

BIO 1409 (4:3:3)

General Biology for Non-Science Majors II

Department of Biology

Division of Arts and Sciences

SOUTH PLAINS COLLEGE

Levelland Campus

Dr. Eric Niederhauser

Spring 2024

Course Information
Biology II for Non-Science Majors (BIOL 1409)
Spring 2024

Instructor: Dr. Eric Niederhauser

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Please include 1409 in the subject line.

Office Hours: Monday: 9:30 - 10:30, 2:30 - 3:30 Tuesday: 9:00 - 10:30
Thursday: 9:00 - 10:30, 2:30 - 3:30 Friday: 10:00 – 12:00

Course Description: A survey of fundamental principles of living organisms including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. This is a part of a two-semester set of classes – though the other semester is not required. The main topics of this semester include the diversity of life, ecology and animal and plant structure/function. This course partially satisfies a Core Curriculum Requirement: Life and Physical Sciences Foundational Component Area (030). Core Curriculum Objectives addressed: Communication skills, Critical thinking skills, Empirical and quantitative competency skills, Teamwork, Personal responsibility, Social responsibility.

Course Implementation:

PREREQUISITE: None. CREDIT: Four semester hours

RECOMMENDED TEXT: Campbell, *Essential Biology with Physiology*, 6th Ed. by Simon, et al.

REQUIRED LAB MANUAL: Download from Blackboard and print. You MUST print the required lab manual and bring it to lab. You do NOT need to print it in color. I strongly suggest printing the whole manual at once. It is formatted to be double sided but single sided works too.

Blackboard: Current grades, course information, lecture notes, links etc. will be available on Blackboard, accessed through <https://southplainscollege.blackboard.com>.

Emails and Announcements: If needed I will send announcements or reminders via email to your SPC email address. You are responsible for any information that is in the announcements or sent to your SPC email by me or the college, so please check them regularly.

Grading

EXAMS: There will be three mid-term lecture exams given during the semester and a comprehensive final. These will be primarily multiple choice and true or false, but may include fill-in-the blank, short answer, and essay questions.

Do not miss exams. If you know in advance that you will be unavoidably absent on an exam date, notify the instructor ahead of time. It may be possible to take the exam at an alternate time. If you miss an exam due to an unforeseen circumstance and do not contact me within 24 hours, I will not consider a makeup exam. Failure to notify me will result in a zero for the exam.

IN-CLASS QUIZZES: There will be quizzes at the beginning of most classes that will address the previous lectures and lab. If you are late for class your quiz grade will suffer. There will be no in-class quiz makeups but the three lowest in-class quiz grades will be dropped. Students who miss 4 or more quizzes (for any reason) will NOT have the lowest quiz grades dropped. Quizzes will use a remote clicker system.

LAB GRADES: Based on assignments, attendance and exams taken in the lab.

GRADING SUMMARY

| Grade Type | Percentage of Grade |
|------------------------|---------------------|
| Exams | 60 % |
| In-Class Quizzes | 20 % |
| Lab Exams /Assignments | 20 % |

Grading scale: Final semester average 90-100 = A; 80-89 =B; 70-79 = C; 60-69 = D; <60 = F.

Last Day to Drop the Course: April 25, 2024

Policies, Procedures and Rules

This course will be conducted according to the policies and procedures of the South Plains College Student Handbook and General Catalog.

Attendance Policy: This course is designed to be an in-person course. Punctual and regular class attendance is mandatory. Once a week, class meetings consist of lecture period AND a lab period; consequently, failure to attend lecture OR lab will count as an absence and any work missed will receive a grade of zero. Labs cannot be made up. Students are responsible for all information discussed during absences from class - regardless of the reason.

If you intend to withdraw from the course, please see me first – do not just stop coming to class. When absences become excessive and, in the opinion of the instructor, minimum course objectives cannot be met, the student may be withdrawn from the course. That being said, it is the student's responsibility to withdraw from this course. Students who fail to attend will be assigned their earned letter grade at the end of the course. Grades are kept up to date, and guidance will be provided throughout the term to help students decide whether they need to drop the class. For more information regarding drops/withdrawals, please visit www.southplainscollege.edu/admission-aid/apply/schedulechanges.php.

Tardy Policy: Arriving to class late is disruptive. If you are late, please come in quickly, and quietly take your seat. A student who is consistently tardy may be dropped from the class. See me if there is a problem or if you know you will be late.

Barring emergency, there is no excuse for being tardy to lab. If you are late for lab, you will lose 2 lab exam points from the next exam.

Classroom Conduct: To create an effective learning environment, respect must be shown to your fellow students and to the instructor. Disruptive and disrespectful behavior will not be tolerated. Disruptive and disrespectful behavior includes:

- Cell phone use. **Cell Phone use is not permitted.** Cell phones should be **out of sight** in lecture and lab. Do not text or answer calls during class or lab time.
- Use of other electronic devices including laptops. Not only is this distracting, but research shows that handwritten notes are more effective. I reserve the right to allow laptop use on an individual basis.
- Headphone or earbud use during lecture.
- Leaving class during lecture. **If you will need to leave early let me know.**
- Sleeping in class or lab.
- Eating in lab. Discrete food consumption in lecture is tolerated.
- Failure to follow general instructions.
- Talking out of turn, cursing, inappropriate gestures etc.

You will receive a zero for that day's quiz for any of the above behavior and may be asked to leave the classroom. If the behavior is deemed excessive the student may be withdrawn from the course.

Academic Integrity: The attempt of any student to cheat or present as her/his own any work, which she/he has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

Examples of cheating and dishonesty include (but are not limited to): plagiarism, illegal possession of examinations, the use of unauthorized notes or texts during an examination or quiz, obtaining information during an exam from the exam paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in an office.

You must use your own words on exams.

Lab Safety: Each student will be informed/trained on the “Chemical Hygiene Plan (CHP) for Laboratories at South Plains College” during the first week of the semester. Each student will be required to acknowledge receipt of this information and be required to follow all procedures outlined by the instructor and/or staff of South Plains College.

Material Safety Data Sheets (MSDS): These data sheets detail any potential hazards which may be incurred while utilizing various chemicals in the laboratory. The MSDS notebook is located in room 146 of the science building. All students are encouraged to read about the chemicals used in the lab in the MSDS notebook. Please ask the instructor if you need assistance.

Privacy: The federal law guaranteeing student privacy is the policy of this professor as well as that of SPC. This means that I will not discuss your grade with anyone other than you. I will NOT discuss your grade with your parents, guardians, friends, etc.

Other Applicable Policies: This webpage - <https://www.southplainscollege.edu/syllabusstatements/> has the official South Plains College statements about the following:

- Intellectual exchange
- Disabilities
- Non-discrimination
- Title V Pregnancy Accommodations
- CARE Team
- Campus Concealed Carry

Tentative Schedule Bio 1409 Spring 2024

| Unit | Week | Date | Lecture Topic | Laboratory Topic |
|---------------------------|-------------------|--------------------------|---|--|
| Introduction to Diversity | 1 | Mon Jan 15 Wed Jan 17 | No Class Introduction, Life Defined and Organized | Taxonomy |
| | 2 | Mon Jan 22 Wed Jan 24 | History of Life Prokaryotes | Microscope Review, Microbes, Protista |
| | 3 | Mon Jan 29 Wed Jan 31 | Protista Fungi | Fungi and Plant Diversity |
| | 4 | Mon Feb 5 Wed Feb 7 | Plant Diversity TEST 1 | Test |
| | 5 | Mon Feb 12 Wed Feb 14 | Plant Structure Plant Function | Plant Morphology and Anatomy |
| | 6 | Mon Feb 19 Wed Feb 21 | Flowering Plant Reproduction Plant hormones and behavior | Plant Reproduction (Fruit and Flower Dissection) |
| | 7 | Mon Feb 26 Wed Feb 28 | Plants and people, Ecology Link TEST 2 | Test |
| | 8 | Mon Mar 4 Wed Mar 6 | Animal Classification Porifera/Cnidarians/Flatworms | Roundworm/Earthworm Dissection ID: Sponges, Cnidarians, Nematodes |
| Spring Break March 13-19 | | | | |
| Animal Diversity | 9 | Mon Mar 18 Wed Mar 20 | Roundworms Annelids/Mollusks/Echinoderms | Crayfish Dissection; ID: Molluscs, Annelids, Echinoderms |
| | 10 | Mon Mar 25 Wed Mar 27 | Arthropods Vertebrate Diversity /Fish | Fish Dissection; ID: Arthropods |
| | 11 | Mon Apr 1 Wed Apr 3 | Amphibians, Reptiles, Birds Mammals | Frog Dissection; ID: Vertebrates |
| | 12 | Mon Apr 8 Wed Apr 10 | Unit and Semester Review TEST 3 | Test |
| | 13 | Mon Apr 15 Wed Apr 17 | Organization Exchanges and Regulation | Pig Dissection Torso and Heart Model |
| Organ Systems | 14 | Mon Apr 22 Wed Apr 24 | Nutrition and Digestion Reproductive system | Pig Dissection Torso and Heart Model |
| | 15 | Mon Apr 29 Wed May 1 | Circulation and Respiration Immune System | Collection DUE Test |
| | Final Exam | | | |