BIOL 1307 – Biology 2 for Majors Spring 2024 Syllabus

INSTRUCTOR AND COURSE DESCRIPTION

Instructor: Dr. Thornton R. Larson **Office Hours:** T 430PM -7PM; MR 2 PM- 3 PM; or by appt

Office: WSB 221 **Classroom:** WSB 201 **Office Phone:** (432)837-8084

Email: trl21jz@sulross.edu

Lectures: Tuesday/Thursday 11 AM to 12:15 PM **Laboratory:** Check your schedule

Course Description

This course is meant to be part 2 of an overview of biology as a whole. For those of you who enjoy things larger than a single cell, this is the class for you. This course will start by looking at species origins and how populations differentiate from one another to become reproductively isolated species. We will review several major groups within organismal biology, including Prokaryotes, Protists, Fungi, Plants, and Animals. After establishing the whats that make up the whos, we will delve into some basic ecological concepts as we work toward understanding how we look at species as individuals, groups, groups of groups, and then global ideas.

This course will set you up as a route through biology at Sul Ross State University as we focus on an organismal approach to the subject. This means we love our species and how they interact in the larger world. While still considered a survey of the field, this course will build your knowledge of the larger organisms in biology and how we study them. These basic ideas will allow you to have a better understanding of the world around you and its functionality between living and non-living elements

This course will expect you to be able to find and read current scientific literature and express that knowledge in a digested format (Summary) to other people. You will have access to a learning community through Codon Learning, in which you will interact more consistently with the materials presented in the course. We want you to come away from this course with a passion for nature and an understanding of how these foundational elements will build on any career within science.

I look forward to instructing this course this semester and strongly encourage you to come to my office hours, or whenever you feel the need and my door is open.

Required Materials

Hawkes Learning Biology Online text and homework are in Blackboard through “Sign in to Hawkes” Module (link for this will be included in every module for easier access for weekly reading and homework)

- Labs will be posted on Blackboard

Exams and Grading

Lecture and Lab are separate grades with individual weights in how classes are reported. It is, therefore, in your best interest to keep full attendance and keep up with assignments in both aspects of the course.

Lecture:

4 lecture exams	40%
2 Summary Papers	20%
5 Team-based Learning	10%
1 TBL Presentation	5%
Attendance	15%
10 Concept Maps	10%
1 Final Exam	replaces the lowest test grade, optional if you have an "A" in the course before any extra credit added

Lab:

Prelab Quizzes (8)	10%
Group Assignments (4)	20%
Individual Assignments (2)	20%
Group Presentation (1)	25%
Research Summary (1) (Individual)	25%

A 90 – 100% B 80 – 89% C 70 – 79% D 60 – 69% F <60%

COURSE OBJECTIVES, LEARNING OUTCOMES, MARKETABLE SKILLS, POLICIES, AND UNIVERSITY SERVICES

Course Objectives: At the end of the semester, students will:

1. Understand the Origin of Life
2. Explain the different classifications of organisms and their differences
3. Demonstrate basic steps of the evolutionary process through organismal classification
4. Demonstrate basic ideas of Ecology, Populations, and Conservation
5. Recognize the scope of understanding presented in biology and how one can relate ideas from a single organism to a functional Ecosystem to Biosphere.

Student Learning Outcomes (SLOs) for Biology:

1. Demonstrate an understanding of evolution by natural selection.
2. Demonstrate an integration of environmental awareness into everyday modern life.
3. Understanding how to incorporate molecular biology into the study of the whole organism.

4. Demonstrate utilization of various field techniques toward addressing scientific questions in the discipline.
5. Conduct basic laboratory experiments utilizing standard observational strategies.

Marketable Skills

1. Ability to organize, analyze, and interpret data.
2. Proficiency in using presentation software.
3. Experience in managing time and meeting deadlines.
4. Ability to speak effectively and write concisely about scientific topics.
5. Experience in the development of professional email correspondence.

In-class expectations:

- **No recording** of the lecture without express written permission of the Instructor (if you require the course recording for your studying, please visit the counseling center so I can document your need)
- **No headphones or earpieces** such as Air Pods allowed during class (if you have a sensory need for such a device, please see the counselling center to document this need)
- **No cell phones***. Those using cell phones during class will be asked once to put them away, and if used a second time, will be asked to leave the class for that day, with attendance points or exit note points not being received for that class day.
- **No laptop use** during class*. While some students have utilized laptops for notetaking, this is no longer the norm, as identified by the instructor of this course. Other uses of laptops during lecture (gaming, video watching, social media, etc.) are a distraction to your peers that sit near you, so for students trying to learn, laptops will not be allowed for notetaking in class.
    - I recommend taking notes in a notebook and then transferring those notes using a combination of the textbook and peers in the class to re-engage with the information as a way to study for the class.

*Certain activities during class may require internet or other computer software use. Devices will be allowed for these activities.

Attendance:

Mandatory. Roll will be by through the exit notes that I provide for you to fill out. I am allowed to drop you from my class if you miss more than six times (that accounts for 3 full weeks of lecture). I generally do not drop you myself so don't expect that I will. I do not wish to hear excuses for missing class and do not want to hear about it every time you are gone. Absences are excused only if you have a documented, university-approved excuse (hospitalization, funeral, etc.) DO NOT MISS EXAMS unless you have a documented, university-approved excuse. If you do not inform me of your approved absence before the exam, it will be a ZERO.

Time Commitment Expectations:

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 5-7.5 hours per week to study the lecture material. Completing the readings is technically required **before** lecture so, **I HIGHLY RECOMMEND READING BEFORE LECTURE**. You have been given the tentative schedule please review it and read the material beforehand. I recommend reading your notes in conjunction with reviewing the relevant textbook chapters. Studying is most effective shortly after the lecture, rather than all at once the night before the exam. Look up anything you do not understand, or consult your instructor during office hours.

Summary Papers:

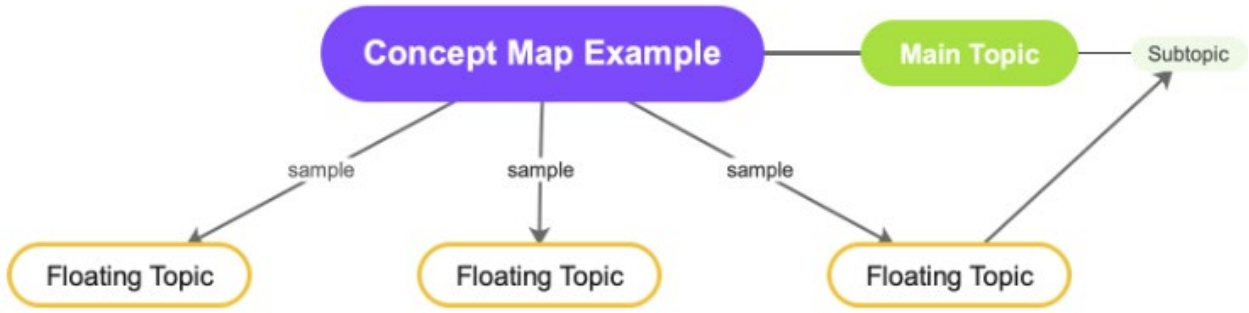
More specific instructions on summary papers will be provided on Blackboard. The purpose of these assignments is for you to read current research in genetics. When I announce the assignments, you will have one week to submit the paper you plan to review to me, upon which I will state if A) it is a research paper (many students still at this stage in their education are unfamiliar with what constitutes a peer-reviewed research paper), B) if the paper is something that I think you are able to understand in a thorough enough manner to review it. If you choose not to check the paper with me and it is not a peer-reviewed research paper, you will lose significant points on the assignment.

Exit Notes:

Upon the conclusion of every class, students will fill out notecards about the following topics. One will express something they are lost on and should consider scheduling office hours to discuss for their understanding. The second is for things they mostly got. This will inform the instructor to consider reviewing that topic, likely at the beginning of the next class. The third is for topics that they completely understand. All of these allow the instructor to understand what areas may need more attention in next lectures, reviews before exams, and even future courses.

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.



Exams-

Exams are given on ScanTron and will consist of 45 questions, totaling 90 points. The remaining 10 points will be awarded through 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.

Late Work Policy:

Late work is frowned upon for assignments to be turned in. All assignments will be due turned in to the appropriate assignment section (Blackboard or other online program) before class starts that day. That means if class starts at 11:00 AM the assignment is in Blackboard by 10:59.59 AM. After this time, you will lose 10% on the assignment. After 24–48 hours late it will be 20% off, and 48–72 hours late it will be 30% off. Beyond these times it will be a '0' on the assignment. These terms are meant to respect both timeliness and flexibility of deadlines and will be upheld.

SRSU Library Services

The Sul Ross Library offers 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 your LoboID and password. Check out materials using your photo ID. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or phone (432-837-8123).

SRSU Disability Services:

SRSU Disability Services. Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Alpine Students seeking accessibility/accommodations services must contact Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Coordinator at 432-837-8203 or email mschwartze@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

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 will reiterate here that I take academic dishonesty and plagiarism very seriously. Citations are your friend. There is a difference between knowingly being dishonest with what is your work and mistakes through learning.

University AI Policy

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.

Dr. Larson's specific AI policy for course work

Dr. Larson recognizes the uses of AI Learning Language Models and does try to encourage the use of them in class spaces. However, many students have utilized AI to complete entire assignments for them or used AI resources to heavily edit their writing to the point that student contribution to the assignment cannot be measured and therefore gets awarded a **score of '0'**. For

the purposes of this class do not use any form of AI to correct your grammar or sentence structure: this includes some of the more advanced functions in google docs and word as well as use of Grammarly. I you are unsure at the appropriateness of AI use for a particular assignment either confirm with Dr. Larson or err on the side of not using such a tool. The goal of the assignments is typically to improve upon skills such as scientific writing and demonstration of understanding, so do not use AI tools unless you have confirmed use to use them for the safety of your own grade.

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. Still we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Required Student Responsibilities Statement

All full-time and part-time students are responsible for familiarizing themselves with the Student Handbook and the Undergraduate & Graduate Catalog and for abiding by the University rules and regulations. Additionally, students are responsible for checking their Sul Ross email as an official form of communication from the university. Every student is expected to obey all federal, state and local laws and is expected to familiarize themselves with the requirements of such laws.

For Remote/Online Courses Only - SRSU Distance Education Statement.

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

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!

TENTATIVE LECTURE SCHEDULE

Week 1 **Jan 12th**		
Jan 13	No Class (Class begins Jan 14th)	
Jan 15	Intro, Evolution Intro	Chapter 18
Week 2 **Jan 19th**		
Jan 20	No Class MLK Jr. Day	
Jan 22	Origin of Species, Galapagos Video, & **TBL**	Chapter 18
Week 3 **Jan 26th**		
Jan 27	Population Evolution	Chapter 19
Jan 29	**TBL** – History of Life on Earth, **CM1 Due**	Chapter 20
Week 4 **Feb 2nd**		
Feb 3	**Exam I**	**Chapters 18-20**
Feb 5	Prokaryotes: Bacteria & Archeas, **CM2 Due**	Chapter 22
Week 5 **Feb 9th**		
Feb 10	Protists, **CM3 due**	Chapter 23
Feb 12	Online Pre-recorded Lecture - Fungi, **CM4 due**	Chapter 24
Week 6 **Feb 16th**		
Feb 17	Seedless, and Seeded Plants **Summary 1 due**	Chapter 25 & 26
Feb 19	**TBL**, **CM5 due**	
Week 7 **Feb 23th**		
Feb 24	**Exam II**	**Chapters 22-26**
Feb 26	Animal Diversity	Chapter 27
Week 8 **March 2nd**		
March 3	Invertebrates part I **CM6 due**	Chapter 28
March 5	**TBL** Invertebrates part II	Chapter 28

Week 9 **March 9th**	**Spring Break**	
Week 10 **March 16th**		
March 17	Vertebrates part I **CM7 due**	Chapter 29
March 19	**TBL** Vertebrates part II	Chapter 29
Week 11 **March 23rd**		
March 24	**Exam III**	**Chapters 27-29**
March 26	Online Pre-recorded Lecture - Ecology and Biosphere part I **CM8 due**	Chapter 44
Week 12 **March 30th**		
March 31	Ecology and Biosphere part II	Chapter 44
April 2	Population and Community Ecology part I **CM9 due**	Chapter 45
Week 13 **April 6th**		
April 7	Population and Community Ecology part II	Chapter 45
April 9	**TBL Presentations**	
Week 14 **April 13th**		
April 14	**Exam IV**	**Chapter 44-45**
April 16	Online Pre-recorded Lecture - Ecosystems	Chapter 46
Week 15 **April 20th**		
April 21	Conservation and Biodiversity, **CM10 due**	Chapter 47
April 23	**TBL** Conservation Biology and Biodiversity	Chapter 47
Week 16 **April 27th**		
April 28	Review **Summary 2 due**	Cumulative
April 30	Dead Day	
Week 16 **Finals**	**Finals Week**	
	Likely Monday May 4th 1015-1215	