

BIOL 1406—BIOLOGY FOR SCIENCE MAJORS SYLLABUS

CLASS INFORMATION

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 Objectives:

- To introduce basic biological principles through an integrated approach.
- To investigate the cellular processes of living organisms with an emphasis on biological chemistry applications.
- To investigate the mechanisms of genetics and inheritance.
- To introduce the role and mechanisms of evolution in biology.

Instructor: Whitney Hoff, MS

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806-716-2327

Office: Science 131 **Office Hours:**

Monday	12:00 to 1:00
Tuesday	8:30 to 9:30 & 1:30 to 2:00
Wednesday	10:30 to 1:00
Thursday	8:30 to 9:30
Friday	9:00 to 12:00

Format: This section of BIOL 1406 will be non-traditional. Students will be expected to prepare for class by viewing online materials, taking notes on readings, and participating in online discussions. Class time will be composed of group-based, student centered learning activities with minimal supplementary lectures. Groups of 3-4 will be assigned by the instructor and will stay the same throughout the semester—unless otherwise necessitated. This course format puts the learning into the students' hands, develops process skills, and fosters independent learning.

The lab portion of this class will follow typical lab format with weekly lab experiments.

COURSE MATERIALS

Text: *Campbell BIOLOGY* (11th Edition) by Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, Jane B. Reece. Available at SPC bookstore and at various online textbook vendors. Earlier editions are acceptable, though they may be missing some information. It is expected that students will read chapters 2-24 throughout this course. **AND** *Biology for Science Majors I & II Lab Manual*, 4rd edition (Available at the SPC bookstore or via the publisher's website).

Blackboard: additional materials will be made available to students throughout the course via blackboard. Access to Blackboard (via website or app) will be necessary.

LECTURE ASSIGNMENTS

Reading/Video Notes: It is expected that you will read the chapter covered in class before coming to class. To ensure that you are doing so, you'll submit reading notes from each chapter—due before class on the day that chapter will be covered. If you would prefer, I have posted supplementary videos for each chapter. You can watch them and take notes instead of/in addition to reading.

Reading Quizzes: A quiz will be given at the beginning of class each day and will cover material from the assigned chapter reading. The questions in these quizzes will be multiple choice and will be representative of what to expect on exams. Completing the reading assignments (and quizzes) prior to meeting with your group is *extremely* important as your ability to complete learning activities will be greatly affected by your preparation beforehand.

Learning Activities: each chapter of the text will have an associated of small and group learning activities based on the key points from each chapter. Group work has been shown to increase students' abilities to retain the information they learn in a course well past the time the course is over. You will be graded on your engagement and participation in these group activities. Activities will be submitted through Blackboard before the end of day the material is covered in class.

Reading Q&A Discussion Boards: for each chapter assigned you will be required to post a question on Blackboard that you still have after completing your reading. You will then answer at least one question posted by another student. Your answer must be clear and precise. This opportunity to teach each other will help everyone to gain a greater understanding of the concepts covered in the reading. Questions may be taken from the discussion boards for unit review, exams, etc. Discussion boards will be due for 4 chapters at a time. I suggest posting questions as soon as you finish reading the chapter to allow other students time to answer them. Up to 5 extra questions can be answered for 5 extra credit points.

Journal Club: groups of 3-4 will be assigned at the beginning of the semester. Three (3) journal clubs will be held throughout the semester. Each group member will be responsible for choosing an article for the group to discuss once throughout the course (a new group member will choose each time). Articles should be related to the topics we have been studying in class. Articles must be peer reviewed scientific articles from legitimate sources. Each article must be approved in advance. Submit via Blackboard. Students are expected to have read their group's article PRIOR to meeting. A great source for finding articles is: www.ncbi.nlm.nih.gov/pubmed.

Podcast: 2-3 times during the semester we will listen to a podcast related to a topic covered in class and use it as a backdrop by which to discuss the relevance of biology to concerns of society. Each student will be required to take notes and submit at least one question or comment they had about the podcast.

YouTube Series: as a class we will be creating a BIOL 1406 YouTube Series to facilitate the learning of future 1406 students. Each group will prepare a 2-minute video covering their topic to be uploaded via Blackboard. Groups will choose their own topics. Students are encouraged to be as creative as they desire, following the style of their favorite YouTube artists. Videos will be submitted through Blackboard.

Unit Exams: exams will consist on 50 multiple choice questions and 5 open ended questions. The 6th exam will be a combination of unit 6 and a comprehensive final. Exams will be given during scheduled class time. Missing an exam will result in a zero.

LABORATORY

Attendance: come to lab and be on time. Missing the lab portion of this class will result in a zero for all assignments associated with the missed experiment unless student contacts me beforehand.

Assignments: written lab assignments will vary from week to week. The most important part of lab will be participating and gaining an understanding of biological concepts through hands on experiments.

Safety: we will cover lab safety during the first lab meeting. You'll be expected to adhere to all safety rules.

GRADING

Reading Notes: 5 points/chapter.

Reading Quizzes: 5 points/quiz.

Learning Activities: 10 points each chapter based on engagement and participation.

Reading Q&A Discussion Boards: 2 points per question posted, 3 points per answer -- totaling 5 points per chapter. Extra credit is available for answering additional questions—up to 5 extra answers/chapter.

Journal Club: 25 points for finding an appropriate article and submitting it on time; and 25 points for participating in each journal club meeting.

Podcast In-Class Discussion: 25 points for attending class, participating in the discussion, and submitting an in-class assignment.

YouTube Video: 25 points.

Unit Exams: 125 points each—final exam is 200 points.

Extra Credit: Extra credit will be available often throughout the semester. Because of this, please to not make requests for *extra* extra credit.

Grading Scale: 90-100	A
80-89	B
70-79	C
60-69	D
< 60	F

LATE POLICY

Nothing will be accepted late **unless prior arrangements have been made.** Discussion boards will *never* be accepted late. **Message me PRIOR to missing an assignment for exceptions.**

ACADEMIC INTEGRITY

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present any work as their own which he or she has not honestly performed is regarded SPC as a most serious offense and renders the offender liable to serious consequences, possibly suspension. Failure to comply with this policy will result in an F for the assignment and can result in an F for the course if circumstances warrant.

COVID-19

If you are experiencing any of the following symptoms please do not attend class and either seek medical attention or get tested for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at dedens@southplainscollege.edu or 806-716-2376.

PRIVACY

The federal law guaranteeing student privacy is the policy of this instructor as well as that of SPC. This means that I will not discuss your grade with anyone other than YOU.

STUDENT CODE OF CONDUCT POLICY

Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

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.

DISABILITY STATEMENT

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.

NONDISCRIMINATION POLICY

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.

TITLE IX PREGNANCY ACCOMMODATIONS STATEMENT

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 Director of Health and Wellness. 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 Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

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 and Frequently Asked Questions, please refer to the Campus Carry page at: <http://www.southplainscollege.edu/campuscarry.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.