

College Bio111/Bio 111X Lab Course Outline and Student Expectations

Morris Central School

2024-2025 Academic Year

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Required Texts/Manuals

OpenStax "Biology" online textbook <https://openstax.org/details/books/biology-ap-courses>

Supplemental Materials

Other readings such as those from alternative textbooks, periodicals, and magazine articles will also be used to enhance learning. These will also be provided to you as they are used.

Introduction:

Students taking this class will be learning the same concepts and principles covered in a freshman level 100 biology course. Students will earn, upon successful completion of this class and lab, four college credits through SUNY Cobleskill, which may be used at a college of a student's choice. Biology class is dedicated to lecture, discussion and other activities. This daily class is full year (180 days) and meets for 45 minutes per day. Additionally, Biology lab meets period two days a week for 45 minutes for approximately 80 sessions.

Goals:

The course will not involve simple memorization of terms or technical details. This course is meant to further deepen participants' understanding of the unifying principles of biology presented in the Regents Living Environment class. A major goal of this course is to teach students to be life-long learners, whether or not they become science majors in their college careers. Students will research topics, complete labs and take part in higher level discussions, with the goal of gaining a broader understanding of how humans work and how they are connected to the world around them.

Essential to this conceptual understanding are:

- a grasp of science as a process rather than an accumulation of facts;
- personal experience in scientific inquiry;
- recognition of unifying themes that integrate the major topics of biology; and
- application of biological knowledge and critical thinking to environmental and social concerns.

Several themes pervade the topics of this course. These themes will help you to organize the concepts and topics into a coherent conceptual framework.

These themes include:

- Science as a Process—Science is a way of knowing. It can involve a discovery process using inductive reasoning, or it can be a process of hypothesis testing.
- Evolution—Evolution is the biological change of organisms that occurs over time and is driven by the process of natural selection. Evolution accounts for the diversity of life on Earth.
- Energy Transfer—Energy is the capacity to do work. All living organisms are active (living) because of their ability to link energy reactions to the biochemical reactions that take place within their cells..
- Continuity and Change—All species tend to maintain themselves from generation to generation using the same genetic code. However, there are genetic mechanisms that lead to change over time, or evolution.
- Relationship of Structure to Function—The structural levels from molecules to organisms ensure successful functioning in all living organisms and living systems.
- Regulation—Everything from cells to organisms to ecosystems is in a state of dynamic balance that must be controlled by positive or negative feedback mechanisms.
- Interdependence in Nature—Living organisms rarely exist alone in nature.

- Science, Technology, and Society—Scientific research often leads to technological advances that can have positive and/or negative impacts upon society as a whole.

Evaluation Scheme – Class

**** I grade based on a total point scale based on the BOE's policy of weighting 60% (test/quiz and labs) and 40% (classwork, attendance, participation, homework)**

1. **Quizzes and Tests** -- Tests will usually count as four quiz grades within this scheme. Any changes to this scheme will be announced by your instructor. Unannounced quizzes based on work during the preceding class periods may occur at any time.
2. **Homework assignments** -- These will be dealt with a variety of methods. These methods include spot checks, collection, discussion without collection, and unannounced quizzes based upon assignments. I will record a minimum of ten grades during each quarter. **Expect to have homework every night.**
3. **Class Participation and Attendance**—This will be checked on a daily basis. If you are present and are an active participant in your own learning you will earn the full points for that day. **Frequent absences or tardiness will affect this grade.**

In college, frequent absences are discouraged and you may lose college credit if you miss more than a certain number of classes. It is important that you understand that we will be moving quite quickly in the content and being tardy or absent will be a detriment to your success.

Note: If you are absent more than Cobleskill's Biology Department's allowed absences you may not receive college credit.

** In addition, research papers, projects, or oral reports, may be assigned at any time at the instructor's discretion. The weighting of these activities for a grade will be announced at the times these are given. The instructor reserves the right to give different quizzes/tests, assignments, or lab reports to make up for absence situations. Changes or modifications in the evaluation policies previously listed may be made at any time at the instructor's discretion.

Lab

1. **Quizzes and Tests** Tests will usually count as four quiz grades within this scheme. Any changes to this scheme will be announced by your instructor. Unannounced quizzes based on work during the preceding lab periods may occur at any time.
2. **Lab Preparation and Completion** Lab notebooks will be evaluated and scored. More will be stated about lab reports and evaluation of the laboratory during the year. Laboratory information may also be evaluated in the homework or test/quiz categories at the discretion of the instructor.
3. **Lab Participation and Attendance** This will be checked on a daily basis. If you are present and are an active participant in your own learning you will earn the full points for that day. Frequent absences or tardiness will affect this grade.

Note: If you are absent more than Cobleskill's Biology Department's allowed absences you may not receive college credit.

The instructor reserves the right to give different lab reports to make up for absence situations. Changes or modifications in the evaluation policies previously listed may be made at any time at the instructor's discretion.

Academic Integrity

Students are expected to practice an ethic of academic honesty. Students will not participate, directly or indirectly, in any practice that could be construed as academic dishonesty (such as presenting others' work as one's own, whether it be through copying a test, bringing in notes for an exam, or handing in papers either written by others or copied from sources, written or spoken, which are not

acknowledged in the text). Students will also discourage academic dishonesty in the actions of fellow students and report occurrences of academic dishonesty to their instructors or the administration.

Student Expectations:

1. **You** are responsible for getting the notes and the assignments for any time you miss class or lab due to absence(s). Get these materials from me or other students, if not they are not scanned and included on Google Classroom. Please do not ask me what was for homework. **IT IS POSTED on Google CLASSROOM! If you are absent, you are responsible for the homework, projects etc. that were assigned the day BEFORE you were absent AND the day you were absent.**
Note: If you are absent more than Cobleskill’s Biology Department’s allowed absences you may not receive college credit.
2. I reserve the right to inspect your notebooks at any time for evaluation. I may grade some or all of the notebooks at any time. I EXPECT YOU TO MAINTAIN SEPARATE A NOTEBOOK THAT I CAN COLLECT AT ANY TIME.
3. I expect all students to participate in all laboratory activities. If you miss a laboratory session, **YOU** are responsible to schedule a time to make up the work. You must do the lab time in order for the lab to count as lab credit.
4. If you know you are going to be out of school for an extended period, please arrange with me **at least two weeks in advance** to obtain the work you will be missing.
5. Under no circumstances will late assignments be given full credit unless your **special** circumstances are discussed with me before the assignment is due.
6. **Safety Protocols** Students are expected to follow the safety guidelines covered during the first week of school. There is a zero tolerance policy for unsafe practices during laboratory activities.
7. Keep phones, earbuds and computers off and away unless expressly requested. If reminding you becomes an issue, administration will be asked to intervene.
8. For other class policies, refer to your student handbook.

Learning Expectations:

1. You will be *earning* your grades in this class, I do not *give* grades.
2. Regular, and active class participation is required. For example: just logging in to Google Classroom is not enough.
3. Come to class prepared to learn. You are responsible for your own learning.
4. Complete ALL assignments to the best of your ability.
5. Do NOT fall behind in your work. It is your responsibility to stay caught up.
6. Reading assignments are NOT optional.
7. Expect quizzes every week. You will also complete unit exams.
8. Follow school and lab safety rules and policies.

Please sign below.

I understand the **College Biology 111 and College Biology 111X Lab Course Outline and Expectations.**

Student Signature

Date

Parent’s Signature

Date