**Biol 2361-001 Plant Form & Function (‘Botany’) Lecture:** Fall 2021 Course Schedule.  
Dr. J. Van Kley (jvankley@sfasu.edu); (936) 468-2068  
M-W 10:00-10:50am (Miller sci. Rm 233)

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<tr>
<th>Week (M)</th>
<th>Lecture Topic &amp; Text Reading</th>
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| Aug 23   | Plants & autotrophs - a phylogenetic context  
Overview of the plant cell (Ch. 2, 3 & 4) |
| Aug 30   | Overview of the plant cell (continued)  
Meristems & plant growth & development; |
| Sept 06  | Ground, vascular & dermal tissues (Ch 22, Ch. 23)  
Primary root & stem anatomy morphology, & function. (Ch. 24, 25) |
| Sept 13  | Secondary (woody) growth in roots & stems; characteristics of wood. (Ch. 26)  
leaf morphology & anatomy (Ch. 25) |
| Sept 20  | Flower morphology (Ch. 25 p. 604-607; Ch. 19 p. 461-465;  
Ch 20 p. 492-497)  
**Test 1** |
| Sep 27   | Inflorescences & fruit morphology (Ch. 25 p. 604-607; Ch. 19 p. 461-465;  
Water and solute transport (Ch. 30) |
| Oct 04   | Plant nutrition and soils (Ch. 29)  
Plant hormones (Ch. 27); External factors & plant growth (Ch. 28) |
| Oct 11   | Plant Diseases & Plant Defense (P. 274 in part; other non-text sources)  
**Test 2** |
| Oct 18   | Photosynthesis (Ch. 7) |
| Oct 25   | Plant reproduction: Mieosis and the alternation of generations life cycle  
(Ch 3 in part, Ch 8 in part) |
| Nov 01   | Pollination and seed dispersal.  
Pollination Biology (Video & Exercise)  
**Test 3:** |
| Nov 08   | Coevolution & symbiosis; the plant community & studying the plant community.  
Temporal change: disturbance, succession & ecosystem development. |
| Nov 15   | Interactions between plants, other organisms, & their environment |
| Nov 22   | **Thanksgiving holidays** |
| Nov 29   | Mapping & classifying vegetation & the vegetation zones of Texas. |
| Dec 06   | Final Examination Week: (Final = Test 4) |

*Week-begin dates shown above are Mondays*
Instructor: Dr. James Van Kley

Office Hours: W 12:00-4:00pm Th 12:30-1:30 pm, Room 115 Miller Sci. Phone (936) 468-2068.

Course Description: We humans, as living organisms, depend on the plant world to provide us with food, energy, wood, fiber and to sustain the rich web of life on our earth. Today, with increasing human pressure on earth’s ecosystems, the ecological future of the earth may depend on decisions made by humans from our generation. For these reasons, a basic knowledge of life-processes and an awareness of the plant world is a vital part of education regardless of what profession one is preparing for. This course introduces you to Botany or Plant Science and will expose you to several of its sub-disciplines including the plant cell, and the morphology, anatomy, physiology & function, reproduction, and ecology of plants. This course will be the fourth test and the cumulative final together as a single two-part exam during Finals Week. It will collectively be worth two test grades.

Major Tests: There will be four non-cumulative major tests, and a cumulative final examination each worth 1/5 of the lecture grade. You will take the fourth test and the cumulative final together as a single two-part exam during Finals Week. It will collectively be worth two test grades.

Study Quizzes: Each lecture will be accompanied by a series of ‘study quizzes in D2L. Since the quizzes are as much for study aids as for evaluation, you will be able to take the quiz multiple (typically up to 10) times and the highest score earned will be the one counted. Each quiz will have a deadline. Quizzes taken after the deadline have a ‘late penalty’ typically 10% of the points) deducted from them. Second and subsequent attempts for a given quiz may be done after the deadline without penalty as long as the first attempt was on time. Access to the quizzes will “end” the evening before the next test. You will no longer be able to access and get credit for a quiz after the end time. Take the quizzes and deadlines seriously; your quiz scores for a given test-unit contribute 10% of your total test grade!

Final Grades: When calculating your lecture score I will double your best test and drop your worst (but read the ‘fine print’: I offer this benefit only to those who attempt all the tests and the final, not to those who ‘zero’ a test because they failed to take it! The lecture grade (Biol 2361) will constitute 2/3 and the lab grade (from Biol 2061) 1/3 of the total grade for the entire lecture-lab course series and will be the posted grade for Biol 2361. After calculating your total percentage (2/3 x percentage of points from lecture + 1/3 x lab percentage), final grades will be determined as follows: Total percentage > 90% = A; 89% - 80% = B; 79% - 70% = C; 69% - 60% = D; <60% = F.

There will be no extra credit assignments in this course. Make-up tests will be allowed only for students with excused absences. Quizzes will “end” the evening before a given test and you will not be able to take them after that. Only students participating in University-sponsored events or those with a serious illness, family emergency, or a serious conflict will be granted an excused absence. You must provide verification from a family member, University official or doctor to be excused. Please inform me beforehand if you know you must miss a test. I am much more flexible when I know of an absence beforehand. Students with unexcused absences will receive a ZERO for any missed tests.

Attendance: Regular attendance and participation is essential to success in this course. I will be monitoring attendance and course engagement and assigning absences for missed lectures for missed classes or activities. I will calculate a ‘participation’ grade based on attendance course engagement. Missed lectures, late study quizzes, and missed study will result in deductions from your participation grade. The median deduction score score for the class will be set at 80%. Those with the fewest deductions will have a score of 100%. All other scores will be calculated relative to the median and maximum down to a minimum of zero. Your participation grade will provide the ‘quiz’ (10%) portion of the cumulative part of the Final. I will consider attendance for students with borderline grades: For example, a student with excellent attendance and a score of 79 may receive a "B" rather than a "C". University and Departmental policy states that instructors may fail students who miss more than 3 weeks of class for ANY reason; I therefore reserve the right to fail any student who misses 7 or more lectures.
Course evaluations: Student evaluations help us improve courses; participation in the anonymous on-line course evaluation at the end of the term is required. Students who do not participate may receive a 1% deduction from their final score.

Supplemental Instruction (SI): SI plans for this course are pending. If it goes forward, bonus points (1% point per test) will be awarded to regular SI attendees.

Student Learning Outcomes for Biol 2361:
1. Students will be able to understand the structure and functions of tissues, and tissue systems. Links to Core Objective 1.
2. Students will be able to understand the internal anatomy and external features (morphology) of plant roots, stems, leaves, flowers & fruits; they will be able to describe & quantify morphological features of images or specimens. Links to Core Objectives 1 and 3.
3. Students will understand the principles of photosynthesis, including a knowledge of energy molecules (ATP and NADPH); the light reactions including its products and byproducts; the Calvin Cycle and its products; the relationship between the light reactions and Calvin Cycle; and C4 and CAM photosynthesis. Links to Core Objectives 1 and 3.
4. Students will gain an understanding of basic plant reproduction, including the concepts of life cycles, alternation of generations, gametangia, sporangia, and specialized reproductive features. Links to Core Objective 1.
5. To introduce students to the concepts of plant communities, ecosystems, succession, and interactions among plants with each other, other organisms, & their environment. Links to Core Objective 1.

Program Learning Outcomes: Each course student learning outcome listed above corresponds to the Biology Department PLO 1- to develop knowledge of biological concepts.

General Education Core Curriculum Objectives:
CO1- Critical Thinking Skills. Includes creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information.
CO2- Communication Skills. Includes effective development, interpretation and expression of ideas through written, oral, and visual communication.
CO3- Empirical and Quantitative Skills. Includes analysis of numerical data or observable facts resulting in informed conclusions.
CO4- Teamwork. The ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

Academic Integrity (A-9.1): Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

A student cannot properly prepare for a profession by cheating. Offline tests are closed book and accessing any external materials or devices as well as communicating with other students constitutes cheating. If I choose to administer tests online, cheating includes any form of communication regarding the course with anyone except myself during a test. Online Tests are ‘open book’ and timed so accessing your notes, the lectures or any other relevant materials during an online test or quiz does not constitute cheating (but it does consume your valuable test-time so be careful!) The MINIMUM penalty for cheating is a ZERO.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit. Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Students caught cheating in this course will, at a minimum, be given a ZERO for the test/quiz in question. I will also formally report all cheaters to the administration.

Withheld Grades Semester Grades Policy (A-54): Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing
the grade point average. The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**Students with Disabilities:** To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Acceptable Student Behavior:** Classroom or online behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior including ‘trolling’ will not be tolerated. Students who disrupt the learning environment may be asked to leave class or be blocked from online resources and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom, chatroom, or online forum. Students who do engage in the course regularly or who perform poorly on class projects/tests may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

**Student Mental Health:** SFASU values students’ mental health and the role it plays in academic and overall student success. SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

On-campus Resources:
SFASU Counseling Services  
[www.sfasu.edu/counselingservices](http://www.sfasu.edu/counselingservices)  
3rd Floor Rusk Building  
936-468-2401

SFASU Human Services Counseling Clinic  
[www.sfasu.edu/humanservices/139.asp](http://www.sfasu.edu/humanservices/139.asp)  
Human Services Room 202  
936-468-1041

Crisis Resources:  
Burke 24-hour crisis line 1(800) 392-8343  
Suicide Prevention Lifeline 1(800) 273-TALK (8255)  
Crisis Text Line: Text HELLO to 741-741

**Masks & COVID19 Precautions:** Since COVID19 is again, a serious issue this Term I STRONGLY urge all students to decide to do the right thing and wear masks (cloth face coverings) over the nose and mouth at all times in class or office meetings. If you are not already, get vaccinated. The vaccines are effective: At this time vaccines are >90% protective against hospitalization with severe COVID! Students not wearing a mask and/or not observing appropriate physical distancing are selfishly endangering others; even if you are vaccinated you can contract mild or asymptomatic COVID and spread it to others perhaps more vulnerable than yourself! Masks and vaccines are NOT a political statement; they are an expression of respect for Human life by individuals who choose to use the best science-based tools available to reduce the impact of this dangerous disease!