

## Schedule for Botany (BIOL 250), Fall 2021 (8/6/2021)

| Week | Date  | Day | Topic  | What to Read   |
|------|-------|-----|--|--|
| 1    | 8/23  | Mon | Introduction to The Course   | Berg Chapter 1, Appendices                                   |
|      | 8/25  | Wed | Microscopes, Plant Cell Structure, Mitosis, The Cell Cycle   | Berg Chapter 3 up to page 56 and pages 240-246               |
| 2    | 8/30  | Mon | How things Enter and Exit Plant Cells, Plant Tissues   | Berg Chapters 3 pages 56-60 and Chapter 5                    |
|      | 9/1   | Wed | Organ Systems and Organs - Roots   | Berg Chapter 6   |
| 3    | 9/6   | Mon | <b>HOLIDAY (no class) Martin Luther King Day</b>   |  |
|      | 9/6   | Wed | Exam 1 - cell, tissues, roots  | Organ Systems and Organs - Stems<br>Berg Chapter 7           |
|      |       |     | <b>FIELD TRIP TO BALBOA PARK</b>   |  |
| 4    | 9/13  | Mon | Organ Systems and Organs -Leaves   | Berg Chapter 8   |
|      | 9/15  | Wed | Chemistry Basics, Enzymes, Scientific Method   | Berg Chapter 2 and Pages 16-19                               |
| 5    | 9/20  | Mon | Exam 2 - stems, leaves, scientific method  | Metabolism: Cellular Respiration<br>Berg Chapter 4           |
|      | 9/22  | Wed | Metabolism: Photosynthesis   | Berg Chapter 4   |
| 6    | 9/27  | Mon | Mineral Nutrition and Soils  | Berg Chapter 10 and relevant sections of Chapter 6           |
|      | 9/29  | Wed | Transport in Plants  | Berg Chapter 10 and relevant sections of Chapter 6           |
| 7    | 10/4  | Mon | Exam 3 - cellular respiration, photosynthesis, mineral nutrition                                     | Growth Responses and Regulation of Growth<br>Berg Chapter 11 |
|      | 10/6  | Wed | Meiosis, Patterns of Inheritance (Mendelian genetics)  | Berg Pages 246-251 and Chapter 13                            |
| 8    | 10/11 | Mon | Molecular Basis of inheritance   | Berg Chapter 14  |
|      | 10/13 | Wed | Genetic Frontiers  | Berg Chapter 15  |
| 9    | 10/18 | Mon | Exam 4 - soils, transport, regulation of growth, meiosis   | Flowers<br>Berg Chapter 9                                    |
|      | 10/20 | Wed | Fruits and Seeds   | Berg Chapter 9   |
| 10   | 10/25 | Mon | Evolution  | Berg Chapter 16 (17 optional)                                |
|      | 10/27 | Wed | Classification of Organisms, Scientific Names  | Berg Chapter 18  |
| 11   | 11/1  | Mon | Exam 5 - Mendelian genetics, molecular genetics, genetic engineering                                 | Viruses & Prokaryotes<br>Berg Chapter 19                     |
|      | 11/3  | Wed | Fungi & Lichens  | Berg Chapter 21  |
| 12   | 11/8  | Mon | Introduction to Protists, San Diego's Kelp Forests, Plant Life Cycles and Alternation of Generations | Berg Chapter 20 and Page 251                                 |
|      |       |     | <b>FIELD TRIP TO THE BEACH</b>   |  |
| 13   | 11/10 | Wed | Nonvascular Plants (Bryophytes) (NVP)  | Berg Chapter 22  |
|      | 11/15 | Mon | Exam 6 - classification, prokaryotes, fungi, lichens, protists                                       | Seedless Vascular Plants (SVP)<br>Berg Chapter 23            |
|      | 11/17 | Wed | Seed Plants: Gymnosperms   | Berg Chapter 24  |
|      |       |     | <b>FIELD TRIP TO SAN DIEGO BOTANICAL GARDENS (fee)</b>   |  |
|      | 11/22 | Mon | <b>HOLIDAY (no class) Thanksgiving Break</b>   |  |
| 14   | 11/24 | Wed | <b>HOLIDAY (no class) Thanksgiving Break</b>   |  |
|      | 11/29 | Mon | Seed Plants: Angiosperms   | Berg Chapter 25  |
| 15   | 12/1  | Wed | Exam 7 - nonvascular plants, seedless vascular plants, Gymnosperms                                   | Economic Botany<br>PDF HANDOUT                               |
|      | 12/6  | Mon | Ecology - overview and symbioses   | Berg Chapter 26 (emphasis on community ecology)              |
|      | 12/8  | Wed | Ecology - San Diego County   | PDF HANDOUT  |
|      |       |     | <b>FIELD TRIP TO MISSION TRAILS REGIONAL PARK</b>  |  |
| 16   | 12/15 | Mon | Global Ecology and Human Impacts   | Berg Chapter 27  |
|      | 12/17 | Wed | Exam 8 - angiosperms, economic botany, ecology - symbioses, local ecology, global issues             | <b>DID YOU RETURN YOUR LAB KIT?</b>                          |