



## Bachelor of Science in BIOLOGY

NAME \_\_\_\_\_

DATE \_\_\_\_\_

### **THE "ASCENT" GENERAL EDUCATION (40 credits)**

#### **BASECAMP (24)**

GATE 1000 University, Vocation & Wellness (2; F) \_\_\_\_\_  
 or GATE 2000 University... (1; F,Sp - Transfers) \_\_\_\_\_  
 & PHED 1100 Fitness & Wellness (1; F,Sp) \_\_\_\_\_  
 BIBL 1300 Lit. of the Old Testament (3; F,Sp) \_\_\_\_\_  
 BIBL 1310 Lit. of the New Testament (3; F,Sp) \_\_\_\_\_  
 \*CHEM 1510/1510L General Chemistry I (4; F)□ \_\_\_\_\_  
 COMM 1260 Oral Communication (3; F,Sp) \_\_\_\_\_  
 \*CORE 2000 Engaging Faith & Society (3; F,Sp) \_\_\_\_\_  
 \*†ENGL 1220 Princ. of College Writing II (3; F,Sp) \_\_\_\_\_  
 \*MATH 2610 Statistics (3; F,Sp) \_\_\_\_\_

#### **EXPEDITION (13)**

##### **Trail #1: Artistic Expression (3 units)**

(Select one from "Trail #1" course menu on reverse)

Course taken: \_\_\_\_\_

##### **Trail #2: Cultural Perspectives (3 units)**

(Select one from "Trail #2" course menu on reverse)

##### **Trail #3: Civic Engagements (3 units)**

(Select one from "Trail #3" course menu on reverse)

Course taken: \_\_\_\_\_

##### **Trail #4: Science and Society (3 units)**

PSYC 1600 Intro. to Psychology (3; F,Sp) \_\_\_\_\_

##### **Trail #5: Adventure Recreation (1 unit)**

(Select one from Trail #5 course menu on reverse)

Course taken: \_\_\_\_\_

#### **SUMMIT (3)**

(Select one from "Summit" courses menu on reverse)

Course taken: \_\_\_\_\_

LEAD 2000 Service Seminar (0; FSp) \_\_\_\_\_

\*Course has prerequisites; consult course descriptions in catalog

† ENGL 1210 is the pre-requisite for ENGL 1220. You may be waived from ENGL 1210 by SAT, ACT, AP or a Placement Exam. If you need ENGL 1210 it will count as an elective.

### **REQUIRED PREREQUISITE**

\*#MATH 1830 Precalculus (3; F)

#This course may be waived with dept. chair permission. If course is taken, it will count toward unrestricted elective credits

### **MAJOR REQUIREMENTS (61 credits)**

#### **COMMON COURSES (51 credits)**

\*BIOL 3110/3110L Cell & Molecular Biology (4; F) \_\_\_\_\_  
 \*BIOL 3120/3120L Genetics (4; Sp) \_\_\_\_\_  
 \*BIOL 3240/3240L Ecology (4; F) \_\_\_\_\_  
 \*BIOL 4310/4310L Microbio. for Biology Majors (4; F) \_\_\_\_\_  
 \*BIOL 4550W Senior Seminar (3; Sp) \_\_\_\_\_  
 BIOL 1510/1510L General Biology I (4; F) \_\_\_\_\_  
 \*CHEM 1520/1520L General Chemistry II (4; Sp) \_\_\_\_\_  
 \*CHEM 3110/3110L Organic Chemistry I (4; F) \_\_\_\_\_  
 \*CHEM 3120/3120L Organic Chemistry II (4; Sp) \_\_\_\_\_  
 \*MATH 2430 Calculus I (4; Sp) \_\_\_\_\_  
 \*PHYS 2110/2110L General Physics I (4; F) \_\_\_\_\_  
 \*PHYS 2120/2120L General Physics II (4; Sp) \_\_\_\_\_  
 BIOL 1520/1520L General Biology II (4; Sp) \_\_\_\_\_

#### **BIOLOGY ELECTIVES (10 credits)**

Choose from the following (must include one lab class):

\*BIOL 3100/3100L Marine Biology (4;TBA) \_\_\_\_\_  
 \*BIOL 3400 Field Biology (1-3) \_\_\_\_\_  
 \*BIOL 3550/3550L Biochemistry (4; Sp) \_\_\_\_\_  
 \*BIOL 3600/3600L Special Topics in Biology (1-4) \_\_\_\_\_  
 \*BIOL 4110 Immunology (3) \_\_\_\_\_  
 \*BIOL 4730 Biology Internship (1-3) \_\_\_\_\_  
 \*BIOL 4740 Biology Research (1-3) \_\_\_\_\_  
 \*BTEC 3700 Biotechnology: Ethics & the Reg. Env. (3) \_\_\_\_\_

### **||PRE-HEALTH SPECIALIZATION (8-12 credits)**

#### **\*Optional\***

BIOL 1310/1310L Human Anatomy (4; F,Sp) \_\_\_\_\_  
 BIOL 1320/1320L Human Physiology (4; F,Sp) \_\_\_\_\_  
 \*BIOL 3550/3550L Biochemistry (4; Sp) -- elective \_\_\_\_\_

### **UNRESTRICTED ELECTIVES (19)\***

(Max transfer electives =33-36)

#### **Additional program requirements**

Cross-Cultural Coursework (6 units)

*Students must*

*complete 6*

Course taken: \_\_\_\_\_ HUMA 1450 \_\_\_\_\_ in GE

Course taken: \_\_\_\_\_ HUMA 1460 \_\_\_\_\_ 3

#### **TOTAL PROGRAM**

|                                                   |            |
|---------------------------------------------------|------------|
| General Education                                 | 40         |
| Biology Major (at least <b>24</b> UPPER DIVISION) | 61         |
| Electives                                         | 19         |
| <b>TOTAL (at least <b>30</b> UPPER DIVISION)</b>  | <b>120</b> |

## APPROVED COURSE MENUS FOR THE ASCENT

### BASECAMP COURSE MENU

Before setting out on the Ascent, there are both things one needs to be able to do and things one needs to know. Simpson University's GE "Base Camp" is the learning space where those skills and literacies will begin to be developed. The Basic skills and literacies offered by an institution are valuable for any number of reasons, but primarily because they allow a person to function independently in both personal and professional settings. These foundations are most frequently recognized in the realm of communication--the ability to read, write, and speak well--but additionally, a Simpson education also requires basic literacies to construct a Christian worldview. The following courses will set the foundation for the Ascent.

#### Course 1: The Liberal Arts Path at Simpson

GATE 1000 University, Vocation & Wellness (2; F)

#### Course 2: English

ENGL 1220 College Writing II (3; F,Sp)

#### Course 3: Oral

COMM 1260 Oral Communication (3; F,Sp)

#### Course 4:

Choose one of the following:

MATH 1830 Precalculus (3; Sp)

MATH 2300 Math for the Educated Citizen (3; Sp)

MATH-2400 Math Concepts for Teachers I (3; EF)

MATH 2610 Statistics (3; F,Sp)

#### Courses 5-7: Biblical & Christian Worldview

BIBL 1300 Literature of the Old Testament (3; F,Sp)

BIBL 1310 Literature of the New Testament (3; F,Sp)

CORE 2000 Engaging Faith and Society (3; F,Sp)

#### Course 8:

Choose one of the following:

BIOL 1310/1310L Human Anatomy (4; F)

BIOL 1510/1510L General Biology I (4; F)

BIOL 2520/2520L Introduction to Biology (4; F,Sp)

CHEM 1300/1300L Introduction to Chemistry (4; F)

CHEM 1510/1510L General Chemistry I (4; F)

PHYS 1510/1510L Introduction to Physics (4; Sp)

### EXPEDITION COURSE MENU

#### Trail #1: Artistic Expression (Choose at least 3 units)

An Artistic Expressions course examines the incredible creativity of humanity as they respond to the challenges, pains, and triumphs of life through artistic mediums and language. The following courses achieve this.

BIBL 4230 Psalms (3; OF)

BILA 2210 Greek (3; EF)

BILA 2260 Hebrew (3; OF)

COMM 2300 Digital Photography (3; OF)

ENGL 2100 Introduction to Literature (3; EF)

ENGL 3200W Advanced Composition (3; F)

HUMA 2440 Fine Arts & Western Culture (3; Sp)

LING 3350 Language Acquisition (3; Sp)\*\*

MUAP 1712 Simpson Chorale (1; F,Sp)^

MUSI 1600 Music in History and Context (3; F,Sp)

BIBL-3031 Biblical Interpretation (3)

#### Trail #2: Cultural Perspectives (Choose at least 3 units)

A Cultural Perspectives course explores the cultural diversity of the world and teaches students to appreciate and value all individuals as bearers of the image of God. The following courses achieve this.

§ANTH 3110 Cultural Anthropology (3; F)

§CCST 3740 Peoples of the World (3; F)

COMM 2100 Media & Culture (3; EF)

§COMM/LING 4330 Communicating Cross Culturally (3; F,Sp)\*\*

§ENGL 3220 World Literature (3; EF)

§HIST 3385 History of the Islamic World (3; ES)

§HUMA 1450 World Civilizations I (3; F)

§HUMA 1460 World Civilization II (3; Sp)

§POLS 2000 Politics and Culture of the Developing World (3; OS)

#### Trail #3: Civic Engagements (Choose at least 3 units)

A Civic Engagement course is one in which students are introduced to the concepts, practices, and obligations of our civic and economic processes and their effects on humanity. These courses empower students to be engaged and informed citizens in a democratic society.

BUSS 1950 Introduction to Economics (3; F,Sp)

COMM 2090 Small Group Communication (3; F,Sp)

POLS 2700 Introduction to Political Science (3; F)

POLS 2720 American Government (3; Sp)

POLS 3000 Political Thought (3; OS)

#### Trail #4: Science and Society (Choose at least 3 units)

A Science and Society course is one in which students explore the manifold wonder of the created order and gain a better appreciation for the complexity of the earth and the interconnectedness of all that dwells in it. These courses provide an introduction to the natural and social sciences and offer an overview of a given field and its skills.

BIOL 3510 Environmental Science (3; Sp)

BIOL 3540 Human Biology (3; F)

ODLE 3015 Environmental Education (3; OS)

PHYS 3200 Earth and Space Science (3; F)

PSYC 1600 Introduction to Psychology (3; F,Sp)

#### Trail #5: Adventure Recreation (Choose at least 1 unit)

An Adventure Recreation course is one in which students either engage in physical activity and/or enter into the natural world and learn how to be healthy and whole individuals in both mind and body. The following courses achieve this.

ODLE 1005 Wilderness Journey (3; Su)

ODLE 1060 Hiking (1; TBA)

ODLE 1015 Snowshoeing/Winter Camping (1; TBA)

ODLE 1020 Rock Climbing (1; TBA)

ODLE 1025 Mountaineering (1; TBA)

ODLE 1040 Mountain Biking (1; TBA)

ODLE 1050 Kayaking (1; TBA)

ODLE 1055 Canoeing (1; TBA)

ODLE 1070 Cross-Country Skiing (1; TBA)

### SUMMIT COURSE MENU

Summit courses are designed to be taken after a student completes 45 total units and has completed at least one course in each trail (#1-5) of the Expedition. Typically students will take the Summit Course in their Junior year.

CCST 3120 Microenterprise Development (3; OS)

COMM 4290 Advanced Public Communication (3; F,Sp)

HIST 3370 History of Christianity (3; EF)

§MUSI 3690 Music in World Cultures (3; Sp)

ODLE 3960 Survey of Leadership Theories (3; Sp)

PHIL 3010 Philosophy & Critical Thought (3; Sp)

PSYC 3016 Lifespan Development (3; F)

THEO 3600 Christian Theology (3; F)

THEO 3650 Issues in Ethics (3; EF)