

BIOL 1407 (4:3:3)

Biology for Science Majors II

Department of Biology

Division of Arts and Sciences

SOUTH PLAINS COLLEGE
Levelland Campus

Fall 2023

Dr. Megan Keith
Associate Professor of Biology

SOUTH PLAINS COLLEGE
BIOL 1407.001/002- BIOLOGY FOR SCIENCE MAJORS II
FALL 2023



Instructor: Dr. Megan Keith
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Meeting Times:

Lecture:	Section 001: MW	1:00PM – 2:15PM (S122)
	Section 002: TR	9:30AM – 10:45AM (S122)
Lab:	Section 001: MW	2:30PM – 3:45PM (S198)
	Section 002: TR	11:00AM – 12:45PM (S198)

Office Hours:

Monday:	10:00AM – 12:00PM
Tuesday:	1:30PM – 2:30PM
Wednesday:	10:00AM – 12:00PM
Thursday:	1:30PM – 2:30PM
Friday:	9:00AM – 11:00AM

Course Description: This course focuses on fundamentals of plant and animal form and function, biological diversity and ecology. This is the second semester of an integrated course for majors in biological sciences and related studies, including the medical disciplines.

Students who have completed this course will be expected to:

- Exhibit knowledge of the three domains of life and the diversity of organisms.
- Demonstrate knowledge of plant form and function.
- Demonstrate knowledge of animal form and function.
- Understand the basic principles of ecology.

TextBook Program: *This course is in the SPC TextBook program, so you do not need to purchase a textbook or access code for the course (unless you opt out).*

- What is TextBook?** The required textbook/digital content for this course is available to you in Blackboard from the first day of class. The fee for the textbook/digital content is the lowest price available from the publisher and bookstore and is included in your tuition/fee payment.
- How do I access my TextBook?** Access to your course material is provided either by VitalSource or other links inside your Blackboard course. VitalSource (and many publisher's) ebook features include the ability to hear the text read aloud, highlight, take notes, create flash cards, see word definitions, build study guides, print select pages, and download up to 20% of the book for offline access. See the Course Resources folder.
- Help with TextBook issues and support:** check with your professor and/or contact <https://support.vitalsource.com/hc/en-us/requests/new> (available 24/7 via chat, email, phone, and text)
- Opting out of TextBook:** Participating in TextBook is not mandatory, and you can choose to opt-out. However; by opting-out you will lose access to the course textbook/digital content and competitive pricing, and you will need to purchase the required course material on your own.

If you still feel that you should purchase the course textbook/materials on your own, send an opt-out email to pwells@texasbook.com. Include your first name, last name, student ID number, and the course you are opting out of. Once you have been opted-out, you will receive a confirmation email. If you need assistance with the process, contact the SPC Bookstore:

Email: pwells@texasbook.com / Phone: 806-716-2097

Email: agamble@texasbook.com / Phone: 806-716-4610

- Required textbook:** Campbell BIOLOGY, 12th edition by Urry et al. **NOTE: This is an e-text, other options are available for hard copy versions.**
- Required Laboratory Manual:** Biology for Science Majors I & II Lab Manual (4th edition). Only available at the SPC Levelland Bookstore
- Other required materials:** A reliable internet connection and a webcam with microphone for use with Blackboard Collaborate, Zoom, etc. and the exam proctor should it need to be implemented. This can be a USB or internal webcam. **Mobile devices should not be used for quizzes or exams (if moved online).**

Online Course Content

- Blackboard is the primary source for course information.
- **Students need to access Blackboard regularly. Google Chrome is the preferred browser for use with Blackboard.**
- Specific course materials available may include: lecture slides or outlines, lecture recordings, reading assignments, messages and announcements from the instructor, study aids, quizzes, exams, lab exercises, etc.

Communication

Email is the main method that I have to communicate with you. Any announcements that I make via Blackboard will also be sent to your SPC email. Please check your email regularly.

NOTE: Include something in the subject line that gives me an idea of the contents of the message, including your course number.

I will check my email throughout the day Monday – Friday. I typically respond to all messages within 24 hours or less except on weekends and holidays.

Copyright Notice

All material presented by the instructor in the course is copyright protected. The material presented by the instructor may not be modified or altered in any way. You have permission to download or print any material presented by the instructor in this course (ex. course information sheet, contact information, and learning module checklists). Copies must only be used for your personal educational use during this semester. The material may not be distributed in any way. If any course material is found on other websites, this is an act of academic misconduct and will be dealt with appropriately following the guidelines of the college concerning academic integrity.

Assessment

Final grades for the course will be calculated on a weighted scale: five exams (55%), quizzes (20%), lab practicals (15%) and assignments (10%). I follow a traditional grading scale:

90 – 100% = A 80 – 89% = B 70 – 79% = C 60 – 69% = D ≤ 59% = F

***Course Average:** Calculated by the weighted average of the three grade categories indicated. If a student's final average is less than one half a percentage point away from the next higher letter grade, the instructor will consider giving the higher letter grade. For example, a student with an 89.51 would receive a letter grade of "A" for the course.

I do not curve final grades, however, we have resources available to you if you feel you need help improving your grades. Office hours and tutoring are available to help set you up for success.

Exams

- Each major exam will cover material from BOTH lecture and lab material.
- The exam format may include multiple-choice questions, definitions, matching, short answer questions, and essay questions.
- ALWAYS read instructions carefully before beginning an exam.
- Each exam score is recorded as a percent score (number correct out of the total possible) with 100% being the maximum score.
- The final exam will be a comprehensive exam.
- Students should **NOT** miss exams! Any student who misses an exam for any reason that does not qualify as an excused absence will have a 0-score entered for that exam.
- Any act of academic dishonesty on exams will result in a 0-score for that exam and the student will be dropped from the course with a grade of "F".

Quizzes

- Quiz dates are listed on the course schedule and will be posted on your calendar in Blackboard as they become available.
- Quizzes will cover lecture AND lab material. DO NOT use a cell phone to take quizzes.
- Read instructions carefully before beginning each quiz.

- Students will be given one attempt and a set amount of time to finish the quiz. Time limits are dependent upon the number of questions and the difficulty of the topics covered.
- **Always review your quizzes** after they have been graded as I may leave feedback. This can be done by going to My Grades and clicking on the grade you received for that quiz.
- Missed quizzes CANNOT be made up unless missed due to a reason that qualifies as an excused absence.
- The lowest quiz grade (1) will be dropped at the end of the semester.

Assignments

- Assignments include concept checks as well as additional exercises to reinforce topics covered in class. Read the instructions before beginning any assignment.

Assignments are meant to challenge you to apply what you are learning in class to various situations. This skill is needed in your upper level biology courses, so it is my goal to help you develop this skill early in your academic career.

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.

1. **Attendance-** Punctual and regular lecture and lab attendance is required of all students.

- Open door policy: if you do arrive late, quietly take your seat. You may not make up quizzes or other work. Excessive tardiness will not be tolerated and may result in withdrawal from the course (3 late arrivals exceeding 10 minutes = 1 unexcused absence).
- In the case of unexcused absence, the student will receive a 0 for the work submitted that day and it is the student's responsibility to obtain missed notes from classmates.
- When unavoidable situations such as illness, weather, an official college-sponsored trip, or a death in the family causes absence, the student may make up the missed class work as long as documentation can be provided. The student will have one week from the date the makeup work is assigned to turn it in for credit.
- The student may be administratively withdrawn from the course when absences become excessive (4 unexcused absences or more) AND the minimum course objectives cannot be met. The instructor is required to initiate a student's administrative withdrawal when the student has missed every class period for two weeks excluding holidays.
- Should a student, for any reason, delay in reporting to a class after his/her official enrollment, absences will be attributed to the student from the first meeting of the class. A student who does not attend a class by the 12th day of classes will automatically be dropped from the course and receive a grade of "X".
- If a student decides to stop attending class, submitting assignments, or that they want to drop the course for any reason, it is the student's responsibility to drop the course. After the second exam, I will not perform administrative drops. If you fail to drop the course, you will receive a failing grade at the end of the semester.

Students who miss multiple assignments typically fall so far behind that they are unable to catch up and their grades suffer on that section of material. Set yourself up for success; manage your time wisely so that you can spend the time required to do well on your work and study effectively.

2. **Technical difficulties-** Please send an email *immediately* to notify the instructor of these difficulties. **You will be allowed one and only one reset on any assignment/exam for the semester.**

Should issues arise that are out of your control (i.e., Blackboard shuts down indefinitely) then the instructor will adjust assignment availability and due dates as appropriate.

3. **Make-up policy-** If work (online quizzes/assignments or in-person exams) is missed for reasons that would not be considered an excused absence, it cannot be made up. There will be **no exceptions** to this rule. If, however, a student misses work due to circumstances out of their control, missed work may be made up. All make-up work is due within one week of the date that it is assigned. **It is essential that you communicate with me to ensure that you stay caught up in the class. If circumstances prevent you from making it to an exam, you must email me BEFORE the time at which the exam is administered (unless you are prevented from doing so due to an emergency situation).**

4. **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 at SPC as a most serious offense and renders the offender liable to serious consequences, possibly suspension. Each student is expected to abide by absolute honesty. Infractions will result in penalties subject to an assignment of a grade of “F” for the course or expulsion from the college. Students should also regard civility online as a requirement to remain on the roll in class.
- Plagiarism violations include, but are not limited to, the following:
 1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
 2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
 3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
 4. Missing in-text citations.
 - Cheating violations include, but are not limited to, the following:
 1. Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, an administered test’s content;
 2. Discovering the content of an examination before it is given, including bribing another person to obtain an unadministered test or information about an unadministered test;
 3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
 4. Entering an office or building to obtain unfair advantage;
 5. Taking an examination for another;
 6. Altering grade records;
 7. Copying another’s work during an examination or on a homework assignment;
 8. Collaborating with or seeking aid from another person during a test;
 9. Rewriting another student’s work in Peer Editing so that the writing is no longer the original student’s; or
 10. Taking pictures of a test, test answers, or someone else’s paper.
 - **ChatGPT and other AI:**
 - **Purpose:** AI is an advanced language model designed to aid and engage in meaningful conversations. It is intended to supplement learning, stimulate critical thinking, and enhance academic discourse. However, its use comes with certain responsibilities.
 - **Academic Integrity:** Using AI to generate academic work, including essays, reports, or assignments, without proper attribution is a violation of academic integrity policies. Plagiarism undermines the learning process and is strictly prohibited. Students must ensure that their work reflects their own ideas, research, and analysis, and appropriately cites **all** sources.
 - **Collaboration and Consultation:** While AI can be a valuable resource, it is essential to strike a balance between seeking assistance and maintaining personal responsibility. Collaboration with peers, consulting instructors, and utilizing other approved learning resources should be prioritized. Overreliance on AI for solutions without actively engaging in the learning process is discouraged and can be grounds for academic integrity violations. Utilizing AI as a tool for brainstorming or research is allowed, but the writing should be the student’s won work and thoughts.
 - **Critical Thinking and Originality:** AI can provide suggestions and information, but it is essential to critically evaluate the responses and exercise independent thought. Relying solely on AI for answers deprives students of the opportunity to develop analytical and problem-solving skills.
 - **Ethical Use and Bias Awareness:** AI is trained on large amounts of data from the internet, which may include biased or inaccurate information. Be mindful of the potential for bias and critically evaluate the response provided by any form of AI. Students must verify information from reliable sources, question any potential biases, and ensure that the information and sources used in the paper or assignment are neutral, peer-reviewed sources.
 - **Responsible Engagement:** Students should engage with ChatGPT in a respectful and responsible manner. Avoid using offensive language, discriminatory remarks, or engaging in any form of harassment or inappropriate behavior. Uphold the standards of respectful communication, both in addressing AI and fellow classmates.

- **Compliance with South Plains College Policies:** Misusing or violating the guidelines outlined in this syllabus warning may result in disciplinary action, including academic penalties. The use of AI (artificial intelligence), such as ChatGPT, to complete course work is cheating. The use of these programs negatively affects your ability to learn and apply the material and will result in an automatic zero in this course.
5. **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.
 6. **Grievance procedure:** If a student is having a problem with the course policies or the instructor, he or she should first try and resolve any such problems with the instructor. If the problem is not resolved, the student may proceed to the Biology Department Chair, who can advise the student on how to resolve the problem or direct them to the appropriate office.
 7. **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 (see the Student Guide for more information: <http://catalog.southplainscollege.edu/content.php?catoid=58&navoid=1931>).
 8. **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.
 9. **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.
 10. **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.
 11. **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 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.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester. Be aware that with the ongoing COVID-19 pandemic, changes may be necessary if the format of the course has to change.

Breakdown of Course Topics

Unit 1: Survey of Life on Earth through Fungi

History of Life on Earth
Phylogeny & the Tree of Life
Bacteria & Archaea
Protists

Exam 1

Unit 2: Plant Diversity, Plant Anatomy & Physiology

Plant Diversity I
Plant Diversity II
Plant Structure & Growth
Angiosperm Reproduction
Fungi

Exam 2

Unit 3: Survey of Animals

Intro to Animal Diversity
Invertebrates
Vertebrates

Exam 3

Unit 4: Animal Anatomy & Physiology

Animal Form & Function
Animal Nutrition
Circulation & Gas Exchange
Osmoregulation
Motor Mechanisms
Animal Reproduction
Immune System & Viruses

Exam 4

Unit 5: Ecology

Intro to Ecology & the Biosphere
Population Ecology
Community Ecology
Ecosystem Ecology

Exam 5

