

# HORTICULTURE

NRM 1301

SUL ROSS STATE UNIVERSITY

SPRING 2023

**Instructor:** Jeff Keeling

**Office:** WSB 218

**Phone:** 432-837-8114

**Email:** [jkee675@sulross.edu](mailto:jkee675@sulross.edu), [Jeffreykeeling88@gmail.com](mailto:Jeffreykeeling88@gmail.com)

**Course Meeting Times:** MW 3:00 p.m. – 4:40 p.m. in Room 201/206

**Office Hours:** M 4:30 p.m. – 5:30 p.m., TR 3:00 p.m. – 5:00 p.m.

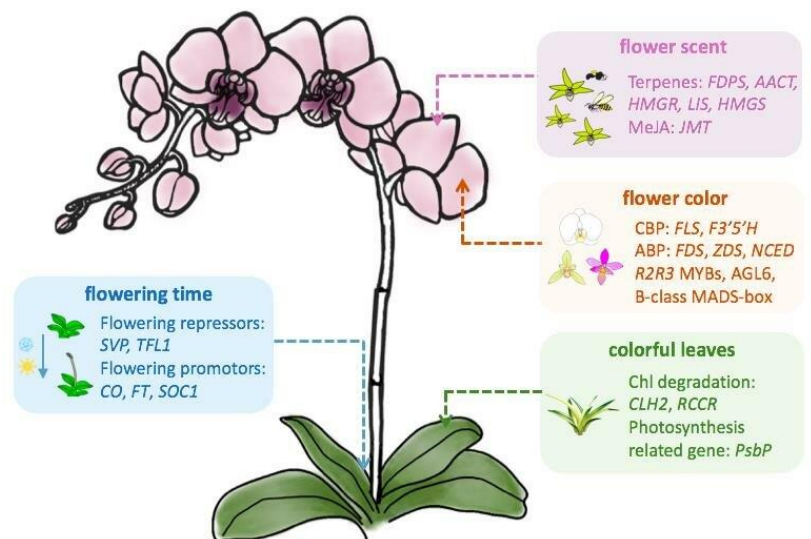
## Course Description:

A survey of the general field of horticulture; a study of the principles and practices of propagation; the growth and fruiting habits of horticultural plants and the culture, harvesting, handling, and utilization of vegetables, fruits, and nuts. Genetics, entrepreneurship skills and landscape design will be emphasized, as will the significance of soil health, biodiversity, and sustainability.

**Recommended Text:** George Acquaah, *Horticulture principles and practices*, 4th edition

## Tentative Schedule of Lectures and Topics (subject to change)

Week 1 (1/18 – 1/20)	Syllabus; Kiss the Ground
Week 2 (1/23 – 1/27)	Intro to Horticulture; Vegetative Anatomy and Morphology
Week 3 (1/30 – 2/3)	Plant Evolution, Classification, and Life Cycles
Week 4 (2/6 – 2/10)	Angiosperms; Plant Taxonomy
Week 5 (2/13 – 2/17)	Intro to Genetics; Exam 1
Week 6 (2/20 – 2/24)	DNA/RNA
Week 7 (2/27 – 3/3)	Protein Synthesis; Horticultural Genetics
Week 8 (3/6 – 3/10)	Photosynthesis
<b>(3/13 – 3/17)</b>	<b>SPRING BREAK (No classes)</b>
Week 9 (3/20 – 3/24)	Plant Growth Environment; Exam 2
Week 10 (3/27 – 3/31)	Greenhouses
Week 11 (4/3 – 4/7)	Sexual/Asexual Propagation
Week 12 (4/10 – 4/14)	Biological Pests and Control



**APR 14**

**LAST DAY TO DROP WITH A 'W'**

Week 13 (4/17 – 4/21)

Techniques of Gardening/Landscaping

**Week 14 (4/24 – 4/28)**

Landscape Architecture and Design (**LAB REPORT DUE 4/26**)

Week 15 (5/1 – 5/5)

Landscaping for Biodiversity Pt. 1

Week 16 (5/8 – 5/12)

Landscaping for Biodiversity Pt. 2

**Week 17 (5/15 – 5/17)**

**EXAM 3 (FINAL)**

Grades:

Exam 1	appx. 125 points
Exam 2	appx. 125 points
Exam 3	appx. 125 points
Lab Report	50 points
Total	appx. 425 points

### ***STUDENT LEARNING OUTCOMES (SLOS)***

1. Learn the subsets of horticulture and other applied plant sciences
2. Develop general understanding of basic botany and genetics.
3. Understand required growing conditions for horticultural plants.
4. Understand the ecological and economical importance of the science of horticulture.

**CORE OBJECTIVES ADDRESSED:** 1) Communication Skills – Students will effectively communicate the results of scientific investigations; using oral, written, and visual communication, either in group discussions or on written exams. 2) Critical Thinking 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) Students will be able to organize, analyze, and interpret data. 2) Students will be proficient at using presentation software. 3) Students will acquire experience in managing time and meeting deadlines. 4) Students will gain the ability to speak effectively and write concisely about scientific topics. 5) Students will acquire experience and guidance in the development of professional email correspondence.

**SRSU Attendance Policy.** Roll will be taken during each class meeting. The SRSU catalog states “The instructor may, at their discretion, drop a student from a course when the student has a total of nine absences in lecture and three absences in lab. An absence is defined as non-attendance in fifty minutes of class. Exams must be taken on the scheduled exam date that will be announced at least a week prior, unless other arrangements have been made with the instructor. Exams must be made up within a week form the scheduled date. **RULE TO LIVE BY: DON'T MISS ANY CLASSES!** If you absolutely have to miss, make sure you let me know before.

**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, or quiz when collaboration is forbidden.

### **ADA Statement**

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 Schwartz, LPC, SRSU's Accessibility Services Coordinator at 432-837-8203, or email [mschwartz@sulross.edu](mailto:mschwartz@sulross.edu). Our office is located on the first floor of Ferguson Hall – room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine, Texas, 79832.

### **Library Information**

The Bryan Wildenthal Memorial Library and Archives of the Big Bend 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](http://library.sulross.edu). Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email ([srsulibrary@sulross.edu](mailto:srsulibrary@sulross.edu)), or phone (432-837-8123).

Additional information for students at Rio Grande College:

**The Southwest Texas Junior College (SWTJC) Libraries at Uvalde, Del Rio, and Eagle Pass offer additional access to library spaces and resources. Del Rio, Eagle Pass, and Uvalde students may additionally use online resources available through SWTJC website, [library.swtjc.edu](http://library.swtjc.edu). The SWTJC Libraries serve as pick-up locations for InterLibrary Loan (ILL) from the Alpine campus.**

## **SRSU Distance Education Statement**

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

## **Classroom Climate of Respect**

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

## Diversity Statement

I aim to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, socioeconomic class, age, nationality, etc.). I also understand that the crisis of COVID, economic disparity, and health concerns, or even unexpected life events could impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create an inclusive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.