**Welcome to Honors Biology!**
Hi! My name is Dr. Kate Brilakis. I look forward to getting to know you as we deep dive into the core concepts of Biology. During our first class, we’ll chat about strategies to set yourself up for success and ensure this term is both productive and enjoyable.
 **Course Overview:**
The Advanced Placement Biology curriculum is equivalent to a college Biology course taken by freshman biology majors. You may obtain college credit by successfully passing the National AP Biology exam at the end of this course. The course differs significantly from the Honors Biology course you already completed with respect to the range and depth of topics covered, the laboratory requirements, and the time/effort required.

**As an AP Bio student, you will be encouraged to:**\*approach science as a process rather than as a linear accumulation of facts.
\*recognize unifying themes that integrate the major topics of biology.
\*apply your knowledge and critical thinking to environmental and social concerns.
\*develop an appreciation for the process of scientific inquiry and the importance of
 critical thinking is really the most important part of this program.

**Expectations:**You’ve already been in school for about 12 years. Let’s assume you know what teachers expect of you. To jog your memory, I’ve listed some basic expectations for this class. Please…
● Be prepared - come to class with materials, ready to engage.
● Be proactive - take the initiative in the learning process to ensure you understand the
 material or to ask for help if you do not.
● Do the work – success will be tied to thoughtful and thorough attention to your work.
 Track your work, ensure its quality, and submit it on time.
● Seek help - if you have questions or need assistance with a topic, it is OK to ask for
 help. I am available some mornings before school and some afternoons
 after school. I am also quick to answer student email. We can also meet
 virtually if you prefer.
● Use our online resources – we will discuss these resources in a bit.
● Respect:
 Yourself - you absolutely have the ability to do well in this class!
 Your peers – please engage your classmates with respect, listen when they
 speak, and speak in a civil way to your classmates.
 The learning process - show attentiveness to your work and lab safety.

**Requirements**The requirements for the class are as follows:
● Assignments must be prepared as directed in class and turned in by the stated due
 date. Late work will not be accepted without an approved, written explanation.
● You will need to have a strategy for keeping up with your classwork.
● You will be expected to maintain class materials in an organized/accessible fashion.

**What are the AP Biology Objectives? To:**● Develop a conceptual framework for modern biology;
● Develop an appreciation of science as a process;
● Demonstrate the ability to apply scientific skills and follow scientific processes;
● Develop collaborative relationships with other AP Biology students;
● Enjoy the challenges, opportunities and successes offered by the course.

Additionally, a goal of our AP Biology program is for students to understand that science is a process by which those working in it uncover new knowledge about the natural world in a systematic fashion. Our AP Bio course follows the National AP Biology program which is organized around:
 **Big Ideas, Science Practices, and 8 units of study.

Big Ideas**By structuring our course around these four big ideas, you will be encouraged to develop an appreciation for the study of life, and identify and understand unifying principles within a diversified biological world. **\*** Evolution: The process of evolution drives the diversity and unity of life.
\* Energetics: Biological systems use energy and molecular building blocks to grow, to
 reproduce, and to maintain dynamic homeostasis.
\*Information storage and transfer: Living systems store, retrieve, transmit, and respond
 to information essential to life processes.
\*Systems Interactions: Biological systems interact, and these systems and their
 interactions exhibit complex properties.

**Science Practices**What we know today about biology is a result of inquiry. Therefore, understanding the process of inquiry in science and developing critical thinking skills is critical. At the end of this course, students will have an awareness of the integration of other sciences in the study of biology, understand how the species to which we belong is similar to, yet different from, other species, and be knowledgeable and responsible citizens in understanding biological issues that could potentially impact our lives. **\***Concept Explanation
\*Visual Representation
\*Questions and Methods
\*Representing and Describing Data
\*Statistical Tests and Data Analysis
\* Argumentation

**8 Course Units**As we work through our 8 units, we will touch on various aspects of the big ideas and do the science practices. These are as follows:

1. Chemistry of Life
2.Cell Structure and Function
3.Cellular Energetics
4.Cell Communication and Cell Cycle
5.Heredity
6.Gene Expression and Regulation
7.Natural Selection
8.Ecology

**Let’s talk Labs**Lab research is a critical component of the scientific process. Biologists seek to understand living systems via the analysis and interpretation of the best data available. Data include measurements, observations, responses, etc. As such, lab work is an essential part of science. For the lab portion of our course, you will be:
● working on lab tasks that will occupy approximately 25% of many class
 periods and may take place over several days.
● maintaining a lab notebook in which you will describe experimental
 procedures, record data, perform calculations, and identify observable patterns.
● presenting laboratory experiments in a specific written format by preparing lab
 reports based on your lab results. The sections of a lab report will include
 introduction, methods, data, analysis, and discussion.

Our **Class Resources** are: *(Here’s where I had not clue as to what was available to me…)***Textbook:** (??)
(this one I’ve used at DTCC…Campbell, Neil and Jane Reece, Biology [AP Edition], 9th edition. San Francisco: Pearson Education, Inc.

**Mastering Biology** website. This correlates with the 10th edition of the textbook.
Does the school use this? When do students register for access?

**AP Classroom**. (Can we use this website for AP Bio Exam practice and to register for the AP Bio Exam)

**Canvas** (can I get access to set up the page?)

**Communication:** \*Email: I check email throughout the day and will attempt to reply to you quickly.
I do not check email between 8 PM and 8 AM.
Email me at: ???
 \*Canvas: ???
 \*My teaching/learning website: check it every day for updates
 \*In person: we may have time for a short conversation is at the very beginning or very end of class or when you are engaged in individual or group work. For longer chats, let’s set up a time to meet.
 \*Web Grades: Please keep in mind that grading may occasionally take time as I carefully evaluate student work. However, I do my best to keep web grades updated in a timely way.

**Grading**This semester, you will complete:
8 Section Quizzes (4 points each) 32 points total = 32% of your grade
2 Cumulative Assessments (9 points each) 18 points total = 18% of your grade
Class assignments 25 points total = 25% of your grade
Lab activity 25 points total = 25% of your grade

Your letter grade will reflect the points you earn following NC’s 10 point system:
90 – 100 points earned = A
80 – 90 = B
70 – 80 = C
60 – 70 = D
 < 60 = F

Our quizzes will see how well you understand the information explored in one section.
Each cumulative assessment will assess your ability to relate the information
from the previous 4 sections into the Big Ideas outlined on page 2.
Our assessments will be challenging to prepare you for successfully completing the national Board’s AP exam. Questions will be MC, short answer, or essays and will focus on the processes we will explore. Assessments will be designed to ascertain if you have developed a true understanding of these processes and will be reflective of how knowledge can be applied in the context of science.

**some random bits…
\*** Students electing this course should be highly motivated, self-disciplined and inquisitive. Please be honest, respectful, and dedicated.
\*Cell phones are absolutely NOT (no way! Not!) permitted in class. They must remain in your backpack. Do not rely on your phone for your lab calculati0ns.
\*If you are not in the classroom when the bell rings, you will be marked tardy.
\*If you are disruptive, you will be quietly asked to leave class. Please wait in the hallway
until such time I can come out into the hall and address your behavior.
\*If you are not pulling your weight in a group activity, you will not earn the points for that activity.

So, I guess that’s it for now. Whew! We can always address questions/concerns you may have in class. So, let’s get started…!