

BIOL 311 Genetics (3 credits)
New Mexico Institute of Mining and Technology
FALL 2017
TR 9:30-10:45 AM CRAMER 101

INSTRUCTOR:

Dr. Linda C. DeVeaux

Office: 209 Jones Annex

Office Hours: T R 11-12 AM, or by appointment

Phone: 575-835-5504

Email: linda.deveaux@nmt.edu

natural selection in the ongoing process of evolution.

1L

a sophomore/junior level required course for majors in Biology. #

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COURSE GOALS:

- To introduce the principles of transmission of genetic traits
- To teach the molecular basis of genetic transmission and structures involved
- To introduce current genetic trends in medicine, molecular biology and biotechnology
- To teach principles of genetic technologies and their applications

STUDENT LEARNING OUTCOMES:

After completion of this course, students are expected to be able to

- Describe and apply principles of classical genetics, molecular biology and biotechnology
- Understand the molecular basis of inheritance, and the biomedical implications
- Appreciate the implications of genetic technologies in current problems in human health
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PROGRAM EDUCATIONAL OBJECTIVES:

Our graduates will be able to use basic principles of science to analyze, to explain, and to apply biological information and concepts. Our graduates will be able to design and implement biological research and report findings orally and in writing.

COURSE REQUIREMENTS:

Required textbook: Introduction to Genetic Analysis, Eleventh Edition, Griffiths, Wessler, Carroll and Doebly. Supplementary reading material provided online should be considered required reading unless designated otherwise. All students should read the chapters in the textbooks prior to each class meeting.

Students are expected to:

- attend class regularly
- read the associated chapters in the textbook prior to class
- check Canvas and NMT email for class announcements at least daily
- complete and turn in homework
- participate in class discussions and problems
- take exams at the scheduled time
- **ASK QUESTIONS IN CLASS OR COME TO OFFICE HOURS**

DESCRIPTION OF INSTRUCTIONAL METHODS:

The class is primarily based on lectures, delivered as PowerPoint presentations, which will be made available as .pdf files online following each lecture. Student participation in discussion and review, which is an essential component of the course, will be incorporated into grading through unannounced quizzes and in-class problems.

No make-up exams or quizzes will be arranged except under extraordinary circumstances. Please see the instructor as soon as possible. Additional documentation may be required.

EVALUATION PROCEDURES:

3 midterms + 1 final	60%	(each midterm is 12%; final is 24%)
Quizzes	10%	
Class problems	10%	
Homework	20%	

There will be no make-up exams or quizzes except in the case of extraordinary circumstances. Homework is due on the date indicated in the Powerpoint when it is assigned, and late assignments will be marked down at the instructor's discretion. Students may work together on homework, but must turn in individual assignments that CANNOT BE IDENTICAL. You must answer in