

SUL ROSS STATE UNIVERSITY - GENERAL BOTANY 1311 - SPRING SEMESTER 2020

Professor: Jim Zech
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Office Hours: By appointment or T: 1:00 – 2:00 P.M.; TTH: 9:00 – 9:30 A.M.; W: 9:00 A.M. - 12:00 P.M._

Time and Place: Lecture: TTH: 11:00 A.M. - 12:15 P.M.; 201 WSB

Text: Biology of Plants, 8th Ed.; Raven, Evert, and Eichhorn

Tentative Class Schedule and Reading Assignments:

WEEK	DATE	LECTURE TOPICS	CHAPTERS	PAGES
1	1/14	Introduction	1	1-15
	1/16	Introduction	1	1-15
2	1/21	Subdisciplines	1	10-11
	1/23	Building Blocks	2	18-30
3	1/28	Cells	3	38-62
	1/30	Cell Cycle: Mitosis	3	62-71
4	2/4	DNA: Structure; DNA: Replication	9	174-178
	2/6	Protein Synthesis	9	179-185
5	2/11	FIRST EXAM		---
	2/13	Primary Growth: Tissues	23; 25	538-557; 579-583
6	2/18	Primary Growth: Roots	24	558-578
	2/20	Primary Growth: Stems	25	583-590
7	2/25	Primary Growth: Leaves	25	590-599
	2/27	Secondary Growth: Stems	26	614-635
8	3/3	Photosynthesis	7	122-149
	3/5	Aerobic Respiration	6	107-119
9	3/10	SPRING BREAK		
	3/12	SPRING BREAK		
10	3/17	SECOND EXAM		---
	3/19	Transport: Diffusion; Translocation	4; 30	75-85; 722-727
11	3/24	Taxonomy	12	234-250
	3/26	Alternation of Generations	12	250-254
12	3/31	Alt. of Gen.: Details	17	397
	4/2	Meiosis; Homosporous/Heterosporous	8; 17	155-172; 397-398
W	4/3	LAST DAY TO DROP WITH W		
13	4/7	Nonvasc. Plts: Bryophytes; Moss Lf Cycle	16	366-390
	4/9	Seedless Vascular Plants	17	391-429
14	4/14	THIRD EXAM		---
	4/16	Fern Allies: Life Cycle	17	406-407; 410-411; 426-427
15	4/21	Vasc. Seed Plts: Gymnos; Pine Lf Cycle	18	430-455
	4/23	Vasc. Seed Plts: Angiosperms	19	457-459
16	4/28	Angiosperms: Flowers; M & EuD; Lf Cycle	19; 20	460-465; 465-476; 487-496
	4/30	DEAD DAY - NO CLASS		
17	5/4 (Monday)	FINAL EXAM (10:15 - 12:15 P.M.)		

Lf = Life; Gymnos = Gymnosperms; EuD = EuDicot; M = Monocot; Vasc = Vascular; Plts = Plants

POINT DISTRIBUTION:

Examinations:

First, Second, Third Exams @ 100 = 300
Final aka Fourth Exam = 100
Power of One Papers (**NOT ACCEPTED LATE**): 2 @ 25 points each = 50

TOTAL POINTS CLASS: = 450

GRADING:

Your final grade in General Botany will be determined by the total points you receive divided by the total points possible and the scale listed below. There will be no deviation from this scale. I will also be determining a subjective

grade. This will be determined by my evaluation of your attendance, participation, and attitude. The subjective grade will influence your final grade in the course, especially in borderline cases.

Grading Scale (percent of total points): A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: 59 and lower

RULES TO LIVE BY:

This lecture has been scheduled for 75 minutes. You should plan to be here for the **ENTIRE** time block. I will start at the hour, plan to be on time. Please sit towards the front. Bring your text to class and read any applying material before coming to class. Keep the classroom clean. No tobacco, eating, **CHEATING** (University Policy), **weapons**, headphones, **NO CELL PHONES, SLEEPING, PHOTOS, FEET ON FURNITURE**, etc. **Number One Source. Balance.**

ABSENCES:

MY BEST ADVICE IS DON'T BE. Regular attendance is expected and required to pass the course. If you must miss class see me **BEFORE** class or inform me **BEFORE** class so other arrangements can be made. I will not give make-up quizzes or exams unless I am contacted **BEFORE** the absence and/or presented with a written valid medical excuse or documentation of other valid reasons such as sickness or death in the family. Quizzes and exams must be made up within **1 week** of their originally scheduled date.

STUDENT LEARNING OUTCOMES:

SLO1 The student will be able to demonstrate an understanding of basic biological concepts, including but not limited to evolution via natural selection, cell theory, and the role and function of DNA.

SLO2 The student will be able to demonstrate utilization of various field techniques toward addressing scientific questions in the specific discipline. These field techniques can include, but are not limited to, plant collection and processing, various animal collection techniques, ecological surveying and sampling, and biodiversity indexing.

SLO3 The student will be able to use biological instrumentation to solve biological problems using standard observational strategies.

SLO4 The student will develop writing skills by summarizing and critiquing recent relevant biological literature.

CORE OBJECTIVES ADDRESSED:

- Team Work
 - Communication
 - Critical Thinking Skills
 - Empirical and Quantitative Skills
 - Social Responsibility
 - Personal Responsibility
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OBJECTIVES OF THIS COURSE:

- Understand the role of key figures and events in the history of biological science.
 - Understand terminology relevant to biological laboratory and field work.
 - Explore the applications of scientific skills and knowledge to daily living.
 - Understand principles of classification.
 - Recognize major cell structures and their function.
 - Analyze cell division and reproduction.
 - Understand respiration and photosynthesis.
 - Understand the role of DNA and RNA in the process of protein synthesis.
 - Understand genes, and chromosomes.
 - Analyze characteristics of mosses, and ferns.
 - Analyze characteristics of gymnosperms and angiosperms.
 - Analyze characteristics of roots, stems, and leaves.
 - Understand mechanisms of plant reproduction.
 - Understand the effects humans have on the environment.
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MARKETABLE SKILLS:

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.
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STUDENTS WITH SPECIAL NEEDS:

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. Please contact me, Ms. Rebecca Greathouse Wren, M.Ed., LPC-S, Director/Counselor, Accessibility Services Coordinator, Ferguson Hall (Suite 112) at 432.837.8203; mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Students should then contact the instructor as soon as possible to initiate the recommended accommodations.