

South Plains College
Common Course Syllabus: BIOL 1411
Revised January 2023

Department: Biology

Discipline: Botany

Course Number: BIOL 1411

Course Title: General Botany

Available Formats: Face-to-Face, Online, Hybrid/Flex

Campuses: Levelland, Online

Course Description: Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. (ACGM 2018)

Prerequisite: Must be TSI complete in Reading prior to taking this course.

Credit: 4 **Lecture:** 3 **Lab:** 3

Textbook: See instructor course information sheet.

Supplies: See instructor course information sheet.

Course Specific Instructions: See instructor course information sheet.

This course partially satisfies a Core Curriculum Requirement:

Life and Physical Sciences Foundational Component Area (030)

Core Curriculum Objectives addressed:

- **Communications skills**—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions
- **Teamwork**—to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

Student Learning Outcomes: Upon successful completion of this course, students will:

Lecture:

1. Compare and contrast the structures, reproduction, and characteristics of plants, algae, and fungi.

2. Describe the characteristics of life and the basic properties of substances needed for life.
3. Identify the principles of inheritance and solve classical genetic problems.
4. Describe phylogenetic relationships and classification schemes.
5. Identify the major phyla of life with an emphasis on plants, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
6. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
7. Identify the substrates, products, and important chemical pathways in photosynthesis and respiration.
8. Describe the unity and diversity of plants and the evidence for evolution through natural selection.
9. Compare different sexual and asexual life cycles noting their adaptive advantages.
10. Describe the reasoning processes applied to scientific investigations and thinking.

Lab:

1. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem solving to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Compare and contrast the structures, reproduction, and characteristics of plants, algae, and fungi.
5. Describe the characteristics of life and the basic properties of substances needed for life.
6. Identify the principles of inheritance and solve classical genetic problems.
7. Describe phylogenetic relationships and classification schemes.
8. Identify the major phyla of life with an emphasis on plants, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
9. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
10. Identify the substrates, products, and important chemical pathways in photosynthesis and respiration.
11. Describe the unity and diversity of plants and the evidence for evolution through natural selection.
12. Compare different sexual and asexual life cycles noting their adaptive advantages.
13. Describe the reasoning processes applied to scientific investigations and thinking.

Course Evaluation: Embedded exam questions will be assessed from various sections each semester to determine student mastery of material across the course. See instructor course information sheet.

Attendance Policy: Whenever absences become excessive and in the instructor's opinion, minimum course objectives cannot be met due to absences, the student will be withdrawn from the course. Each instructor will have additional information about attendance on their course information sheet.

Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus.

When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the

student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first class meeting.

Students who enroll in a course but have "Never Attended" by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" or "F" as determined by the instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student's responsibility to be aware of that policy.

It is the student's responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate and the student will owe any balance resulting from the adjustment.

Plagiarism and Cheating: Students are expected to do their own work on all projects, quizzes, assignments, examinations, and papers. 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.

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. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;
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. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

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](mailto: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.

Withdrawal Policy: The last day to withdraw/drop with a grade of “W” is **April 27th**. 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. Course averages will be updated twice each week, and guidance will be provided throughout the term to help students decide whether they need to drop the class or not. 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>.

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.

BIOL 1411 Instructor Course Information Sheet

General Botany – Fall 2023

Instructor Information:

Mark Lee, M.S.

mlee@southplainscollege.edu

Office Hours:

MW 1:00 PM – 3:45 PM

F 9:30 AM – 12:15 PM

OR by appointment

Office: Science Room 79

Course Information

Course Description: Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi.

Course Learning Outcomes:

- *Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data (lab).*
- *Use critical thinking and scientific problem-solving to make informed decisions in the laboratory (lab).*
- *Communicate effectively the results of scientific investigations (lab).*
- Compare and contrast the structures, reproduction, and characteristics of plants, algae, and fungi.
- Describe the characteristics of life and the basic properties of substances needed for life.
- Identify the principles of inheritance and solve classical genetic problems.
- Describe phylogenetic relationships and classification schemes.

- Identify the major phyla of life with an emphasis on plants, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
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- Describe the unity and diversity of plants and the evidence for evolution through natural selection.
- Compare different sexual and asexual life cycles noting their adaptive advantages.
- Describe the reasoning processes applied to scientific investigations and thinking.

Format: Conventional (face-to-face), Levelland Campus

Textbooks: Stern's Introductory Plant Biology (15th edition). ISBN10: 1260240835 | ISBN13: 9781260240832

Evaluation: Students will be assessed on the following criteria:

5 Exams (70%)

Herbarium Project (20%)

12 Weekly Quizzes (10%)

All assignments not turned in by the deadline will result in an automatic zero.

Attendance: Students are expected to attend lectures and labs and are responsible for any material that they miss. After three absences, excused or otherwise, points will be deducted from your overall grade for each additional absence. Students must attend both lecture and lab or be counted absent for the day. Missing quizzes and exams will result in an automatic zero unless the student can provide definitive proof of extenuating circumstances. It is the student's responsibility to schedule make-up exams and quizzes in those cases.

Lab Safety: Students are required to wear closed toe shoes and long pants/dresses to lab. Food, drink, makeup and tobacco are not permitted in lab. Any violations of these policies will result in the student being sent away.

Instructor Policies: Food and drink are permitted in lecture, but the instructor reserves the right to revoke this privilege if it is abused. Phones are permitted in lecture and lab, but the instructor reserves the right to revoke this privilege if it is abused. Use of phones during quizzes or exams for any reason will result in an automatic zero.

Schedule: The schedule for the course can be found on blackboard at any time, to include exam days and due dates for assignments. The instructor will inform the class of any changes made and update the schedule accordingly.

For Policies and Procedures, see the common course syllabus.