

BIO 1406 (4:3:3)

General Biology I

Department of Biology

Division of Arts and Sciences

SOUTH PLAINS COLLEGE

Levelland Campus

FALL 2026

Instructor

Dr. Eric Niederhauser

Course Information

Biology I for Science Majors (BIOL 1406) Fall 2026

Instructor: Dr. Eric Niederhauser

Office: S81; Phone: 806 716-2321; Email: eniederhauser@southplainscollege.edu

Office Hours: Mon and Tue: 11:00 - 12:00, Wed and Thu: 1:30 - 3:30, Fri: 8:30 – 10:30.

Course Description: This course focuses on fundamental principles of living organisms including the chemistry of life, cell and molecular biology, genetics, and evolution. This is the first semester of an integrated course for majors in biological sciences and related studies, including the medical disciplines.

Course Implementation:

PREREQUISITE: None. CREDIT: Four semester hours

RECOMMENDED TEXT: Campbell *Biology*, 12th Ed. by Urry et.al. Others ARE acceptable.

REQUIRED LAB MANUAL: A file will be provided for you to download and print.

Blackboard: Grades, course information, lectures, links etc. will be available on Blackboard. You are responsible for checking Blackboard regularly. You can always see your current grade on Blackboard.

Communication: If needed I will send announcements or reminders via email to your SPC email address. You are responsible for any information that is sent to your SPC email by me or the college.

Grading

EXAMS: There will be four exams (3 mid-terms and 1 final) covering both lecture and lab. The exams will be multiple choice, true or false, fill-in-the blank, short answer and essay questions. The final exam will be comprehensive.

Do not miss exams. Their dates are set. Failure to take an exam at the scheduled time will result in a grade of a zero for the exam. Exceptions will be made for documented emergencies only. A doctor's appointment is NOT an emergency - do not schedule them for exam times. If you miss an exam due to an emergency, you must contact me within 24 hours for a makeup exam to be considered.

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 two lowest in-class quiz grades will be dropped. Students who miss 3 or more quizzes (for any reason) will NOT have the lowest quiz grades dropped. Quizzes will use a remote clicker system.

LAB GRADES: This is a lab-integrated course - lab attendance and completion of the lab exercises is required to receive credit for the course. Failure to attend 3 or more labs will result in withdrawal from the course. There are no lab makeups. Understanding of the lab material is also assessed in the exams.

GRADING SUMMARY

Grade Type	Percentage of Grade
Exams	70 %
In-Class Quizzes	20 %
Lab Attendance/Assignments	10%

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: Dec 3, 2026

This course must be completed with a grade of C or better for the student to take General Biology II (Biology 1407) at South Plains College.

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. The class is scheduled to meet for lecture twice each week. 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. 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. 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 withdrawn from the class. Barring emergency, there is no excuse for being tardy to lab. If you are late for lab you will lose participation credit for the lab.

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.
- Earbuds in your ear during lecture or lab.
- Use of other electronic devices including laptops. Research shows that taking notes by hand is more effective. A tablet or laptop with a screen that can be used flat on the desk with a stylus is acceptable. I reserve the right to allow laptop use on an individual basis.
- 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, etc.

You will receive a zero for the day's quiz for disruptive behavior and may be asked to leave the classroom. If the poor 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 during an examination or quiz, obtaining information during an exam from the textbook or 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 (SDS): These data sheets detail any potential hazards which may be incurred while utilizing various chemicals in the laboratory. The SDS notebook is in room 146 of the science building. The sheets may also be found online. 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

Bio 1406 Tentative Schedule Fall 2026					
Lecture				Laboratory	
Unit	Week	Date	Topic	Topic	Ex.
Organization and Chemistry of Life	1	Tue, Aug 25	Introduction. Life Defined and Organized	Safety, Microscopes Scientific Method (Daphnia)	LS,1,5
		Thu, Aug 27	Chemistry for Biology		
	2	Tue, Sep 1	Water and Life, Carbon	Metric System / Data Analysis	2,3
		Thu, Sep 3	Organic Chemistry, Carbohydrates		
	3	Tue, Sep 8	Lipids, Nucleic Acids	Organic Molecules	4
		Thu, Sep 10	Proteins		
	4	Tue, Sep 15	Cell Structure	Cells, Mitosis	6, 10
		Thu, Sep 17	The Cell Cycle (On Exam 2)		
The Cell In Action	5	Tue, Sep 22	EXAM 1	Diffusion and Osmosis	7
		Thu, Sep 24	Membrane Structure and Function		
	6	Tue, Sep 29	Introduction to Metabolism	Enzymes	8
		Thu, Oct 1	Enzymes		
	7	Tue, Oct 6	Cellular Respiration	Respiration/ Photosynthesis	9
		Thu, Oct 8	Photosynthesis		
	8	Tue, Oct 13	Biomass, Energy in Ecosystems	TBA	
		Thu, Oct 15	EXAM 2		
Genetics, DNA	9	Tue, Oct 20	Meiosis and Genetic Diversity	DNA Extraction, Drosophila Start, Genetic Problems	11, 15 16
		Thu, Oct 22	Mendelian Genetics		
	10	Tue, Oct 27	Beyond Mendel	Karyotypes, Remove Flies, Meiosis, Genetic Problems	12, 14 15
		Thu, Oct 29	DNA Structure and Replication		
	11	Tue, Nov 3	Gene Expression 1, Transcription	Fly Count, Protein Sim+Mutation, Chromosomes	16,17, 13
		Thu, Nov 5	From Gene to Protein 2, Mutation, Viruses		
	12	Tue, Nov 10	EXAM 3	PCR Day 1	18, 20
		Thu, Nov 12	Regulation of Gene Expression		
13	Tue, Nov 17	DNA Technology	Protein Fingerprinting	19	
	Thu, Nov 19	DNA Tech Applications			
Evolution	14	Tue, Nov 24	Descent With Modification	No Lab	
		Thu, Nov 26	Thanksgiving Break		
	15	Tue, Dec 1	The Evolution of Populations	PCR Day 2	20
		Thu, Dec 3	The Origin of Species		
Final EXAM Tuesday Dec 08, 10:15 am					