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| Day    | Topic   | Text*                           |
|--------|---|---------------------------------|
| May 29 | Scientific Investigation                                | 1.1, 1.2, 1.3, 1.4, 1.5         |
|        | 30 Measurements, pH and Buffers                         | LG-1, LG-5, LG-Appendix, LG-14  |
|        | 31 Chemical Constituents: Carbohydrates, Fats, proteins | LG-30, 31, 36, 37, 41, Appendix |
| June 4 | <b>Exam I</b>   |                                 |
|        | 5 Microscopes and Cells                                 | 2.1-2.3, 2.5                    |
|        | 6 Diffusion and Osmosis                                 | 3.1-3.3A                        |
|        | 7 Enzymes   | 4.1-4.3                         |
| 11     | <b>Exam II</b>  |                                 |
|        | 12 Cellular Respiration and Fermentation                | 5.1-5.2, LG-Appendix            |
|        | 13 Photosynthesis                                       | 6.1-6.4, LG-Appendix            |
|        | 14 Mitosis and Meiosis                                  | 7.1-7.5                         |
| 18     | <b>Exam III</b>   |                                 |
|        | 19 Genetics and Analysis of Data, Molecular Biology     | LG-45, 10.1-10.2                |
|        | 20 Modeling DNA Replication and Gene Expression         | LG-58                           |
|        | 21 Population Genetics & Evolution                      | 11.1, 11.2                      |
|        | 25 <b>Exam IV</b> , Bacteriology                        | 12.1A,B, 12.3, 12.4             |
|        | 26 Protists, Fungi                                      | 13.1-13.4, 17.1                 |
|        | 27 Plant Diversity I and II                             | s14.1, 14.2B-D, 15.1, 15.2 A,C  |
| 28     | <b>EXAM V</b>   |                                 |

\* Texts: LG-number = the Laboratory Guide for Introductory Biology I.  
 Number only = Judith Giles Morgan and M. Eloise Brown Carter. 2017. Investigating Biology, 9<sup>th</sup> ed., Pearson, N.Y.

## INFORMATION

**Please turn off your cell phone on entering the laboratory.**

We expect you to be present for all lab exercises. You may attend only during the time your section is scheduled. Notify your Teaching Fellow in advance if you know you will be absent from lab. Then (s)he can inform you as to what topics you will miss and help you arrange to make them up before the exam. Make labs need to be arranged with your TF and GA, and must be scheduled and made up within 3 days of missing the lab. Absence does not excuse you from assignments made on the day of your absence. Missing more than two laboratory exercises will result in automatic failure in this course. Habitual tardiness (five or more minutes late, more than three times a semester) and leaving the lab before the end of the lab period will cost you points on your final grade.

To increase your understanding and performance, you must read the lab manual and/or lab guide before class. If any questions arise during your reading, make note of them and refer them to your Teaching Fellow during the next lab period.

The laboratory is a place to study and learn while doing science. This means you should:

- Think about the significance of each step in an experiment as you perform it,
- Study and make sketches of microscopic specimens under all magnifications to help you remember them, and quiz yourself on their identification.
- Quiz yourself on the anatomy of dissection specimens before ending the exercise, and
- Practice your laboratory technique and observational skills so that you will be prepared for the more sophisticated exercises encountered in advanced laboratory courses.

To ensure that you understand the lab exercise you should answer the questions in both the **Questions for Review** and **Applying Your Knowledge** sections at the end of each the lab period (or shortly thereafter) without referring to the text.

Make flash cards to learn the precise meaning of the biological terms you encounter in each exercise and review them frequently. For multi-step, complicated protocols followed in the lab, use a flow chart format to memorize the steps.

PowerPoint presentations of the lab exercises will be available on Blackboard.

Your Teaching Fellow and course instructor are available to answer any questions or help you with any course-related problems (studies, assignments, exams, laboratory assignments).

The **final course grade** will comprise the following:

|               |   |
|---------------|---|
| Lab exams:    | 17 x 5 = 85 points  |
| Lab outlines: | 4 points  |
| Lab notebook: | 5 points  |
| Lab report:   | 6 points (2 points for the first draft and 4 for the final draft) |
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| Total Points: | 100 points  |

**We do not offer "extra credit" work to make up for low exam grades.**