

## First Semester Book Project

One of the requirements of the AP College Board's course description for AP Biology is that you are introduced to related books or readings outside the classroom. In order to meet this requirement, you will choose one book from the list on the second page to read during the first semester. You will complete two checkpoints to demonstrate you have been reading as expected. You will make a group presentation about the book to the class in January as a culminating assignment. This project is worth 5% of your grade for the first semester.

There is a maximum of four students who can read each book, so you will want to request your book early if you feel strongly about a certain title. I will post sign ups for books on **Monday, September 11<sup>th</sup> at 10:00 am,** and you must have signed up by **Friday, September 22<sup>nd</sup> at 11:59 pm** or I will assign you a book to read.

There will be eight copies of each book available to check out for up to one week at a time. However, since that is not enough for every student to have a book at any given time, you could also reserve a copy from the Fort Vancouver Regional Library or buy the book.

**Checkpoint #1:** On turnitin.com **each student** must submit an **original** paper with the following items to establish that you have been reading your assigned book.

- a) Describe three biology-specific topics discussed in your book. Include the page numbers on which each topic can be found and a minimum of 7-10 sentences describing the topic AND its connection to the topics we have or will discuss in class.
- b) Due date? **Friday, October 27<sup>th</sup> by 11:59 pm** on turnitin.com.

**Checkpoint #2:** On turnitin.com **each student** must submit an **original** paper with the following items to establish that you have been reading your assigned book.

- a) Answer questions specific to your book. The questions will cover the first 75% of the book and will be posted on the Quia class site.
- b) Describe three "take-aways" from the book. What did you learn while reading it? What topics in class did the book help you understand better? What questions do you still have about the topic and why? Choose only topics/lessons you would not have had without reading the book.
- c) Due date? **Friday, December 15<sup>th</sup> by 11:59 pm** on turnitin.com

**Presentation to the Class:** Prior to the end of the first semester, you and the other students who are reading the same book will make a presentation to the class. Keep your checkpoint submissions since they will become part of this final presentation. Presentations will take place mid-January. There will be minimal time in class to coordinate with each other, so be prepared to collaborate outside of class as needed. Presentations will last 5-7 minutes and must meet the following requirements:

- a) Summarize the plot and important points of the book. If there is a climax, don't reveal it.
- b) Connect the book to the topics discussed in AP biology. Use checkpoint 1 information here. Generic comparisons will earn no points. Be specific and unique.
- c) Provide 3-5 "take-aways." Use checkpoint 2 information here. Give your audience a memorable idea to entice their interest in the book.
- d) Use a visual aid to enhance the presentation. It should not BE the presentation or distract the audience (no bulleted talking points which are read from the front of the class). Use pictures and/or video clips to help your audience visualize what you are presenting.

<b>“Edu-tainment”—Science Journalism and Narratives</b>	
Sex, Sleep, Eat, Drink, Dream—Jennifer Ackerman	Bombardier Beetles and Fever Trees—William Agosta
Ackerman takes readers through 24 hours of the human body explaining some of the most basic bodily functions that we take for granted. What makes you have food cravings? Why are some people “morning people?” What’s the best time of day to exercise in order to lose weight?	How have plants and insects survived as long as they have on earth compared to other organisms? Agosta details the chemical weapons created by these organisms to fight off predators and spread their offspring, as well as how scientists have turned these same chemicals into profitable medicines.
A Short History of Nearly Everything—Bill Bryson	Genome—Matt Ridley
Bryson’s famous book covers the most up-to-date knowledge (as of 2005) on the creation of the universe, the rise of homo sapiens, the geologic changes of earth’s history, and the mass extinctions we can expect in the future, as well as the methods scientists use to unravel these mysteries.	The human genome consists of 23 chromosomes. Ridley picks one unique gene found on each of the 23 chromosomes and uses this gene to explain difficult genetic questions like why we age, why we are attracted to people of certain traits or why a feature like red hair can skip generations in families
<b>Novels</b>	
The Andromeda Strain—Michael Crichton	Micro—Michael Crichton
What if the first alien life form to visit earth wasn’t a “little green man” but instead a virus? A small desert community is infected with one of these viral species which has hitched a ride on a fallen satellite. A team of scientists is dispatched to the scene to try and stop the deadly disease from spreading. <b>DISCLAIMER:</b> Brief but intense scenes of suicide	A new technology has been developed that shrinks objects—and humans—to ½ inch tall. When a group of shrunken students are left in the Hawaiian jungle they must use their knowledge of plants, fungus, and insects to thwart attacks, find food and shelter, and stay alive. <b>DISCLAIMER:</b> Graphic descriptions of death, some adult situations
Brave New World—Alduous Huxley	My Sister’s Keeper—Jodi Picoult
Huxley’s 1931 novel was the first ever to imagine a dystopian future (like “Hunger Games”). In his famous argument of nature-vs-nurture, Huxley paints a world where everyone is not born but manufactured. The world is thrown into chaos though when a human, accidentally born in the wild (and sporting personality, feelings and morals) is discovered. <b>DISCLAIMER:</b> Frequent adult situations	After Kate develops leukemia early in life, her parents decide to have a second daughter, Anna. They design Anna for the genetic purpose of providing bone marrow for her sister hoping to cure Kate’s cancer. Anna initiates a court battle to win control over her own body, at the risk of killing her sister by withholding her bone marrow. With whom will the courts side? <b>DISCLAIMER:</b> Drug and adult situations
<b>Nonfiction</b>	
The Hot Zone—Richard Preston	The Immortal Life of Henrietta Lacks—Rebecca Skloot
Ebola, which kills in a matter of hours, has always been isolated to Africa and the West Pacific. But in 1989 somehow the virus broke out in Reston, Virginia, only 15 miles outside of Washington DC. Preston details how the army and the CDC came together to stop possibly the worst outbreak in American history from occurring <b>DISCLAIMER:</b> Intense, gory descriptions of victims suffering from Marburg and Ebola infections	In 1951, Henrietta Lacks was treated for cervical cancer. Without her knowledge, her cells were taken and became the first cells to be successfully grown in a Petri dish outside of a body. Since then, her cells have been copied trillions of times and used in laboratories around the world, including our classroom. Skloot details not only the origins of the HeLa cell line but the ethics involved in taking them in the first place
The Poisoner’s Handbook—Deborah Blum	The Mold in Dr. Florey’s Coat—Eric Lax
In 1915 New York, murder-by-poisoning was popular due to the inability of the police to track the toxins in any way. So two scientists in the NYPD began inventing the science of forensic toxicology to fight these crimes. Blum details some of these infamous crimes and how the first forensic scientists solved the cases by tracking poisons within the victim’s bodies.	Penicillin was an accident and even abandoned as a useless substance. Lax traces the scientific experiments, political arguments, hurt feelings, misconceptions, fighting and fame between the scientists who spent 12 years trying to turn a small scrape of mold they found in their laboratory into the world’s first ever antibiotic.