

| Lecture        | Day       | Date        | Topic  | Reading                        | Notes  |
|----------------|-----------|-------------|--|--------------------------------|--|
| 1              | Monday    | January 7   | Introduction to Mendelian genetics                           | Chapter 1; Chapter 3 (3.1-3.2) | Introduction posted on MasteringGenetics website     |
| 2              | Wednesday | January 9   | More on Mendelian genetics                                   | Chapter 2; Chapter 3 (3.2-3.5) | Assignment 1 posted on MasteringGenetics website     |
| 3              | Monday    | January 14  | Pedigrees and probability                                    | Chapter 3 (3.4-3.9)            |  |
| 4              | Wednesday | January 16  | Modifications of Mendelian ratios                            | Chapter 4 (4.1-4.8)            | Assignment 2 posted on MasteringGenetics website     |
|                | Monday    | January 21  | HOLIDAY  |                                |  |
| 5              | Wednesday | January 23  | More on modifications of Mendelian ratios                    | Chapter 4 (4.8-4.14)           | Assignment 3 posted on MasteringGenetics website     |
| 6              | Monday    | January 28  | Sex determination and sex chromosomes                        | Chapter 5                      |  |
| 7              | Wednesday | January 30  | Chromosome aberrations                                       | Chapter 6                      |  |
| <b>MIDTERM</b> | Monday    | February 4  | <b>MIDTERM EXAM</b>  |                                |  |
| 8              | Wednesday | February 6  | Mapping genes  | Chapter 7 (7.1-7.3)            | Assignment 4 posted on MasteringGenetics website     |
| 9              | Monday    | February 11 | More on mapping; Bacterial genetics                          | Chapter 7 (7.3-7.7); Chapter 8 |  |
| 10             | Wednesday | February 13 | Mutations; DNA structure and analysis                        | Chapter 9; Chapter 14          | Assignment 5 posted on MasteringGenetics website     |
|                | Monday    | February 18 | HOLIDAY  |                                |  |
| 11             | Wednesday | February 20 | Genomics and genetic engineering                             | Chapter 18; Chapter 19         | Assignment 6 posted on MasteringGenetics website     |
| 12             | Monday    | February 25 | Regulation of gene expression                                | Chapter 15                     |  |
| 13             | Wednesday | February 27 | Quantitative traits and measuring heritability               | Chapter 21                     | Assignment 7 posted on MasteringGenetics website     |
| 14             | Monday    | March 4     | Population genetics and evolutionary genetics                | Chapter 22                     |  |
| 15             | Wednesday | March 6     | Developmental genetics                                       | Chapter 20                     | Assignment 8 posted on MasteringGenetics website     |
| 16             | Monday    | March 11    | Cancer genetics: cell cycle, oncogenes and tumor suppressors | Chapter 16                     | <i>Lecture by Dr. Clodagh O'Shea, Salk Institute</i> |
| 17             | Wednesday | March 13    | Telomeres, aging and cancer                                  | Chapter 10                     | <i>Lecture by Dr. Vicki Lundblad, Salk Institute</i> |
| <b>FINAL</b>   | Monday    | March 18    | <b>FINAL EXAM</b> (7-10 pm)                                  |                                |  |