

Grove City Senior High School

SY 2009-10

Course Title: Biology – Lab (SCI110)

Instructor: Mr. Barber Room 172

Textbook: Biology by Miller & Levine

Course Description: This lab-based course is designed to be a fundamental introduction to biology for all students. It is a required course for graduation and is usually studied by students in Level I. The course focuses on the global nature of life and the interactions of the biodiversity of the world and their relationships to man. The course content is aligned with the Pennsylvania academic standards for science & technology as well as appropriate components of the environment & ecology standards and emphasizes knowledge in the areas of characteristics of life, biochemistry, cell structure, cellular reproduction, genetics, phylogeny, classification, ecology, dissection*, graph interpretation, and problem-solving involving biological mathematics. Hands-on laboratory procedures, critical thinking skills, and the scientific method of inquiry are strongly emphasized. Additionally, developing reading for comprehension and study skills will be integrated throughout the course. Evaluation includes study guides, lab reports, homework, quizzes, reading comprehension checks, library/Internet assignments and examinations. Content examinations are required for each unit to include a comprehensive mid-term and final examination. As a result of this course, students will have a better understanding of life's inner workings as well as the interactions occurring between the environment and living organisms. Moreover, student will acquire an appreciation for the influences of humans on the world and what are our needs and responsibilities with regard to the environment. The pace and scope of the course is designed to push to envelope of student learning to the level of not only meeting the academic standards but exceed these standards to produce academically proficient students and citizens capable of making informed decisions concerning contemporary science issues.

* **Dissection Policy:** Any student who chooses to refrain from participation in or observation of animal dissection has the right by law to do so. In the event that a student objects to this activity, an alternative educational assignment may be provided.

The objectives of this course are **1)** impart a core body of knowledge as determined by the applicable PA State Academic Standards **2)** academically prepare the student for higher level science courses in the GCSH curriculum and **3)** enhance student understanding of the interactions occurring among the environment and living organisms as well as facilitate an appreciation for the influences of humans on the world and what our needs are from the environment.

Grading: Grade distribution will consist of the following components:

- 1). Exams/Quizzes/Comprehensive Midterm and Final (aligned with applicable PA State Academic Standards)
- 2). Laboratory Packets/Reports
- 3). Library/Internet Activities
- 4). Seatwork/Homework
- 5). Notebook
- 6). Class/Lab Participation

Point values will be earned in each of the above areas and a percentage will be calculated at the end of each grading period based upon the total score (earned points / possible points = %). Grades will be assigned in accordance with the marking system outlined in the Grove City Senior High Student Handbook.

Students are **expected** to come to class prepared, take notes as needed, participate when appropriate, compete in-class and homework assignments and strive (effort, effort, effort) to reach their own academic potential. Those students that require additional help with course requirements may also seek assistance from **1)** GCSH Guidance Dept. Tutorial Program **2)** East Main Church Tutorial Services and/or **3)** Tutorial CD-ROM that is issued along with the textbook.

NOTE: Suggested test preparation methods include: study your lecture notes, read the textbook and lab packets (reread as needed), use the interactive tutorial CD-ROM, participate in class activities/labs, complete all homework assignments thoroughly & accurately and avoid missing class.

Make-up Work: Students, repeat students, are responsible to ensure they make up any missed assignments (i.e. exams/quizzes/final, in-class assignments, projects, notes, laboratory experiments, homework) in accordance with school policy. Students are expected to initiate the request for scheduling times/dates to make-up work.