

Sul Ross State University
Genetics 3306
Syllabus
Fall 2018

Instructor: Dr. Sean P. Graham
Office 221 Warnock Science Building
Phone 837-8084
Email: sean.graham@sulross.edu

Office Hours: MWF 11-12; T-TH 2-3; or by appointment (email)

Lecture: Tues & Thurs 11-12:15 WSB 101

Text: Genetics “From Genes to Genomes” Hartwell,
et al 4th Edition (**NOT REQUIRED**)

Tentative schedule (subject to change)

Week	Week of	Topic	Chapter
1	Aug 28	Intro: Genetics: the secret of life	1
1		Mendel	2
2	Sep 4	Mendel’s Principles	2
2		Extension of Mendelian Laws	3
3		Chromosomes	4
3		Linkage	5
4	Sep 11	Recombination	5
4		Mapping	5
First Exam: September 27, 2017			
5	Sep 18	DNA structure	6
6	Oct 2	DNA structure (special lab day this week...you will see DNA!)	6
6		What is a gene?	7
7	Oct 9	Gene Expression	8
7		Gene Exp (cont)	8
8	Oct 16	Genomes and Proteomes	10
8		Genomes and Proteomes	10
Second Exam; Nov 1, 2017			
9	Oct 23	Gene movement on Chromosomes	12-13

10	Oct 30	Chromosomal rearrangements and Cytogenetics	12-13
10		Prokaryotic Genetics	14
11	Nov 6	Gene Regulation	15-16
11		Gene Regulation	15-16
12	Nov 13	Mutation and Cancer	17
12		Mutation and Cancer (11/16 Last day to drop with a W)	
Thanksgiving Holiday (Nov. 21-23)			
13	Nov 27	Developmental Genetics	18
13		Variation and Selection	19

Last day of classes Dec 4

Final Exam Finals Week Dec 7; 10-12

Exams: Exams will consist of a mixture of multiple choice, true/false and short answer questions. ALL material discussed during the class is potential material that will appear on the exam. There will not be a “study guide” narrowing the focus for each exam. The easiest way to know the material that is being stressed is to ATTEND CLASS!!! There will be no extra credit assignments; however, the questions on the quizzes will provide practice for exam questions and will be similar if not identical to many exam questions. During exams bathroom breaks are not allowed so plan ahead!!!

Points Distribution:

Exam 1	100
Exam 2	100
Exam 3	100
Assigned Problems/Quizzes	~ 100
Total Points	400

Grading Scale (percentage of total points)

A = >90 B=80-89 C=>70-79 D=60-69 F=59 or lower

Sul Ross State University is committed to equal access in compliance with the Americans With Disabilities Act of 1973. It is the student’s responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Grace Duffy in Counseling and Accessibility Services, Ferguson Hall, Room 112. The mailing address is P.O. Box C-171, Sul Ross State University, Alpine, Texas 79832. Telephone: 432-837-8203.

Classroom Etiquette: Cell phones should be silent and not used during class and texting is forbidden, in addition please do not make unnecessary noise, when the instructor is speaking you should not be talking to your friend. Cell phone usage,

!

texting, or talking during class time can equal a loss of points at the instructors discretion. Please be on time.

Attendance: Students missing more than 6 lectures will be dropped from the class as per university policy and receive an F in the course. Arrangements for excused absences must be made beforehand. Exams missed for any reason must be made up within one week of the original exam date, but the reason for missing must adhere to the university acceptable absences policy (they must be documented family or health emergencies).

Ethical Conduct: Cheating and or plagiarism will not be tolerated and will be dealt with according to university policies. This includes quizzes—turn in your own work or else.

Student Learning Objectives: The student will be able to understand the principles of the heredity and develop an in depth understanding and appreciation of the processes of evolution, including classical Mendelian genetics, molecular genetics, and epigenetics.

Student learning Outcomes (SLOs) (Undergraduate):

1. *Demonstrate an understanding of evolution by natural selection*
2. Demonstrate an integration of environmental awareness into everyday modern life
3. *Understand how to incorporate molecular biology into the study of whole organisms*
4. Demonstration utilization of various field techniques toward addressing scientific questions in the discipline
5. *Conduct basic laboratory experiments utilizing standard observational strategies*

Students enrolled in distance education courses have equal access to the university's academic support services, such as Smarthinking, 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 information to verify students' identities and to protect students' information. The procedures for filing a student complaint are included in the student handbook. 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.

Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Mary Schwartz, M. Ed., L.P.C., in Counseling and Accessibility Services, Ferguson Hall, Room 112. The mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Telephone: 432-837-8203 8691. E-mail: mschwartz@sulross.edu