**Course Syllabus 2019-2020**

1. **Instructor Information**

**Teacher**: Mr. Brian Martin

**Contact Information:** Please feel free to call, text, or e-mail me about any questions. If you call or

text before 10:00 pm I will try to respond that evening.

1. Phone: 484-645-6193

2. E-mail: [bjmar92@gmail.com](mailto:bjmar92@gmail.com)

3. Website: martinsclasses.weebly.com

1. **Course Description**

Biology and the study of the nature teaches us to observe the beauty of God’s creation, the complexity of His handiwork, and His sustaining role in the world. We will explore the following fundamentals; philosophy of science, historical achievements, zoology, cellular and molecular biology, human anatomy and physiology, and botany. This course will include an assortment of dissections, experiments, and research projects. Students will also complete a long term biology project that will count for a large portion of their grade. This will culminate with a presentation at the science fair/grandparents day.

1. **Goals and Aims**

A. Discuss the theories of science and scientific inquiry from a Christian perspective.

B. Analyze critically the theory of Darwinian evolution, and natural selection from various worldviews.

C. Cultivate a spirit of meekness and awe by conceptualization of God’s creative design.

D. Increase interest in careers in science and medicine

E. Appreciate the complexity of life, earth, animals, and the human body

1. **Objectives**
   1. Name the six steps of the scientific method chronologically.
   2. Contrast the creation sequence with the evolutionary sequence.
   3. List the eleven system of the human body.
   4. Describe the functions of the eleven systems.
   5. Label major organs in each of the eleven systems.
   6. List the six Phyla of animals with three key characteristics
   7. Draw the fourteen main components of a cell.
   8. Summarize the functions of these components.
   9. Create offspring models based on parental information.
   10. Identify the ten plant families.
   11. Differentiate between the six components of a plant.
   12. Create an example of the binomial system of nomenclature.
   13. Construct a research experiment.
   14. Analyze our diets over a three day period
   15. Formulate an improved diet
   16. Apply the improved diet for three days (optional)
   17. Match two hundred vocabulary words.
   18. Match fifty prefixes.
2. **Textbooks and Instructional Materials**
   1. *Biology: God’s Living Creation ­*- Abeka
   2. martinsclasses.weebly.com
3. **Equipment and materials**
   1. Notebook or paper in a binder
   2. A place to store class material
   3. Dissecting Equipment
   4. PPE
   5. Microscopes
   6. Pen and pencil
4. **Course Requirements**

The prerequisites to this course are …

* + 1. Basic computer and research skills

1. **Logistics**
   1. **Procedures and Expectations**
      1. Student should record assignments.
      2. Daily participation in class is expected.
      3. Develop a way to organize all the course materials. (homework, class notes, pre-lab assignments, lab reports, quizzes, and tests)
      4. Attend class five days a week. I should be notified ahead of time if you will be absent.
      5. Absent students are responsible for all catch-up work.
      6. Students should be in their seats by the time the bell rings.
      7. Test and quizzes should be overturned and placed on the corner of one’s desk or handed in when finished.
      8. During instructional time students are expected to remain quite (except for relevant questions), take notes, and pay attentions. Students who engage in disruptive behavior will receive a verbal warning. A second offense may require that you stay for a chat at the end of class.
      9. When given in class work time collaboration among students is allowed. Communication is generally restricted to course material. Voices should stay subdued.
      10. All work should be done neatly and in an organized manner. Sloppy work may have to be re-done.
      11. Pay attention when other people are speaking.
   2. **Rules**
      1. School rules will be upheld in my classroom
      2. Students who have to leave class after the bell to retrieve classroom materials, get drinks, or use the restroom will receive an irresponsibility.
      3. Late homework will be penalized according to PVMS policy.

(I will overlook one late assignment and one irresponsibility point per quarter. (Late homework must still be completed))

* + 1. Respect school property, the teacher, co-students, and other’s time and resources.
    2. Maintain a positive attitude about life and learning.
    3. Laboratory rules are located on the student safety contract.
  1. **Class Logistics**
     1. **Homework:** Students will be given homework to review concepts taught in class. These assignments are crucial for students to expand their understanding, and will give both the teacher and student an opportunity to check comprehension of the material before moving on. Homework assignments will usually be discussed and checked the next day in class, giving students the opportunity to ask questions to further increase their understanding. Homework is due at the start of the class period. Each paper must contain a headings which include the student’s name and lesson/assignment/page numbers. **All homework must be done in pencil.**
     2. **Quizzes:** Quizzes help you and me determine how well you are mastering the material and what parts aren’t clearly understood. To receive full credit all work must be shown when applicable. Most quizzes will be announced, but some may be unannounced.
     3. **Notes Quizzes:** Every chapter will have a notes quiz near the end. They will include important concepts from the chapter. Student may use any notes taken in class to complete the quiz. You may not use your textbook.
     4. **Tests:** There are about 12 tests throughout the year. They will be closed books, notes, and friends unless told otherwise. Test fix-ups: After a test has been returned and you would like to improve your score, you may ask me for a test make-up plan. If you follow the plan you can earn full credit for the fix-up. Plans may vary by test. Intermediate work, if needed, must always be shown to get full credit, even if you use a calculator. I generally give partial credit on tests for correct work even if the final answer is incorrect.
     5. **Projects:** This course requires the completions of a research project. More details will be given in the future.

1. **Methods**

A. Teaching Methods

1. Lectures 2. Demonstrations 3. Cooperative learning

4. Projects 5. Multimedia 6. Discussions

7. Field Trips

B. Assessment

1. Exams 2. Quizzes 3. Review 4. Homework

5. Projects 6. Presentations 7. Laboratory activities

1. **Grading Policies**

A. Tests 60% B. Homework 20% C. Projects 5%

D. Notes Quizzes 5% E. Quizzes 10%