Principles of Animal and Plant Genetics
Syllabus

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Feb. 9</td>
<td>Preliminary Assessment</td>
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| Feb. 11,13,16 | Mendelian Inheritance  
|              | Segregation & Indep. Assortment  
|              | Dominance & Rescessivity  
|              | Probability Rules  
|              | Breeding for simple traits                                             |
| Feb 18,20,23 | Sex Linked Traits  
|              | Sex Chromosomes & Sex Linkage  
|              | Nondisjunction & the Chromosomal Basis for Inheritance  
|              | Sex Determination                                                       |
|            | **QUIZ 1 DUE BY END OF DAY** **FEBRUARY 27**                           |
| Feb 25,27, March 2 | Chromosomal Basis for Inheritance  
|              | Mitosis & Meiosis  
|              | Chromosome Structure                                                    |
| Mar 4, 6,9 | Linkage & Basic Genetic Mapping  
|              | Linkage & Recombination  
|              | Linkage Maps                                                            |
|            | **QUIZ 2 DUE BY END OF DAY** **MARCH 9**                              |
| March 11  | Review                                                                 |
| March 13 | **EXAM 1**                                                             |
March 16, 18  DNA as the Genetic Material  
          DNA Structure  
          DNA Replication  

March 20, 23, 25 27  Transcription & Translation  
          Transcription  
          The Genetic Code  
          Protein Synthesis Nature of the Gene  
          Basic Operon Structure & Function  

QUIZ 3 DUE BY END OF DAY MARCH 27  

March 30 – April 3  Spring Break  

April 6, 8, 10,13  Eukaryotic Gene Expression  
          Gene-Protein Relationships  

April 15, 17, 20  Genetic Change – Mutation  
          Types of Mutation  
          Mechanisms of Mutation  
          DNA Repair Mechanisms  

April 22  Review  

April 24:  SECOND EXAM  

April 27, 29, May 1  Quantitative Genetics  
          Basic Statistics  
          Quantifying Heritability  

May 4, 6, 8  Population Genetics  
          Hardy-Weinberg Law  

QUIZ 4 DUE BY END OF DAY MAY6  

May 11, 13, 15  Evolution  

May 18  Review & Course Evaluation  

Finals Period  EXAM III – Cumulative Final Examination
Course Policies and Procedures

Course Grades: Exams 1 & 2  50%
Final Exam  40%
Online Quizzes  10%


Syllabus:  I reserve the right to make corrections to this syllabus.
Class Notes:  The PowerPoint slides are provided to aid your study.  I reserve the right to make corrections or changes to the slides at any time. It is your responsibility to make note of any changes.

Academic Honesty:  The Academic Honesty policies of the University will be followed. Plagiarism and other forms of dishonesty will not be tolerated and will result in a grade of F for the class.

Late Assignments & Missed Examinations:  There will be no make-up examinations because of the size of the class. If it is necessary to miss an examination due to illness, death in the family, or other personal emergency, contact the course instructor immediately. The policy is to extend the weight of the final examination in the event of an excused absence from an examination. There will be no exceptions.

Typical grade spans based on previous years:
   A: 90 - 100
   B: 78 – 89
   C: 65 – 77
   D: 50 – 64
   F: < 50

This is just a guide for the student to approximate their grade. I reserve the right to adjust this scale when final grades are assigned. Plus and minus grades are at the appropriate end of the range (i.e. a 65 was a C-).