350** Immunology (3) (F odd)
Pre-req: C or better in BIOL 3310/3315
- ___ **BIOL 3370/3375** Ichthyology/Lab (4) (S even)
Pre-req: C or better in BIOL 3030/3035
- ___ **BIOL 3390/3395** Mammalogy/Lab (4) (F odd)
Pre-req: C or better in BIOL 3030/3035
- ___ **BIOL 3410/3415** Invertebrate Zoology/Lab (4) (F even)
Pre-req: C or better in BIOL 3030/3035
- ___ **BIOL 3430/3435** Entomology/Lab (4) (F odd)
Pre-req: C or better in BIOL 3030/3035
- ___ **BIOL 3450/3455** Comparative Vertebrate Studies/Lab (4) (S)
Pre-req: C or better in BIOL 3110
- ___ **BIOL 3470/3475** Herpetology/Lab (4) (F even)
Pre-req: C or better in BIOL 3030/3035
- ___ **BIOL 3490/3495** Ornithology/Lab (4) (S odd)
Pre-req: C or better in BIOL 3030/3035
- ___ **BIOL 3510/3515** Plant Anatomy & Diversity/Lab (4) (F odd)
Pre-req: C or better in BIOL 1620/1625
- ___ **BIOL 3530/3535** Plant Physiology/Lab (4) (F even)
Pre-req: C or better in BIOL 1620/1625
- ___ **BIOL 3550/3555** Plant Taxonomy/Lab (4) (S)
Pre-req: C or better in BIOL 1620/1625
- ___ **BIOL 3630/3635** Freshwater Biology/Lab (4) (F as needed)
Pre-req: C or better in BIOL 3030/3035
- ___ **BIOL 3990** Advanced Topics in Biology (2) (F/S)
Pre-req: C or better in BIOL 1620/1625
NOTE: Substitution Form Required
- ___ **BIOL 4410** Animal Behavior (3) (F)
Pre-req: C or better in BIOL 3110 & MATH 1040
- ___ **BIOL 4500/4505** Capstone: Biology of Disease (4) (F even)
Pre-req: C or better in BIOL 3310/3315
NOTE: Substitution Form Required
- ___ **BIOL 4510** Plant Pathology & Mycology (3) (F on demand)
Pre-req: C or better in BIOL 1620/1625
- ___ **BIOL 4530/4535** Plant Propagation/Lab (4) (S on demand)
Pre-req: C or better in BIOL 1620/1625

ADDITIONAL INFORMATION

B.A. Requirement:

Students must take at least 16 credits of a foreign language.

B.S. Requirement:

Students must take at least 12 credits of mathematics/laboratory science courses.

Students must complete their major coursework with a C grade (2.0) or higher.

Students must have a total of 40 Biology credits (not including BIOL 1010); 20 Biology credits must be upper-division.

Students must have 120 total credits/ 40 upper-division credits to graduate.

A minor is not required.

Credits over ten years old may not be accepted.

Pre-Requisites and the semester that courses are offered are subject to change. Please check the current catalog for updates.