

BIOL 1104

Introduction to Biology

Course Description

This course serves as an introduction to the study of life and emphasizes eight core areas: philosophy of science, biochemistry, cell biology, genetics, evolution, diversity of life, human biology, and ecology. While biology may be considered a subject for memorization by some, others believe it is more effective and interesting to think about and apply the material learned in familiar and real-life situations. The skills of reading, critical thinking, and teamwork must be fostered and practiced to be useful in the future. Because biology is encountered every day, this class can be a valuable piece of the college experience and educational process.

Required Materials

OpenStax, Concepts of Biology. <https://openstax.org/details/concepts-biology>

SimBio Virtual Lab set. Custom Kit for Biology 1104 at Southern Wesleyan University

Accreditation

Southern Wesleyan University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate, baccalaureate, and masters degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097 or call 404-679-4500 for questions about the accreditation of Southern Wesleyan University.

Course Learning Outcomes

CLO#1	Upon successful completion of this course, each student will describe the principle of natural selection and its importance to biological thought.
CLO#2	Upon successful completion of this course, each student will communicate the main philosophies that have shaped the history of science and contrast those with a Christian approach to the natural sciences.
CLO#3	Upon successful completion of this course, each student will explain the basic makeup of matter and the importance of carbohydrates, lipids, proteins, and nucleic acid.
CLO#4	Upon successful completion of this course, each student will diagram the composition of a typical cell and state the function of organelles.
CLO#5	Upon successful completion of this course, each student will describe the energy transformation involved in photosynthesis and aerobic and anaerobic respiration.

CLO#6	Upon successful completion of this course, each student will compare and contrast the outcome of the processes of mitosis and meiosis.
CLO#7	Upon successful completion of this course, each student will describe the structure of DNA and its role in the study of inheritance.
CLO#8	Upon successful completion of this course, each student will outline the levels of biological hierarchy and modern taxonomic classification.
CLO#9	Upon successful completion of this course, each student will compare and contrast populations, communities, and ecosystems.
CLO#10	Upon successful completion of this course, each student will describe and apply the process of scientific inquiry. BIOL 1104 Page 2 of 11
CLO#11	Upon successful completion of this course, each student will describe how the study of biology might enhance one's faith.
CLO#12	Upon successful completion of this course, each student will analyze and discuss current events related to course content.

Course Learning Assignments and Assessments

Grading

Homework, Quizzes, & Discussion Forums	20%
Laboratory Assignments	20%
Current Event Article Essay Average	25%
Exams	35%
Total	100%

Homework, Quizzes, and Discussion Forums– 20%

- Weekly homework will consist of completing the assigned reading and Canvas quiz
- Class discussions will take place within the course forum/discussion boards. In order to access the forums, choose “Discussions” in the Main Menu. In most cases, students must post an initial response by the announced

due date and respond to at least two class mates' postings. All readings and other instructions will be posted within the discussion forum.

- A rubric is posted within the course Files and is attached to the assignment showing the expectation of excellent discussion forum participation.
- The major grades in this assignment division are for Discussion Board Portfolios. Students will collect and highlight their best posts from all Discussion Boards to present for more rigorous grading. Examples and a rubric are available on the assignment pages.

Laboratory Assignments – 20%

- Each student will complete their laboratory requirement through SimBio virtual labs. ENTER PURCHASE INFORMATION WHEN AVAILABLE.
- Students will submit answers to the lab simulation workbooks through Canvas. Answers for lab simulation tutorials will occur through the SimBio site.

Current Event Article Essay Average – 25%

- Current Event Article Papers will be composed of a 600-800 word paper summarizing and reviewing a recent article about biology. The review should include how the topic of the article relates to the topic of the course and the student's opinion of the research findings. The student should utilize a legitimate news Website (i.e. www.cnn.com), a recent (within the last year) newspaper or magazine (i.e. Newsweek, The Greenville News), or a peer-reviewed journal article from the library holdings.
- Proper citation should be given within assignments, using the APA style of documentation. The student should see the APA Guide from Rickman Library posted on MySWU for additional information on documentation. Lack of documentation can be considered plagiarism.

Exams – 35%

There will be three exams given during the course – following Sessions Two, Four, and Seven. The due dates for these exams will be posted on. The questions will require the student to apply the academic objectives listed in this syllabus.

GRADE EQUIVALENCY TABLE

All grades are reported in a system of eleven letter grades designated as “A” through “F” with appropriate plus and minus additions reflecting the following scheme:

Percentage Value	Letter Grade	Numeric Value for GPA
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.4
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.4
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.4
60-66	D	1.0
<60	F	0.0

Course Policies

Attendance Policy

Regular attendance is a key to success in the course. Please refer to the Attendance Policy outlined in the Catalog for full details of the SWU policy on attendance.

Hybrid courses are a combination of online and classroom activities. Students are expected to attend all campus class meetings as well as to adhere to posted online deadlines for assignments. Face-to-face sessions are held once a week for three hours, and attendance is mandatory. Classroom attendance will be taken in class by the instructor.

Online attendance is based on completion of at least one designated assignment by the due date/time posted within the course site for each session. Online activities may include lecture, assignments, readings, discussion forums, and assessments (e.g. quizzes, tests).

Communication

The course site (Canvas) and SWU email are the primary tools for class communication, assignments, handouts, etc. All participants must have access to the course site and SWU e-mail and are expected to access them on a daily basis.

While it is important to maintain good communication with the instructor, Internet connectivity problems and home computer problems are not considered adequate excuses for missing assigned class work.

Technology Requirements

To be successful in this course, all participants are expected to ensure their technology equipment meets the [recommendations](#) provided by SWU's Technology Services.

Students requiring technical support related to their courses or other SWU-provided technologies should send an e-mail to helpdesk@swu.edu or call 864.644.5050.

Academic Honesty

Honesty in all matters - including honesty in academic endeavors - is a valued principle at Southern Wesleyan University. It is the expectation of the university that all those joining the academic program will act with integrity in all matters.

No forms of academic dishonesty will be tolerated. Students are encouraged to help each other maintain these high standards. All academic dishonesty should be reported to the faculty directly. Faculty, upon evidence of academic dishonesty (cheating, plagiarism, or misuse of another's intellectual property), either by voluntary confession, report of another student, or on the basis of work submitted, must follow the procedure outlined in the Catalog (under *Academic Honesty*). This includes but is not limited to a zero for the work involved, 10% course grade reduction, or a failing grade for the course. Unresolved cases may be appealed using the Appeal Process outlined in the Catalog (*Academic Honesty*).

Accommodations for Students with Disabilities

Southern Wesleyan University is committed to providing equitable access to learning opportunities for all students. Accommodations can be made for students with disabilities, as outlined in "Services for Students with Disabilities" found in mySWU's Student tab under The Learning Center. Any student desiring accommodations must send the request and all documentation to the Student Success Coordinator in Rickman Library 224. Call 864-644-5036 for more information.