Biological Concepts: Unity 26-105

Fall 2011 Lab Syllabus

Instructor: Donna Charley-Johnson

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Office Hours: Tuesday 12:40-1:20 or by appointment.

Texts: University of Wisconsin Oshkosh edition of Campbell, N.A., J.B. Reece, L.G. Mitchell, and M.R. Taylor. *Biology: Concepts and Connections, 6th ed.*

*Bio. 105 Concepts in Biology: Unity Laboratory Manual.*

**Grading:** Your lab grade will be 10% of your final course grade and will be determined in the following manner (this does not include lab exams which will occur during the lecture period):

Group Lab reports: 60%

Individual Lab Quizzes, Group Additional Questions: 40%

**Lab Reports**:

Lab reports will be written as a lab group—one report turned in for your group of 3 people. Reports must be turned in at the end of the lab period. Late and/or illegible lab reports will not be graded.

Lab reports should be written on the form provided and contain the following elements:

**Hypothesis:** What is happening? (Big picture) Be sure that you state it as a hypothesis and as a prediction. This is a general explanation of an observed phenomenon, not a prediction of what you think will result from a specific experiment.

Example: Termites navigate by sight (hypothesis).

Not: The termite will follow the blue line but not the red (prediction).

**Proposed experiments and controls:** What will you do to test your hypothesis? Include enough details and information so that your experiment could be repeated exactly. Be sure to describe your controls. You must have controls to support or falsify your hypothesis—how do you know the termite is following the color and not the scent.

**Predicted results and rational:** What do you expect to observe and WHY? These predictions are specific to your designed experiment, and should be made BEFORE you do the experiment. This helps you to know that you have the proper controls. Explain the scientific basis for your predictions.

**Actual results and conclusion:** What were your actual observations? Include any measurements collected in either a table or graph. It may be appropriate to show the class data in addition to your lab group’s data. Was your hypothesis supported or falsified? What conclusions can be drawn from your data? Don’t make statements that aren’t supported by your data! If further experiments need to be done, describe what else you could do to find the answer to the problem.

**Quizzes and Additional Questions**:

Lab quizzes and additional questions will serve as a measure of your understanding of the concepts covered in this course and your ability to apply the learned concepts.

**Expectations**:

Bring text and lab book to class every week.

Read the lab exercises before coming to class.

Answer all questions/fill in all blanks in lab book.

Participate in class discussions

Review previous work, particularly in ongoing lab experiments.

**Academic Integrity**: If you decide to participate in any form of academic dishonesty you will be subject to the Student Academic Disciplinary Procedures as outlined in the Student Disciplinary Code (http://www.uwosh.edu/dean).