BIOLOGY 142 - General Biology Lab

W 10:15-12:20 Room: 2120 AB

Instructor: Dr. Jim Cohen Pronouns: he/him/his Office: 2212C AB E-mail: jcohen@kettering.edu Phone: (810) 249-4383 Student hours: M, T, TH 11:15-12:20 or by appointment

Course Objectives: Biology is the science of life. The study of plants, animals, fungi, bacteria, and other organisms, their cellular and chemical processes, and the interactions between and among various organisms are part of this area of science. By actively participating in lab, you will gain hands-on experience with biology and learn to understand and appreciate various aspects of the life, from molecules to ecosystems.

Learning Objectives: Upon successful completion of this course, you will be able to demonstrate an understanding of: 1) use of a light microscope, 2) cell division, 3) plant classification, 4) ecosystems, 5) single-celled organisms, and 6) multi-cellular organisms.

Text: Readings will be provided by professor

Grading:	
Quizzes	100 points
Lab Participation	100 points
Fruit and Seed Dispersal	100 points
Cell Biology	100 points
PCR	100 points
Phylogenetics	100 points
Total	600 points

Class Behavior: Be respectful of your classmates, and do not disturb them by talking in class, arriving late, or participating in other disruptive behavior. Remember to act as you wish others would act.

Quizzes: Be prepared for a quiz at the beginning of each class. There will be no make-up quizzes.

Email Policy: I will respond to emails within 48 hours of receiving them, but only if the email includes all of the following: subject, salutation, body, and signature. Correct spelling and grammar are expected.

The instructor can change the class rules at any time throughout the semester, if he deems it necessary to do so.

Week	Lab
1	Introduction and Microscopy
2	Fruit and Seed Dispersal 1
3	Fruit and Seed Dispersal 2, including presentation
4	Cell Biology 1 - observation and experimental design
5	Cell Biology 2 - experimental design and experimentation
6	Cell Biology 3 - experimentation, data analysis, and report
7	PCR Lab 1 - PCR
8	PCR Lab 2 - Gel electrophoresis
9	Phylogenetics 1 - experimental design and experimentation
10	Phylogenetics 2 - experimentation, data analysis, and report

Class Schedule