Ms. Kenny/Lincoln High School IB Bio 1-2 and 3-4 HL: NCES #1731

School phone: (503) 916-5200

Room 214

e-mail: mkenny@pps.net

### **Classroom Guidelines and Expectations**

#### Introduction

Welcome to IB Biology! The next two years will be fun and challenging as we learn the higher level IB Biology curriculum through laboratory experiences, 2-D and 3-D modeling, computer simulations, demonstrations, group work, and scientific inquiry. Additional course resources and most class hand-outs can be found on my website: <a href="http://www.kennyibbio.blogspot.com">http://www.kennyibbio.blogspot.com</a> (students in 3-4 HL)

### **Course Goals**

This year all students in IB Biology will be able to:

- a) expand their knowledge of biology concepts
- b) apply the concepts of biology to real world observations/problems.
- c) work safely in the lab using a number of different tools and techniques.
- d) work cooperatively with other members of the class.

#### **Materials**

You are expected to come to class each day with a **writing utensil**, your **notebook**, and a **good attitude.** In addition, you will regularly need a calculator, preferably TI-84 or better. The textbook for this class is <u>Biology Course Companion</u> (Allott and Mindorff, Oxford, 2014). Regular reading of this text will be essential to your success in this class.

# **Behavioral Expectations and Safety**

The key word here is RESPECT. Respect yourself, respect others, and respect the materials in the room. As in any science class, safety is a large concern and you will be asked to comply with a safety contract that you will sign at the beginning of the year. I ask that you keep all food out of the room (or wrapped and put away) and keep cell phones and other electronic devices off and put away. Texting, games, and social media are a big distraction in today's classroom and can prevent you from being present for the important work that we need to do. Plus, the compulsive behavior is just not good for you! To protect your learning and mental health, we will put phones in pouches during class time. Occasionally we will use phones to play Kahoot or for measurement purposes.

### Attendance

<u>Tardies</u>: It is very important that you make it to class on time. You are late if you enter the class after the tardy bell has rung. One consequence for being late is that you will not be able to earn points for that day's "Early Work" assignment. Additionally, being absent for 25% or more of the class is considered to be an absence.

<u>Absences:</u> When returning from an excused absence, it is **your responsibility** to bring your note to 104 and to inquire about any missed assignments. I HIGHLY recommend that you check the class website if possible during your absence or check with a reliable classmate upon your return. You have three days to make up homework assigned during an excused absence, although I recommend that you do it as soon as possible. If you do not have an excuse for an absence, your work will be considered late and you may not be able to make up missed class activities (including tests).

<u>FLEX</u>: FLEX time is very limited this year. While it is important that you stay home when sick, other reasons for absence should be avoided whenever possible. It is important that you make up labs during the next available FLEX because the equipment needs to be put away. Due to the nature of some labs and activities, they might not be able to be made up. In these situations, an alternative assignment can be provided to students with an excused absence, although the experience will not be the same.

#### Miscellaneous

# Career Standards:

This course will help prepare students for further college-level science classes and any lab or science career. I encourage students to take personal responsibility in completing assignments, working with other students, and calculating their grades. Students will develop problem-solving skills as they design and implement their own experiments. As in the real world, things rarely work out as expected on the first try. Students will also develop communication and teamwork skills as they work collaboratively with their peers on projects, labs, and problems.

# Diversity of Learners:

We all come into this class with our own strengths and weaknesses and our own learning styles. A variety of teaching strategies will be used (group work, lecture, video, computer simulation, active learning, drawing, etc.) to ensure that all learners have a chance to shine. Keep in mind that an activity that seems silly to you may be the favorite activity of other students.

### **Academic Integrity:**

It is assumed that the work that you turn in is your own. Work that is obviously copied will not be graded. Participation in cheating on a test results in a grade of zero for that test and no chance for test corrections or test substitution. If you feel tempted to cheat, think again! It's just not worth it. Come in and talk to me about your concerns or just to get help. You will be asked to sign an Academic Honesty contract during the first or second week of school.

### Getting Help:

Lincoln has many avenues for getting help. One of the most important steps is listening in class and asking peers for help if you missed something. It is important to stay organized and write down <u>all</u> of your assignments. But sometimes that is not enough. FLEX time is good for getting more personal help. There is also a Lincoln peer tutoring program and regular help from PSU tutors (listen for announcements in the bulletin!).

#### Grading

Your grade will be made up of the following items (there may be some additions or deletions during the course of the year):

<u>Early Work:</u> The first 5 minutes of every class (excluding test days) will begin with the students copying a review question from the overhead projector and then writing the brief answer (3 points per day). **Early work cannot be done by students who are tardy or unexcused absent!** 

<u>Homework:</u> This will be assigned regularly and will consist of reading, quick labs, worksheets, and group work. Check the website for weekly homework assignments. I see homework as practice to learning the material and as such it is not heavily weighted in your grade. Nevertheless, I do take some points off for late work to encourage you to keep up with it.

<u>Unit Tests/Quizzes:</u> Tests will generally be given twice per quarter and will correspond with the end of a unit. They will be announced and usually reviewed for in class. It is important that students be there on the day of the test. Students who are not there may not be able to make up that test or will be asked to take it during class immediately upon return. Quizzes will be shorter in duration and will not be given as much time for review.

<u>Test Corrections:</u> Students who get less than a 75% can do test corrections to bring their test grade back up to a 75%. Test corrections will occur during FLEX times. Students should come prepared with their notes, books, and questions in order to maximize their use of the time allotted. Students can earn half-credit back for everything that they correct.

<u>Projects:</u> At least once per semester there will be a project assigned that may involve group work, research, carrying out an experiment at home, writing, creating a visual aide, or doing a presentation in front of the class.

Extra Credit: Extra credit is available through attendance at science lectures, science book clubs, creating visual aides for class, contributing to the class website and pre-approved projects of the student's choice. Last-minute projects and book clubs will not be approved! Extra credit points can only make up 2% of your grade.

<u>Webgrades:</u> Lincoln is using the on-line program, Synergy, that once again allows students and parents to check grades through the internet. It is a good idea to check your grade regularly so that any discrepancies can be quickly cleared up. Keep in mind that teachers need time to get assignments graded and then get the data entered into the computer. If you lose your password information, go to the Counseling Center or 104 to get it. I do not have that information.

<u>Calculation of Quarter Grades:</u> Quarter grades will be calculated by using the following weighting: Tests, Projects, and Quizzes: 70%, Labs: 20%, and All other Work: 10%. Then the following scale will be used to determine letter grade.

A 90-100% D 60-70% B 80-90% F Below 60% C 70-80%

Borderline grades can be influenced by such factors as attendance, contribution towards a positive classroom environment, and overall improvement during the quarter.

Calculation of Semester Grades: Semester grades will be comprised of the following:

# IB Biology HL 1-2

# **Kenny Course Syllabus**

**Course Standards:** We follow the course requirements for the Higher Level Biology. This includes 240 hours of requirements, including 60 hours of Practical Work. See requirements <u>here</u>.

# First Semester

**Introduction to Course, Statistics, and Measuring**: Brine Shrimp Lab

<u>Cells and Membranes (Most of Chapter 1):</u> Microscope Lab, Bubble Lab, Paramecium Lab, Potato Osmosis Lab, Cell Model Project

<u>Biochemistry: Water and Macromolecules (Most of Chapter 2).</u> Water Olympics Lab, Clay Models

<u>Cell Respiration and Photosynthesis (2.8,2.9,8.2,8.3)</u>, Respiration Lab, Photosynthetic Pigment Chromatography

<u>Cell Division: Mitosis and Meiosis (1.6,3.3,10.1)</u>: Onion root tip mitosis. Creature Meiosis Activity.

Possibly Start Genetics (3.1 and 3.2)

## Second Semester

<u>Finish Genetics (3.1,3.2,3.4,10.2).</u> Lots of genetics problems, Punnet Grids, Pedigrees, Genetic Disease Project.

**Replication, Transcription, Translation (2.7,7.1,7.2,7.3)**. Replication Models. Genetic Code Activity.

Enzymes (2.5,8.1). Catalase Enzyme Inquiry Lab.

Biotechnology (3.5 and more). Gel Electrophoresis Lab.

<u>Plants (Chapter 9).</u> Transpiration Lab, Seed Germination, Flower Dissection, Plant Growth. Ecology (maybe get it started)