**Instructor Information:**

Mrs. Heidi Tarr

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Office hours: Days 1-8 7:45-8:25.

**Some days I will ask my AP Biology students to come in at 7:45** so that we can conduct longer laboratory investigations.

**About the Course**

 Nerdlings, welcome to AP Biology. AP Biology is an exciting, challenging, and rigorous course, with a great deal of independent work. It is a college level course, and I teach my class with the same high expectations and grading policies that students will encounter in college. AP Biology covers the same information as semesters 1 and 2 of introductory college biology for biology majors. It is a verychallenging course where success is measured by both intellectual ability and self-motivation. Be prepared to work hard. The most important qualities you must possess and utilize to be successful are a good work ethic, self-motivation, time management and organization (especially of your time). You are expected to put in a minimum of thirty minutes to one hour of work per night for this course. Students are expected to come to class having already read the material to be covered and taken notes over online lectures. During class time students are expected to participate in classroom discussions, labs, debates, and case studies. Students should review their notes on a daily basis and be prepared to ask questions the following day. Students need to participate in all laboratory activities, and turn in all assignments complete and on time. There will be some essay writing assignments along with lab work, case studies, debates, video lecture notes, book chapter notes and other assignments.

 All students will take the AP biology exam in May, 2019 for college credit. This includes seniors who will need to register to take the Exam in Israel. There will be several optional review sessions either after school or on weekends for students wishing to take the AP biology exam.  The dates for the sessions will be given to you as soon as we come up with dates and times that work around everyone’s schedules.

**Class expectations:**

This is a college level course! Therefore I expect college level work habits from my students. This means that you are expected to put in time at home to take notes over chapters, answer questions, make vocabulary cards, and study. You should be spending thirty minutes to one hour per night of work for this class. This means you should not be copying notes from other students or relying on them to complete assignments for you.

**Class grades:**

Each semester you will have 4-5 major tests, 4-5 AP lab activities, multiple case studies, 4-6 FRQ’s (Free response questions), 1-2 debates, weekly video lecture notes, and weekly book chapter notes that will count or contribute towards your final grade. You will also be required to read the chapters in advance and may be asked to complete preliminary questions or study guides that are needed for comprehension of the material.

**Grade Categories**:

Your grades in AP Biology fit into two categories: **Labs,** grades encompassing labs, class work, quizzes, case studies, and debates; **Major Assessments** grades which encompass summative unit exams, FRQ’s, and projects. You will also have weekly video lecture notes, and chapter notes that will be checked every Thursday for videos and Friday for Chapter notes. For each unit there will be a 35 question multiple choice portion and 3 free response questions. You will also have an essay test consisting of one long free response question and 3 short free response questions.

**How are Grades Calculated in my course?**

Grades in AP Biology will be based upon a weighted percent score. Tests, and projects are weighed at 70%, and labs at 30%. For example, if you didn’t turn in any labs for the entire semester but scored a 100% on all tests the highest average you could make for your total grade would be an 70%.

**Late Work Grading Policy:**

No late work will be accepted for AP Biology students. Keep in mind this is a college level course and I teach it as such. This means you have to be responsible and bring your work to class, not leave it at home or in your locker. Unless you have an excused absence you will receive a zero for whatever you missed. You will be allowed to turn in **one late assignment PER SEMESTER** for full credit if, and only if, it is turned in the day after it is due. Once you use your one late work pass for the semester you will receive a zero for any other work not turned in on time. If you have any type of school activity, you are required to take any exams that are being given the day you will be absent before you leave. **It is up to you to notify me in advance if you are going to be gone for an exam.**  Of course there are always extenuating circumstances which will be handled on a case by case basis.

**What do I learn in AP Biology?**

AP Biology centers around four big ideas which are as follows:

* Big Idea 1 – The process of evolution drives the diversity and unity of life.
* Big Idea 2 – Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain homeostasis.
* Big Idea 3 – Living systems store, retrieve, transmit and respond to information essential to life processes.
* Big Idea 4 – Biological systems interact, and these systems and their interactions possess complex properties.

**What are the time requirements for this course?**

This is a fast-paced rigorous college course. You are expected to keep up with all assignments throughout the year. You should be reviewing notes, video lectures, completing assignments and studying on a nightly basis. You should be putting in around thirty minutes to one hour per night on slow weeks and on testing weeks or weeks with multiple assignments you will be putting in one-two hours per night. It is extremely important not to fall behind in the course because it moves at such a fast pace.

**Supplies for AP Biology:**

1. **Two composition notebooks** **or 3-ring binder with a divider** which will be used for notes over chapters and answering section questions. You will also use this to record data during your labs. You will be required to keep a running table of contents so please leave the first two pages blank and fill them in appropriately. I will be checking these so keep up with them.
2. **A graphing calculator, pencils, blue or black pens**, **highlighters, rulers, and note cards for vocabulary**
3. **Barrons AP Biology Review Book.**  You can purchase this book online or at Barnes and Noble.

**Lab Supplies that would be much appreciated but are not mandatory:**

1. **2 rolls of paper towels for easy clean up**
2. **Tissue paper**
3. **Hand Sanitizer**
4. **Extra-large puppy pads (for labs that involve liquids and dissections)**

**Failed test make-ups:**

If you fail a test you will have one week from the date your test is graded and returned to you to correct it (you may not re-take it). If you do all your corrections properly you will receive half credit back for the questions you missed. For example, if you earn a 50 on a test, and you complete your test corrections you will receive a 75. All students are given the option to complete test corrections whether they failed the exam or not. You may not pick and choose what questions you want to correct. All of the following must be done on a separate sheet of paper in my classroom then stapled to your test.

1. Write down the correct answer and explain why it is correct. In 3-4 sentences explain the concept behind the correct answer.
2. Write one sentence explaining why each of the other answer choices were incorrect as they pertain to the concept addressed.

If you choose not to correct your test, you will **NOT** receive any points back, and will be given the grade you earned. I highly encourage my students to come in and work in groups on test corrections. This allows for students to collaborate and start realizing the benefit of strong study groups for college.

**Explanation of Flipped Classroom:**

You will notice that homework will involve watching video podcasts that will contain lectures about the content we are learning in class.  My classroom is what is commonly referred to as a "flipped" or "inverted" classroom.  What this means is that students receive some content outside of class, usually in a 10-20 minute podcast created by myself or Mr. Anderson, which they are able to do at their leisure, provided it is completed by the due date.  I will typically do one “in class” lecture over the most difficult concepts per unit.

The flipped classroom does **not** mean that students do not ever receive direct instruction from me; in fact, it is quite the opposite.  Because students are getting the content delivered outside of class in a smaller amount of time,  I now have class time to elaborate on the concepts learned, to clarify any muddy points students may have, to provide enrichment, and to assess what students have learned before moving on to more challenging work.  In my classroom, this looks like:

* designing and conducting lab experiments
* conducting case studies
* practicing free response questions as a part of exam prep
* answering short answer questions about content learned the night before
* solving problem sets with partners
* debating controversial topics in the realm of biology
* using rubrics to grade FRQs

The flipped classroom model allows me to differentiate instruction more effectively for the different learners in my classroom, which the direct teach model does not allow.  Because all lectures are pre-recorded and posted to my website, [www.nerdlingscience.com](http://www.nerdlingscience.com), and my YouTube channel students can pause them when needed and watch them as many times as they want. Something that could not be done in a traditional lecture. I am also able to assess more frequently what students do and do not understand, which helps me to ensure they are learning what needs to be learned in order to meet the learning objectives of the course. I assess using free responses, unit exams, lab presentations, group projects, as well as open questioning in class. Most work I assign during class will be done in partners or collaborative groups. Aside from test days it is extremely rare that students will have to sit and do work individually.

**Websites and social media with which I am affiliated**

1. I have a Snapchat, Twitter and Instagram account as well as a YouTube station and a website all of which are student and parent friendly.
2. WEBSITE: [www.nerdlingscience.com](http://www.nerdlingscience.com)
3. My Snapchat, Twitter and Instagram screen name is: @Queen\_Nerdling
4. My YouTube channel: queen nerdling You can find my channel by typing in “Queen Nerdling” in the search field or by following this link: https://www.youtube.com/channel/UCO7OfGz2T5UNcAbIFiBDD\_g . This is where all my video lectures are posted.