

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 2023

Course Information
Biology II for Non-Science Majors (BIOL 1409)
Spring 2023

Instructor: Dr. Eric Niederhauser

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Please include 1409 and your section number in the subject line.

Office Hours: Monday: 9:30 – Noon, 2:30 – 3:30 Tuesday: 11:00 – Noon
Thursday: 2:00 – 3:00 Friday: 9:00 – 11:00

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: I may post announcements on Blackboard and/or send emails to your SPC email address periodically throughout the semester. 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 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.

Missed exams: If you know in advance that you will be absent on an exam date, notify me ahead of time, it **MAY** be possible to take the exam at an alternate time. **If, due to an emergency, you miss an exam and do not contact me within 24 hours, I will not consider a makeup exam.**

IN-CLASS QUIZZES: There will be quizzes at the beginning of most classes. There will be no in-class quiz makeups but three of the lowest in-class quiz grades will be dropped. Students with 4 or more absences due to 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 27, 2023

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: Attendance to lecture and lab is mandatory. Failure to attend lecture or lab will count as an absence. Students are responsible for all information discussed during absences from class - regardless of the reason. 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.

It is the student's responsibility to withdraw from this course. Otherwise, students 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 <https://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php>.

COVID-19: For information and resources about COVID-19, please visit <https://www.southplainscollege.edu/emergency/covid19-faq.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.

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.

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

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 your parents, guardians, friends, etc.

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 associated with the chemicals used in the laboratory. Students are encouraged to read about the chemicals used in the lab. The MSDS notebook is located in room 146 of the science building. These sheets can also be found online. Please ask the instructor if you need assistance.

Non-Discrimination Statement: South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

Campus Concealed Carry: Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to the SPC policy at: http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

Title IX Pregnancy Accommodations: If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations, you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Health and Wellness Center. Once approved, notification will be sent to the student and instructors. It is the student’s responsibility to work with the instructor to arrange accommodations. Contact the Health and Wellness Center at 806-716-2529 or email dburleson@southplainscollege.edu for assistance.

SPC Diversity Statement: In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

| Tentative Schedule Bio 1409 Spring 2023 | | | |
|---|--------------------------|---|--|
| Unit | Week | Lecture Topic | Laboratory Topic |
| Introduction to Diversity | 1 | Introduction Life Defined and Organized | Taxonomy |
| | 2 | History of Life Prokaryotes | Microscope Review, Microbes, Protista |
| | 3 | Protista Fungi | Fungi and Plant Diversity |
| | 4 | Plant Diversity TEST 1 - Feb 8, 9 | Test |
| Plants | 5 | Plant Structure Plant Function | Plant Morphology and Anatomy |
| | 6 | Flowering plant reproduction Plant hormones and behavior | Plant Reproduction (Fruit and Flower Dissection) |
| | 7 | Plants and people, Ecology Link TEST 2 - Mar 1, 2 | Test |
| Animal Diversity | 8 | Animal Classification Porifera/Cnidarians/Flatworms | Roundworm/Earthworm Dissection ID: Sponges, Cnidarians, Nematodes |
| | Spring Break March 13-19 | | |
| | 9 | Roundworms Annelids/Mollusks/Echinoderms | Crayfish Dissection; ID: Molluscs, Annelids, Echinoderms |
| | 10 | Arthropods Vertebrate Diversity /Fish | Fish Dissection; ID: Arthropods |
| | 11 | Amphibians, Reptiles, Birds Mammals | Frog Dissection; ID: Vertebrates |
| | 12 | TEST 3 - Apr 10, 11 Organization | Test - Apr 12, 13 |
| Organ Systems | 13 | Exchanges and Regulation Nutrition and Digestion | Pig Dissection Torso and Heart Model |
| | 14 | Reproductive system Circulation and Respiration | Pig Dissection Torso and Heart Model |
| | 15 | Immune System Semester Review and Catch up | Collection DUE Test |
| Final Exam | | | |