PLANT TAXONOMY
BIOL 3602/5602
6 Credit Hours

Instructor: Dr. Clifton F. Albrecht
Office: WSB 218
Email: cfa25gj@sulross.edu
Office Hours: By appointment.

Lecture Time: MTWThF 8am-5am
Classroom: WSB 206
Textbook: Plant Systematics 3rd edition, Simpson, M.

Course Description: An intensive field and laboratory course in plant diversity, taxonomy, and systematics, with an emphasis on practical field botany in Trans-Pecos Texas. Students develop competence in plant morphology and terminology, dichotomous-key identification, and interpreting phylogenetic trees, alongside training in specimen collection and curation and botanical photography. Fieldwork spans multiple sites along an elevational gradient from the Rio Grande region to the Davis Mountains and includes curated reference-building through a continuing collection, photo library, and field notebook, plus short student-led taxonomic presentations.

Attendance: Attendance is mandatory. One excused absence will be allowed per semester, for which clear documentation must be provided. Further absences will result in full loss of participation points on that day. No unexcused absences will be permitted.

Late work: 20% will be deducted from assignments' full point value for late submission. A further 20% will be deducted at 8:00 AM each subsequent day until such time as all points have been deducted.

Month	Day	8-9:30am	9:45-11:15am	11:30am-12:30pm	12:30pm-late afternoon
May	28	Demonstrate major clades. Site #1		Free work time	
May	29	Lecture: (1) Syllabus; (2) Phylogenetic trees (incl. rank names & vocab related to phylo. tree construction)	Lab: Phylo trees #1 [basic construction, reading, interp, rank names and hierarchy]	Free work time	
May	30	Lecture: (1) Origins of plants [Cyanobacteria, endosymbiosis & green algae]. (2) Shared traits of the land plants.	Lab: Phylo trees #2 [(1) large-scale tree reconstruction using morphology, w/ ref to CDRI species. (2) fine reconstruction of genus.]	Free work time	
June	2	Collections Training (Campus + HH). Not full field day.	Lab: Herbarium tour	Free work time	
June	3	Photography Training (Campus + HH). Not full field day.	Lab: Plant morphology & dichotomous keys #1	Free work time	
June	4	Collections. Site #2			
June	5	Lecture: (1) Morphology	Lab: Plant morphology & dichotomous keys #2	Free work time	
June	6	Free work time			
June	9	Collections. Site #3			
June	10	Photography. Site #4			
June	11	Lecture: (1) Embryophyta synapomorphies (recap). (2) Mosses, liverworts, & hornworts. (3) Tracheophyte synapomorphies	Free work time		

June	11	Lecture: (1) Embryophyta synapomorphies (recap). (2) Mosses, liverworts, & hornworts. (3) Tracheophyte synapomorphies	Free work time		
June	12	Lecture: (1) Lycopodiophyta. (2) Monilophyta. (3) Gymnosperms	Lab:Complement to lectures June 11 and 12	Free work time	
June	13	Free work time			
June	16		Free work time		
June	17	Collections. Site #5			
June	18	Photography. Site #6			
June	19	Free work time			
June	20	Free work time			
June	23	Collections. Site #7			
June	24	Photography. Site #8			
June	25	Lecture: Basal Angiosperms + Monocots	Lab: Complement to lecture June 25	Free work time	
June	26	Lecture: Eudicots	Lab: Complement to lecture June 26	Free work time	

STUDENT LEARNING OUTCOMES (SLOS): The student graduating with an MS in Biology should be able to:

1) Understand and implement scientific methodology.
2) Utilize field techniques toward addressing scientific questions.
3) Utilize statistics in the analysis of data.
4) Communicate scientific findings using both oral and written communication.

CORE OBJECTIVES ADDRESSED:

1) Communication Skills – Students will effectively communicate the results of scientificinvestigations, using oral, written, and visual communication, either in group discussions or on written exams.
2) CriticalThinking Skills – Students will include creative thinking, innovation, inquiry, and analysis required to relate new information with previous information in a way that demonstrates the diversity and similarity due to evolutionary ancestry.
3) Empirical and Quantitative Skills – Students will use basic math skills to solve problems (e.g., related to genetic outcomes, cellular energy production, and probability) resulting in informed conclusions.
4) Teamwork Skills – Students will work effectively with others to support a shared goal during lab sessions on activities, such as dissections, problem-solving, and other experimental procedures.

MARKETABLE SKILLS: A student getting a degree in the biological sciences would be expected to acquire the following marketable skills by graduation.

1) Organization, analysis, and interpretation of data.
2) Use of presentation, word-processing, and statistical software.

Academic Integrity. Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation is appreciated. Examples of academic dishonesty include but are not limited to: Turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, orquiz when collaboration is forbidden.

SRSU Disability Services. SRSU Disability Services. Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Alpine students seeking accessibility/accommodations services must contact Mary Schwartze Grisham, M.Ed., LPC, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email mschwartze@sulross.edu Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, SUI Ross State University, Alpine. Texas, 79832.

Technical Support. SRSU 24/7 Blackboard Technical Support: Phone: 888.837.6055. Email: blackboardsupport@sulross.edu

SRSU Library Services. The Bryan Wildenthal Memorial Library in Alpine offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu. Off-campus access requires your LoboID and password. Check out materials using your photo ID. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).