

Genetics (Biol 3334) 4 credit hours Spring 2024

Instructor: Ray E. Willis, Ph.D.

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Recommended Text: Pierce, Benjamin A. 2020. Genetics: A Conceptual Approach, 7th or 5th

Course organization:

Genetics is a lecture course presented as two 50-minute lectures per week. It is suggested that you keep abreast of the material and study after each class as opposed to trying to “cram” prior to the test. The student should be familiar with all of this information for exams.

Office hours: During the following time periods, the professor may be found in office and is available for consultation without previous appointment. If you cannot meet during these hours, please see or email the professor to set up an appointment.

9:00 to 11:00 M W F in office

Evaluation of student achievement:

Exams: During the semester, there will be 3 in-class exams and 1 final exam.

Lecture Grade total =75% + Lab Grade =25% = Total Course Grade 100%

Make-ups: It is important that all exams be completed as scheduled. If it is necessary for a student to miss an exam, **the student must notify the professor within 24 hours of the scheduled exam.**

Testing conditions: Once an exam has been handed out, students are not allowed to leave the classroom and return. Please make every effort to come to the classroom prepared for the test. **All cell phones must be silenced before the test is handed out. Do NOT pull out your cell phone at anytime during the test!** If it is necessary for you to wear a hat, the bill must be turned so your face is not obscured during the test. All personal items must be stored under your desk so that the exam proctor may use the aisles during the exam. Attempting to cheat on an exam by looking at someone’s test is a serious offense and will result in a grade of zero for that exam. Please consult Student Handbook for process of disciplinary action. Grades will be available as soon as possible. **I will not post grades or give them out over the phone or e-mail.**

Final exam Thursday May 9th 8:00-10:00

All cell phones should be turned off before entering the classroom in order to prevent disturbing the class.

Chapters

Introduction to Genetics
Chromosomes and Cellular reproduction
Basic Principles of Heredity
Sex-determination
Extensions and Modifications of Basic Principles
Pedigree Analysis and Applications
Linkage, Recombination and Eukaryotic Gene Mapping
Chromosome Variation
DNA: The Chemical Nature of the Gene
Chromosome Structure and Organelle DNA
DNA Replication and Recombination
Transcription
RNA Molecules and RNA Processing
The Genetic Code and Translation
Control of Gene Expression

Grading scale: Students must demonstrate a mastery of at least 60% of the material presented to pass the course as evidenced by their grades on the exams and graded assignments. The scale used to assign the letter grades will be as follows:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
below 60%	F

Class attendance policy:

Students should attend every lecture. It will be very difficult to pass this class without participating in the lecture series. Additionally, I will announce tests dates in class once I feel I have covered enough material. It is the practice of MSU to allow students to participate in university-sponsored events, even when those events cause them to be absent from class. Students participating in university-sponsored events will be given reasonable opportunities to make up missed assignments and exams. It is up to the student to notify the professor that they will miss an assignment due to a sponsored event **BEFORE** the event occurs.

Policy regarding disabilities: Any student have a certified disabling condition should see the professor about making any necessary course modifications as early in the course as possible. Assistance is also available through Disability Support Services.

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's webpage at <https://mwsu.edu/campus-carry/rules-policies>.

Flexibility Clause: Circumstances may arise during the course of the semester that may prevent the professor from fulfilling parts of this syllabus; therefore, it should be viewed as a guide and subject to change. Students will be notified of any changes.