

SUL ROSS STATE UNIVERSITY - GENERAL BOTANY 1311 - SPRING SEMESTER 2017

Prof: Jim Zech
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Office Hours: By appointment or W: 11:00 A.M.- 12: 00 P.M.; 1:00 -2:00 P.M.; TH: 9:30 - 11:00 A.M.

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

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

Tentative Class Schedule and Reading Assignments:

WK	DATE	LECTURE TOPICS	CHAPTERS	PAGES
1	1/17 1/19	Introduction Subdisciplines	1 1	1-15 10-11
2	1/24 1/26	Building Blocks Cells	2 3	18-30 38-62
3	1/31 2/2	Cells Cells	3 3	38-62 38-62
4	2/7 2/9	Cell Cycle: Mitosis DNA: Structure; DNA: Replication	3 9	62-71 174-178
5	2/14 2/16	Protein Synthesis FIRST EXAM	9	179-185
6	2/21 2/23	Primary Growth: Tissues Primary Growth: Roots	23; 25 24	538-557; 579-583 558-578
7	2/28 3/2	Primary Growth: Stems Primary Growth: Leaves	25 25	583-590 590-599
8	3/7 3/9	Secondary Growth: Stems Photosynthesis	26 7	614-635 122-149
9	3/14 3/16	SPRINGBREAK SPRINGBREAK		
10	3/21 3/23	Aerobic Respiration Transport: Diffusion; Translocation	6 4; 30	107-119 75-85; 722-727
11	3/28 3/30	Taxonomy SECOND EXAM	12	234-250
12	4/4 4/6	Alternation of Generations Alt. of Gen.: Details & Meiosis	12 17; 8	250-254 397; 155-172
W	4/7	LAST DAY TO DROP ANY COURSE WITH A W		
13	4/11 4/13	Homosporous/Heterosporous Nonvasc. Plts.: Bryophytes; Moss Lf Cy	17 16	397-398 366-390
14	4/18 4/20	Seedless Vascular Plants THIRD EXAM	17	391-429
15	4/25 4/27	Fern Allies: Lf Cy; Ferns: Lf Cy Vasc. Seed Plts: Gymnos.; Pine Lf Cy	17 18	406-407; 410-411; 422-423 430-455; 442-443
16	5/2 5/4	Vasc. Seed Plts: Angio.; Flowers; M & EuD; Lf Cy DEAD DAY	19; 20	457-459; 460-465; 465-476; 487-496
17	5/8 (Monday)	FINAL EXAM (10:15 A.M. - 12:15 P.M.)		

Lf Cy = Life Cycle; Gymnos = Gymnosperms; EuD = EuDicot; M = Monocot; Vasc = Vascular;
 Plts = Plants; Angio = Angiosperm

POINT DISTRIBUTION:

Examinations:

First, Second, Third Exams @ 100 =	300
Final (Selectively Comprehensive)	150
Quizzes: 4 quizzes at 10 points each	40
TOTAL POINTS CLASS:	490

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 texts to class and read any applying material before coming to class. Keep the classroom clean. No tobacco, **PHOTOS**, eating, **CHEATING** (University Policy), **weapons**, headphones, **CELL PHONES**, **FEET ON FURNITURE**, **SLEEPING**, etc. Number one source.

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.

FINDING THE BALANCE; CHOICES; BE RESPONSIBLE FOR YOUR ACTIONS OR LACK OF ACTIONS

STUDENT LEARNING OUTCOMES:

- Demonstrate an understanding of evolution by natural selection.
- Demonstrate an integration of environmental awareness into everyday modern life.
- Understanding how to incorporate molecular biology into the study of the whole organism.
- Demonstrate utilization of various field techniques toward addressing scientific questions in the discipline.
- Conduct basic laboratory experiments utilizing standard observation strategies.

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.

CORE OBJECTIVES ADDRESSED:

- Team Work
- Communication
- Critical Thinking Skills
- Empirical and Quantitative Skills
- Social Responsibility
- Personal Responsibility

TEA AFNR EDUCATOR STANDARDS:

The teacher understands:

- Basic plant classification, morphology, physiology, and genetics, and
- Horticulture, floriculture, and hydroponics.

DISABILITIES INFORMATION:

Qualified students with disabilities needing academic or other accommodations to ensure full participation in the programs, services and activities at SRSU should contact Counseling and Accessibility Services, 112 Ferguson Hall, Box C-122, 432-837-8203.