

HIGH SCHOOL BIOLOGY COURSE SYLABUS 2015-2016

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Pledge: I believe in you, I trust you. I will come in to work each and every day ready to give you 100% and I will always be willing to explain why we are doing something. I will be reasonable and thoughtful, honest and sincere. I will treat you like young adults that care.

Course Materials: Please bring whatever materials you feel are necessary everyday, certainly a planner, writing utensil and something to use that utensil with (i.e. paper). Please see me for suggestions if needed.

Text: The text will be supplemented throughout this course with various materials, including, but not limited to, video, other texts, current articles and lecture material.
Biology, by Miller and Levine
Publisher: Prentice Hall
ISBN: 0-13-166255-4

Course Content/Objectives: Course curriculum is designed from the currently proposed Michigan Science Standards (August 2015). The course text will be used to supplement the in-class material throughout the course, corresponding chapters from the text are listed below.

| | <i>Major Units</i> | <i>Topics Covered</i> | <i>Text Chapters</i> |
|---|---|--|------------------------|
| 1 | Genetics | Genetics and inherited traits, DNA, Central Dogma, Cell division, Genetic variation, Recombinant DNA. | 1, 11, 12, 13, 14, 10 |
| 2 | Natural Selection and Comparative Anatomy | Theory of evolution, molecular evidence, natural selection, | 15, 16, 17, 18 |
| 3 | Cellular Mechanics | Energy transfer and growth, cell differentiation/specialization, photosynthesis and cellular respiration | 19, 7, 8, 9 |
| 4 | Human Body Systems | Photosynthesis and cellular respiration, ecosystems, element recombination, | 35, 36, 37, 38, 39, 40 |
| 5 | Ecology | Changes in ecosystems, human impact, populations, and environmental factors. | 3, 4, 5, 6 |

This outline provides an overview, some topics will be covered in more depth than others. The instructor reserves the right, with notice to the students, to add items to this summary. Subtracting of items is less likely and would only occur in the event that a pre-assessment indicates sufficient prior knowledge by a vast majority of the students.

Major Assignments: These assignments will be assigned over the course of the year and correlate to major units (topics). A project based approach will be taken. You will receive a rubric for the grading of these assignments and successful completion of this course will be contingent upon you completing these assignments.

Grading: Course grades are determined by performance on assigned tasks. Tasks will take three forms, outlined below. Grade categories will not be weighted but will occur in approximately equal proportions with a slightly higher emphasis on the Practical category.

Objective, ~1/3: Objective tasks are graded on a simple point system or a Pass/Fail system. The score will reflect overall competence as based on the total points possible (shown as a percentage). Examples of these assignments are vocabulary definition sheets, pre-tests, a simple read-and-answer-questions task or a multiple choice assessment.* No partial credit can be earned if these are not turned in.

Practical, ~1/3: Practical assignments involve the demonstration of knowledge by performing a task and providing some form of proof that you understand the concept. All these assignments are graded with a rubric. Partial credit can be earned by actively participating and demonstrating knowledge through action and/or discussion with the teacher. Examples of these tasks are labs, group discussions, and general activities.*

Engagement, ~1/3: Participation, the most common of these tasks, is scored according to the "engagement rubric" provided below. Engagement skills will be highlighted throughout this course. Students should maintain biology notes and participate, vocally and/or attentively, during class. Engagement will be assessed through surveys, one-on-one conferences and daily teacher observations and will be graded frequently. The goal is to give students an accurate sense of how the instructor perceives their engagement in class and with the material.

**It is common that an activity will include multiple types of the above. For instance, a lab activity will usually include a follow up assignment. The lab activity would be graded as a 'practical' while the follow up would be graded as an 'objective' assignment. The example lab activity would appear in PowerSchool as two separate grades, one practical and one objective.*

Engagement Rubric

| | A+ | A | B | C | D | F |
|------------------|---|--|---|--|---|--|
| EXTRAVERT | <p>Always prepared for class with materials and prerequisite knowledge</p> <p>Group dynamic and level of discussion are consistently better because of the student's presence</p> <p>Creatively engages topic and acknowledges the ideas of others.</p> <p>Actively supports, engages and listens to peers (ongoing)</p> <p>Exudes interest in subject matter</p> | <p>Mostly prepared for class with materials and prerequisite knowledge</p> <p>Group dynamic and level of discussion are often better because of the student's presence</p> <p>Engages creatively but may not acknowledge the contribution of others</p> <p>Actively supports, engages and listens to peers (ongoing)</p> <p>Shows interest in subject matter</p> | <p>Often prepared for class with materials and prerequisite knowledge</p> <p>Group dynamic and level of discussion are occasionally better because of the student's presence (never worse)</p> <p>Makes relevant comments based on the assigned material</p> <p>Mostly creative output tends not to acknowledge the contribution of others</p> <p>Makes a sincere effort to interact with peers (ongoing)</p> | <p>Limited interaction with peers</p> <p>Preparation, and therefore level of participation, are both inconsistent</p> <p>When prepared, participates constructively in discussions and makes relevant comments based on the assigned material</p> <p>Group dynamic and level of discussion are not affected by the student's presence</p> <p>Shows limited creativity and acknowledgment</p> | <p>Virtually no interaction with peers</p> <p>Rarely prepared</p> <p>Rarely participates</p> <p>Comments are generally vague or drawn from outside of the subject matter</p> <p>Demonstrates a noticeable lack of interest</p> <p>Group dynamic and level of discussion are harmed by the student's presence</p> <p>Shows limited creativity and acknowledgment</p> | <p>No interaction with Peers</p> <p>Never prepared</p> <p>Never participates</p> <p>Demonstrates a noticeable lack of interest in the material (ongoing)</p> <p>Group dynamic and level of discussion are significantly harmed by the student's presence</p> <p>Shows limited creativity and acknowledgment</p> |
| INTROVERT | <p>Group dynamic and level of discussion are consistently better because of the student's presence</p> <p>Creatively engages topic and acknowledges the ideas of others.</p> <p>Actively listens to peers and consistently provides non-verbal cues as such (ongoing)</p> <p>Exudes interest in subject matter in and out of class</p> | <p>Group dynamic and level of discussion are often better because of the student's presence</p> <p>Creatively engages topic but has almost no interaction with others.</p> <p>Actively listens to peers and occasionally provides non-verbal cues as such</p> <p>Shows interest in subject matter</p> | <p>Group dynamic and level of discussion are occasionally better because of the student's presence (never worse)</p> <p>Creatively engages topic as evidence by teacher/student discussions</p> <p>Listens to peers and occasionally provides non-verbal cues as such</p> | <p>Group dynamic and level of discussion are not affected by the student's presence</p> <p>Shows limited creativity and acknowledgment</p> <p>Is noticeably unprepared at least once a week</p> <p>Is noticeably distracted from subject material a few times a week</p> | <p>Rarely prepared</p> <p>never participates</p> <p>Comments (when made) are vague or drawn from outside of the subject matter</p> <p>Demonstrates a noticeable lack of interest</p> <p>Group dynamic and level of discussion can be harmed by the student's presence</p> <p>Shows limited creativity and acknowledgment</p> | <p>No interaction with Peers, even non-verbal</p> <p>Never prepared</p> <p>Never participates</p> <p>Demonstrates a noticeable lack of interest in the material (ongoing)</p> <p>Group dynamic and level of discussion are significantly harmed by the student's presence</p> <p>Shows limited creativity and acknowledgment</p> |

GTA High School Grading Scale: No credit will be awarded for grades lower than 2.0.

| Percentage | Letter Grade | GPA Assignment |
|------------|--------------|----------------|
| 93-100 | A | 4.0 |
| 90-92 | A- | 3.7 |
| 87-89 | B+ | 3.3 |
| 83-86 | B | 3.0 |
| 80-82 | B- | 2.7 |
| 77-79 | C+ | 2.3 |
| 73-76 | C | 2.0 |
| 70-72 | C- | 1.7 |
| 67-69 | D+ | 1.3 |
| 63-66 | D | 1.0 |
| 60-62 | D- | .7 |
| 0-59 | F | 0 |

Policies/Procedures:

Homework: This may include reading, watching a video or streaming lecture, working on a larger project or report. I am careful about assigning homework, so it is important that you are careful about doing it the day it is assigned.

Corrected Work: Work will be graded fairly and with great scrutiny. All work handed in and then graded may be corrected and/or re-done, once returned by instructor, for full credit, with no penalty. (Provided it is on time, see below).

Late Work: Assigned work can be turned in on time for up to 100% credit. Work turned in the same week, but later than the assigned day, as the due date can be turned in for up to 80% credit. All work may be turned in after the week of the due date for up to 50%.

PLEASE NOTE: I am a reasonable and fair individual, please discuss planned lateness with me.

Absence/Tardiness: Absences and tardies are the responsibility of the individual student and that student should make arrangements to gather missed materials from classmates and/or the teacher website before talking with the instructor about what was missed.

***** A syllabus is a contract between a teacher and student, if changes are made to anything pertaining to this document, notice and explanation will be given and should be respectfully demanded by students.***