

BIOL 1307 BIOLOGY FOR MAJORS II

(3 credits)---- SPRING 2026

Instructor: Mrs Jena Carey
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Course Meeting Times: MW 11-12:15, WSB 101

Office Hours: Monday M-R 8-9:30

Hawkes Biology Textbook: Biology, Hawkes Learning, 2024. ISBN: 978-1-64277-642-3

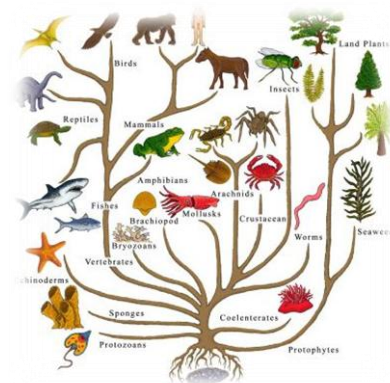
Course Description: This course covers the foundational concepts of natural selection, evolution, and speciation, prokaryotic and eukaryotic diversity, and ecological principles.

Course Objectives.

- Describe the different processes by which natural selection can shape the structure of populations.
- Describe the current understanding of diversity and evolutionary relationships among organisms.
- Describe where representative prokaryotic organisms are found in the environment, their important relationships with other organisms, and important adaptations.
- Identify distinguishing features of eukaryotes, as well as key features of major divisions.
- Examine the process of reproduction and trace the life cycles of representative animals.
- Relate the basic principles of ecology to the diversity and distribution of organisms on earth.

Grading:

| Category | Total Points |
|---|--------------|
| 4 Lecture Exams (45 questions, 100 points per exam) | 400 |
| 10 Concept Maps (20 points each, due 10:59 a.m. day of class) | 200 |
| Attendance (10 points daily, 5 points for tardy) | 260 |
| <u>Team Based Learning (TBL)</u> | <u>140</u> |
| TOTAL | 1000 |



ATTENDANCE AND MAKEUP EXAMS. If you arrive for an exam after our class time as begun, points will be deducted for each minute late. The final exam will not allow for tardiness and doors will be locked, no late entry will be allowed

- Missing any exam without notifying me no later than 24 business hours in advance will result in a zero for that exam grade—no exceptions.
- If you miss an exam, you must be attend the final exam to replace one missed exam. If you should miss more than one exam, grading will reflect that.
- If you fail to appear—or appear late—for your scheduled makeup exam, you will receive a zero.

| WEEK | DATE | TOPIC |
|------|-----------------|--|
| 1 | W 14 Jan | Intro, Evolution Intro Chp18 |
| 2 | M 19 Jan | No Classes |
| | W 21 Jan | Origin of Species, Chp 18 Galapagos Video & TBL |
| 3 | M 26 Jan | Population Evolution, Chp 19 |
| | W 28 Jan | TBL- History of Life on Earth, Chp 20 CM1 Due |
| 4 | M 2 Feb | EXAM I |
| | W 4 Feb | Prokaryotes: Bacteria & Archaea, Chp 22 CM2 Due |
| 5 | M 9 Feb | Protists, Chp 23 CM3 Due |
| | W 11 Feb | Fungi, Chp 24 CM4 Due |
| 6 | M 16 Feb | NO CLASS---- Online Seedless Plants, Chp 25 & Seeded Plants, Chp 26 |
| | W 18 Feb | TBL CM5 Due |
| 7 | M 23 Feb | EXAM II |
| | W 25 Feb | Animal Diversity, Chp 27 |
| 8 | M 2 Mar | Invertebrates, Chp 28 CM6 Due |
| | W 4 Mar | TBL- Invertebrates, Chp 28 |
| 9 | M 9 Mar | No Classes |
| | W 11 Mar | Spring Break |
| 10 | M 16 Mar | Vertebrates, Chp 29 CM7 Due |
| | W 18 Mar | TBL- Vertebrates, Chp 29 |
| 11 | M 23 Mar | EXAM III |
| | W 25 Mar | Ecology & Biosphere, Chp 44 CM8 Due |
| 12 | M 30 Mar | Ecology & Biosphere, Chp 44 |
| | W 1 Ap | Population & Comm Ecology, Chp 45 CM9 Due |
| 13 | M 6 Ap | NO CLASS--- Online Population & Comm Ecology, Chp 45 |
| | W 8 Ap | TBL PRESENTATIONS |
| 14 | M 13 Ap | EXAM IV |
| | W 15 Ap | Ecosystems |
| 15 | M 20 Ap | Cons Bio & Biodiversity, Chp 47 CM10 Due |
| | W 22 Ap | TBL- Cons Bio & Biodiversity, Chp 47 |
| 16 | M 27 Ap | ONLINE REVIEW |
| | W 29 Ap | NO CLASS-STUDY DAY |
| 17 | | See SRSU Final Exam schedule for date and time of Final |

Note – This outline is subject to change. The exams will be administered on the dates given unless material relevant for a given exam has not been covered.

STUDYING: As a general rule, students should spend 2-3 hours studying for every 1 hour of lecture material.

So, for this class, you need to allocate **6-9 hours per week** to study the lecture material. This equates to one to one and a half hours of study PER DAY (if you study M-F). A breakdown of an hour of study is included on our intro slides.

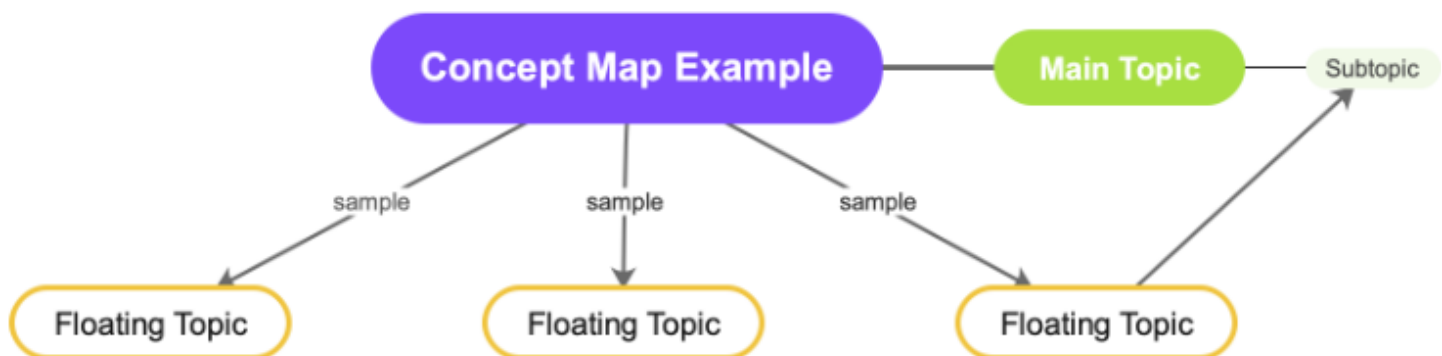
I HIGHLY RECOMMEND READING BEFORE LECTURE.

You have been given the tentative schedule- please review it and read material beforehand.

I recommend reading your notes in conjunction with reading the relevant textbook chapters. Studying is best done before & after the lecture, not all at once the night before the exam.

Look up anything that you do not understand or visit with your instructor during office hours.

Concept Maps: Each set of information will require uploading a concept map. Concept maps are great to quick review before class or during exam prep. It is made to take lots of information and format it where that information is on one page, in a flowing order. I have given some examples below as well as in our introduction slides. Please take time to review this information. Concept maps will be graded on factual information, display, correct orders, and creativity. If you give a simple concept map or one that was copied off the internet, your grade will reflect that. ***All Concept Maps are due on Blackboard by 10:59 a.m. on due date. Any late submissions will occur a five point deduction each day late.***



More Grading Policy: There is NO EXTRA CREDIT given other than Highway Clean Up at the END of the semester. **NO extra credit assignments, opportunities, or questions will be given.** Your grade is the grade **YOU** earned- the amount of work **YOU** put into learning the material. **DO NOT** come to me at the end of the semester asking for a higher grade or extra credit- none will be given. I do not round up grades. For instance: an 89.5 is still a "B", a 79.9 is still a "C".

Exams- Exams are given on ScanTron and will present with 45 questions, totaling 90 points. The remainder ten points will come from HAWKES Learning assignments on Blackboard. All assignments must be completed by 10:59 a.m. on day of exam for full credit; partial credit will be given on assignments completed. Exams are mix of matching, multiple guess, and true/false. There will be no rounding of grades, or curves given. Your grade is your grade earned. If you would like to review your exam, please make time available during office hours to review.

Final exam- If you have an "A" (90 or higher) BEFORE Dead Day and BEFORE any Highway Clean Up extra credit, you will be exempt from the final. Our final will be used to replace lowest exam grade and any missing exam. It will be comprehensive, 100 question ScanTron. Make sure to check the final exam schedule for our date and time. If you miss the final exam, you will not receive any Highway Clean Up extra credit, nor will your lowest exam be replaced. If you are late to the final, entry will not be allowed.

STUDENT LEARNING OUTCOMES (SLOS) The biology student graduating with a BS in Biology should be able to:

- 1) The student will be able to demonstrate an understanding of basic biological concepts, including but not limited to evolution via natural selection, cell theory, and the role and function of DNA.
- 2) The student will be able to demonstrate the utilization of various field techniques toward addressing scientific questions in the specific discipline. These field techniques can include, but are not limited to, plant collection and processing, various animal collection techniques, ecological surveying and sampling, and biodiversity indexing.
- 3) The student will be able to use biological instrumentation to solve biological problems using standard observational strategies.
- 4) The student will develop writing skills by summarizing and critiquing recent relevant biological literature.

CORE OBJECTIVES ADDRESSED:

- 1) Communication Skills – Students will effectively communicate the results of scientific investigations, using oral, written, and visual communication, either in group discussions or on written exams.
- 2) Critical Thinking Skills – Students will include creative thinking, innovation, inquiry, and analysis required to relate new information with previous information in a way that demonstrates the diversity and similarity due to evolutionary ancestry.
- 3) Empirical and Quantitative Skills – Students will use basic math skills to solve problems (e.g., related to genetic outcomes, cellular energy production, and probability) resulting in informed conclusions.
- 4) Teamwork Skills – Students will work effectively with others to support a shared goal during lab sessions on activities, such as dissections, problem-solving, and other experimental procedures.

MARKETABLE SKILLS: A student getting a degree in the biological sciences would be expected to acquire the following marketable skills by graduation.

- 1) Students will be able to organize, analyze, and interpret data.
- 2) Students will be proficient at using presentation software.
- 3) Students will acquire experience in managing time and meeting deadlines.
- 4) Students will gain the ability to speak effectively and write concisely about scientific topics.
- 5) Students will acquire experience and guidance in the development of professional email correspondence.

SRSU Attendance Policy. Roll will be taken during each class meeting. The SRSU catalog states “The instructor may, at their discretion, drop a student from a course when the student has a total of nine absences in lecture and three absences in lab. An absence is defined as non-attendance in fifty minutes of class. Exams must be taken on the scheduled exam date that will be announced at least a week prior unless other arrangements have been made with the instructor. Exams must be made up within a week form the scheduled date. **RULE TO LIVE BY: DON’T MISS ANY CLASSES!** If you absolutely must miss, make sure you let me know before. It is your responsibility t obtain any missed information from your fellow peers.

Academic Integrity

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity, such as turning in work as original that was used in whole or part for another course and/or professor; turning in another person’s work as one’s own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden. Students should also avoid using open AI sources ***unless permission is expressly given*** for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall. ***I do NOT condone (support) the use of any AI on assignments in class.***

Classroom Climate of Respect

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference.

Counseling

Sul Ross has partnered with TimelyCare where all SR students will have access to nine free counseling sessions. You can learn more about this 24/7/365 support by visiting [Timelycare/SRSU](https://www.timelycare.com/srsu). The SR Counseling and Accessibility Services office will continue to offer in-person counseling in Ferguson Hall room 112 (Alpine campus), and telehealth Zoom sessions for remote students and RGC students.

Libraries

The Bryan Wildenthal Memorial Library and Archives of the Big Bend in Alpine offer FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu/. Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).

No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting library.sulross.edu/find-and-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.

Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL), ScanIt, and Direct Mail to get materials delivered to you at home or via email.

Tutoring Center

[The Lobo Den Tutoring Center](#) offers FREE tutoring support to help you excel in your courses. Whether you need assistance in Writing, Math, Science, or other subjects, we're here to help!

Important Information:

- **Drop-in and Scheduled Appointments:** Flexible options to fit your needs.
- **Hours of Operation:** Monday–Friday, 8:00 AM – 5:00 PM.
- **Workshops:** Attend our regularly hosted academic workshops on STEM topics and professional development, often in collaboration with specialized faculty.
- **Location:** BWML Room 128.
- **Contact Us:** For more information or to book an appointment, email tutoring@sulross.edu or call (432) 837-8726.

Looking for additional support?

- **Tutor.com** offers FREE 24/7 online tutoring in over 200 subjects, including specialized support for ESL and ELL learners with native Spanish-speaking tutors.
- **Access Tutor.com via Blackboard:** Log in to your Blackboard account to get started anytime, anywhere.

Take advantage of these valuable resources to boost your confidence and performance in your classes. We look forward to helping you succeed!

Statement Regarding Generative Artificial Intelligence (AI)

The University does not recommend or endorse any specific AI tools or resources. Students should be aware that many generative AI tools (e.g., ChatGPT, Google Gemini, Microsoft Copilot) store user input and may use this data to train future models. For this reason, students should never upload or share personal, confidential, or identifiable information—such as names, ID numbers, health data, or assignment submissions containing such details—into any generative AI platform. When using AI tools, students should verify whether the tool complies with student privacy standards as indicated by the University. Faculty may recommend specific tools that better align with institutional data privacy policies, but ultimate responsibility for data protection rests with users. Students are encouraged to use faculty-recommended platforms when engaging in coursework involving generative AI. The University is not liable for any adverse experience or impact when students interact with these tools.

Here are some recommended statements faculty might adapt for their syllabi: <https://ctl.utexas.edu/chatgpt-and-generative-ai-tools-sample-syllabus-policy-statements>. Review the entire [AI Policy here](#).

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