

Introduction

Welcome juniors and seniors to the wonderful world of AP Bio! I hope that you have had an enjoyable summer and that you are prepared to experience an exciting year in science class. As a certified (by my two children, both graduates of Newton North) bio geek, I'm excited about this course, and the fun we'll have working together this year.

While I have always had an interest in the natural world, my formal training in life sciences began at Swarthmore College where I majored in Biology, and continued at the University of Connecticut where I did graduate work in the biochemistry of chicken cartilage. Both before and after graduate school round One I worked at MIT and the Whitehead Institute investigating retroviruses and ultimately, oncogenes. Last year I completed a Master's Degree in Science Education at Montana State University, during the pursuit of which I got to observe a lot of charismatic mega fauna in Yellowstone National Park, and had my dorm windows blown out by kiwi-sized hail stones. Reductionist though the field has become, my soul is rooted in organismal bio and ecology, so you should expect to encounter sowbugs and slugs, tuataras and Tsugas in this class.

Assignments, rubrics, grades, and more will be posted on of my website: **apbio.anndannenberg.com**. This should facilitate advanced planning on your part so as to make room for biology in your busy schedules. You should also use it to keep track of assignments when you're absent. Check the website daily as *due dates may change* if circumstances so dictate. If you're having trouble accessing the site, or if there is contradictory or confusing information posted, please let me know ASAP!

I am always happy to speak to students and parents after school. I can also meet during my unscheduled blocks some days. Please schedule appointments in advance so as to be sure to find me and have my undivided attention. You may contact me at school in 420C, through my Riley House mailbox, or via E-mail. (E-mail is best!)

I look forward to a great year!

Sincerely,

Anndy Dannenberg (Ms. DR)
Science Department, Newton North High School
Office: Room 420C
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Please read the syllabus, policies, and procedures below. When you are finished, print out the final page, sign the appropriate spaces, and return the signature portion to me. It is due the first Monday of school, September 12, 2011.

Course Description:

Advanced Placement Biology follows the format and guidelines established by The College Board and the Advance Placement Biology Committee. The Committee states the following concerning this course:

The Advanced Placement biology course is designed to be the equivalent of a college introductory biology course taken by biology majors during their first year of college. After high school students have shown themselves to be qualified on the Advanced Placement Examination, some, as college freshmen, may be permitted to undertake upper-level courses in biology or register for other courses for which biology is a prerequisite. Those students who do not intend to pursue science fields in college may have fulfilled the laboratory-science requirement or a pre-professional requirement and will be able to enroll in other courses.

Advanced Placement Biology should include those topics regularly covered in a college biology course for majors or in the syllabus from a high-quality college program in introductory biology. The college course in biology differs significantly from the usual first high school course in biology with respect to the kind of textbook used, the range and depth of topics covered, the kind of laboratory work done by students, and the time and effort required by students.

The Advanced Placement biology course is designed to be taken by students after the successful completion of a first course in high school biology and high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology.

At NNHS, we will attempt to follow as closely as possible the outline of the course recommended by the Advanced Placement Committee. This includes the laboratory exercises as well. Although most material covered will be similar to that of a college introductory biology course, we have the luxury of not having to conduct it in a 200-student lecture hall common to many colleges. Because of our small class size, we will hold classes in more of a seminar format than a lecture hall. This means class will often consist of discussions and small group learning experiences, as opposed to the traditional one-way delivery of most college professors. This also means that, as an instructor, I will be able to provide more one-on-one tutoring after school-- a fact that will be particularly important for this course, which inherently requires us to proceed at a *very* rapid pace. Although I will do all I possibly can to help you, those of you who are unwilling to work hard yourselves should not plan on taking this very rigorous course.

It should be noted that all students are expected to take the AP Biology Exam in May. It should also be noted that students may be expected, on certain days, to perform labs during lunch, free blocks, or after school hours. In addition, the year-long independent project will be carried out entirely by students during their time outside of class.

AP Biology Course Objectives:

OBJECTIVE #1: Foster a passion for biology.

Biology (or any subject for that matter) cannot possibly be learned in one year. It is a lifelong process of enjoyable discovery. Therefore, it is much more important to me that you leave the class wanting to learn more (e.g., reading articles in newspapers and magazines, taking additional courses in college, becoming curious about nature, etc.) than that you leave the class full of tons of words and data (that you'll probably soon forget) and ill feelings toward the subject. Science is a worldview – a way of thinking, rather than a collection of facts.

To achieve this objective:

I will... work hard, bring in weird stuff, tell stories, and do everything in my power to show you how much I love biology and why you should too!

You will... keep an open mind, participate in activities (no matter how goofy), work very hard, ask questions, keep up with assignments, and have fun!

OBJECTIVE #2: Develop the knowledge and skills necessary to succeed in future endeavors.

These skills include mastery of biological concepts necessary to 1) understand and evaluate critically current issues in society that deal with biological themes, 2) seek out further information and make informed decisions about those issues that will effect your own life, and 3) succeed in future college biology classes. Beyond this, we will concentrate on developing critical thinking and process skills (e.g. writing, presentation, group work...) that will be necessary for almost any career you choose to pursue in life.

To achieve this objective:

I will... assign large projects that will involve using and honing these skills, and guide you through their completion; assign smaller group projects; facilitate activities that require you to think critically.

You will... work hard, learn from your mistakes, cooperate, and have fun!

OBJECTIVE #3: Ace the AP exam.

Although I hold Objectives 1 & 2 to be of much greater importance than Objective 3, this is an AP class and successful performance on the AP exam has value to both you and NNHS. Scoring well on the exam can mean placing out of introductory college courses, which can potentially translate into opening your schedule in college so as to take other courses you'd like. It also means building self-confidence and comfort in the knowledge that you can handle work at a college level. Last, but not least, your scores reflect, to a certain degree, the quality of your class, your school, and your teacher.

To achieve this objective:

I will... model tests after AP tests, make all tests cumulative, review previous AP exams, hold review sessions after school, hold a rigorous prep course for the last week prior to the exam, be available for help after school.

You will... work, work, work (yes, even in the spring), share your knowledge with others, believe in yourself, and never give up.

Assessment Terms 1-3:

Tests.....	30%
Reading Quizzes	20%
Projects.....	15%
Labs.....	15%
Homework/ Class work.....	10%
Class Participation.....	10%

Tests: will be cumulative and modeled after AP exams to prepare for the one in May. Most tests will consist of 30 multiple choice questions (worth 60% of the test grade) and one multiple-part essay question (worth 40% of the test grade). Please note: *there will be a final exam in this class just prior to the AP exam in May. This final exam will be worth 15 - 20% of your final grade for the year.*

Reading Quizzes: consisting of approximately 10 short questions should be expected (though not always given) each and every day a chapter reading (from Campbell and Reece) is due to ensure everyone is keeping up with and understanding the material. Readings will often be quite hefty due to the inherently rapid pace of the AP biology curriculum. These quizzes will generally not be announced. It is safest to assume that there will be a quiz the day a reading assignment is due.

Projects: There will be one year-long project (Independent Research Project), in addition to smaller projects. Some of the latter will be group projects, and some individual. There will be approximately one project assigned for each curriculum unit. See apbio.annandannenberg.com for detailed information about the Independent Research Project.

Labs: We will perform most of the 12 recommended AP labs (supplies and time pending). In addition, we will perform other "non-AP" labs periodically. You will be required to write several formal lab papers throughout the course of the year (see AP Biology Lab Paper Guidelines and Rubrics). All other labs will require an "informal write-up" consisting of pre-lab questions, data tables and graphs, questions contained in the lab handout, and a lab abstract. All labs are due one week after the completion of a lab (e.g., if we finish a lab on Tuesday, the lab is due the following Tuesday), unless otherwise instructed.

Homework/ Class work: Because some assignments will be started in class (whether group or individual) and may be completed at home, these two aspects blend into one grading category.

Class Participation: is essential to the success of the class since most days are spent discussing material from readings. I will act as the facilitator of these discussions, with students asking and answering most of the questions. You will be evaluated based on the Class Participation Rubric (posted on the class website).

Assignments: are to be turned in to the wooden IN BOX for your block *before the beginning of class time*, unless otherwise instructed. This means all stapling, name- & date- writing, etc. must be done at home or between classes. After the due date of the assignment, grades will be dropped *10% per day late, for up to three days*. After that, late work will not be accepted unless you have received prior written approval from me or you were out of the building for an excused absence.

Make-up Work: is your responsibility and will be given only if you make arrangements with me **THE DAY YOU RETURN TO CLASS**. If you know ahead of time that you will be absent from class, it is YOUR responsibility to notify me, and you must hand in work the day you return to class. (Please note, however, that I am flexible when it comes to accommodating *extenuating* circumstances, as long as you speak with me about them before or during them, rather than after the fact). If you cut class (which I know you won't), you will receive a zero for anything assigned and/or due that day. *If you legitimately miss a test/quiz, plan on taking it THE DAY YOU RETURN TO CLASS* (see me in the case of multiple absences or extenuating circumstances). You will receive a zero for a test/ quiz not made up within a week (at the latest, with exceptions considered due to special cases). *Also, if you miss the class when we go over a test, you must make a time to meet with me (outside of class time) to go over your test, since tests will not be returned to you to keep.*

Review Books:

I highly recommend getting an AP Biology review book (Kaplan, Princeton, Cliff's, etc.) to help prepare for the AP exam in May (they're also helpful in reviewing for tests throughout the year). I recommend obtaining one in the beginning of the year. I have extras if you'd like to borrow one during the school day, but these must be returned to me before I leave at the end of the day. If you wait until the spring, you may have trouble finding one in the bookstores.

I have read and understood the policies and expectations for Ms. DR's AP Biology class.

(Student Signature)

(Date)

(Parent/Guardian Signature)

(Date)