**2012-2013 Biology Syllabus**

**ASTEC Charter High School**

**Teacher:** Mrs. Jill Carson

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**Website:** http://www.mrscarsonbiology.weebly.com

**Plan Period:** 12:35-1:25 Monday, Tuesday, Thursday, and Friday

**Phone number:** 947-6274

**Textbook:**

Miller, Kenneth & Levine, Joseph. Biology. Prentice-Hall, Inc., 5th edition

**Course Objectives:**

* Identify qualitative and quantitative changes in cells, organisms, populations, and ecosystems given conditions before, during, and after an event.
* Use appropriate tools with accuracy and precision when measuring cells, organisms, populations, and ecosystems.
* Use appropriate International Systems of Units when measuring objects and/or events.
* Using observable properties, place cells, organisms, and/or events into a biological classification system.
* Identify the properties by which a biological classification system is based.
* Evaluate the design of a biology laboratory experiment.
* Identify the independent variables, dependent variables, controlled variables, and control set-up in an experiment.
* Use mathematics to show relationships within a given set of observations.
* Identify a hypothesis for a given problem in biology investigations.
* Recognize potential hazards and practice safety procedures in all biology activities.
* Select appropriate predictions based on previously observed patterns of evidence.
* Report and display data using appropriate-technology and other media.
* Interpret data tables, line, bar, trend, and/or circle graphs from existing science research or student experiments.
* Evaluate experimental data to draw the conclusion that is best supported by the evidence.
* Routinely prepare a written report describing the sequence, results, and interpretation of a biological investigation or event.
* Interpret a biological model, which explains a given set of observations.
* Select predictions based on models, and when appropriate, apply mathematical reasoning to make accurate predictions.
* Compare a given model to the living world.
* Ask a scientific question, formulate a testable hypothesis, and design an appropriate experiment relating to the living world.

**Required Materials:**

* 5 subject notebook with pocket folders (bell work, lab reports, notes, daily activities)
* Notecards with and without lines
* Pencil or black ink pen
* Various materials will be needed for projects through out the course (i.e., Styrofoam ball, Play-doh, decorations for baby project)

**Attendance Policy and Classroom Expectations**:

* Attendance is crucial to the learning process. Students should be in the classroom working on the Starter Activity before the last bell rings. If a student is absent, it is his/her responsibility to obtain information regarding the missing assignments in a timely manner. Refer to student handbook for more information.
* Cheating will result in a loss of assignment credit, a call to the parent, and a referral to the principal.
* Students are expected to participate in all lab activities and use the equipment as it is intended. If any misuse should occur, the student is responsible for replacing the equipment and/or supplies.

**Assessment/Grading:**

Grading:

90-100: A 60-69: D

80-89: B Below 59: F

70-79 C

**Category Weights**

40% Assessments

30% Projects/Lab

20% Daily Activities (discussion, homework, daily work, starters, and participation)

10% Semester Final Exam

Semester 1

**Assessments:**

4 Unit Tests, 4x100=400 points

9 Quizzes, 9x20= 180 points

2 Benchmarks, 2x10=20 points **Projects/Lab:**

5 Projects, 5x50=250 points

5 Lab Activities, 5x10=50 points

5 Lab Reports, 5x10=50 points

**Daily Activities:**

15 Daily Activities, 15x10=150 points\*

**Semester Final:**

1 Final Exam, 1x200=200 points

Semester 2

**Assessments:**

5 Unit Tests, 5x100=500 points

13 Quizzes, 13x20=260 points

**Projects/Lab:**

6 Projects, 6x50=300 points

6 Lab Activities, 6x10=60 points

6 Lab Reports, 6x10=60 points

**Daily Activities:**

18 Daily Activities, 18x10=180 points\*

**Semester Final:**

1 Final Exam, 1x200=200 points

\*(At the end of each week, you will get a grade based on a rubric.)

An explanation of each of the assignments and a space to enter your grade is on the sheet that follows this syllabus. In order to be able to calculate your grade, you will be required to keep track of every grade and enter it on the sheet provided. This is to be kept in your notebook at all times.

**Teaching Strategies**

* **Lectures/Discussions:** Power points and the use of the smart board are used to provide a basis for discussion.
* **Assessments:** Assessments are used as a basis for checking understanding and remediation. Be prepared to defend your answers with reason and facts.
* **Homework Reading & Note- taking:** Students are expected to use the Cornell Note-taking method or Concept mapping for homework reading assignments. Notes will be checked weekly to make sure you are keeping up with the reading assignments and are recording ideas of what you read.
* **Grand Conversations:** This is a group discussion method that includes students bringing at least five questions and five comments based on a reading assignment or topic on which the group discussion will be based. We form tables in a conference-like manner and students take turns either presenting a question or comment of theirs while classmates delve into discussions based on each question or comment. Points are given for turning in questions and comments, discussion participation, and notes taken during the group discussion.
* **Group Presentations:** Since students tend to learn better from teaching others, periodically various topics will be assigned to individual students or small groups of students on which they are to put together a PowerPoint presentation or a quick lecture to present to the rest of the class. (Group grades should not be weighted in such a way that it affects an individual student grade. In other words, each person will be graded on his or her part of the presentation.)
* **Peer Reading Circles:** Student essays will be handed out to different students in the class and students will score and comment on each essay using the appropriate rubrics. Students are usually required to read and score at least 3 different student essays within a class period. Comments and scores are then given to the student to see how their peers scored them and offer constructive criticism to each other. The final homework grade comes from the teacher.

These are examples of the type of activities that will make up the bulk of the class. If you or your parent has any questions, please fill free to contact me. The best way to reach me is by e-mail.

**Semester 1 Grade Register**

**Biology**

**Assessments**

|  |  |  |
| --- | --- | --- |
| 1. **/100**
 | 1. **/100**
 | 1. **/100**
 |
| 1. **/100**
 | 1. **/20**
 | 1. **/20**
 |
| 1. **/20**
 | 1. **/20**
 | 1. **/20**
 |
| 1. **/20**
 | 1. **/20**
 | 1. **/20**
 |
| 1. **/20**
 | 1. **/10**
 | 1. **/10**
 |

**Total test points /600 = \_\_\_\_\_\_\_\_\_\_\_ x .40 =\_\_\_\_\_\_\_\_**

**Projects/Lab Activities/Lab Reports**

|  |  |  |
| --- | --- | --- |
| 1. **/50**
 | 1. **/50**
 | 1. **/50**
 |
| 1. **/50**
 | 1. **/50**
 | 1. **/10**
 |
| 1. **/10**
 | 1. **/10**
 | 1. **/10**
 |
| 1. **/10**
 | 1. **/10**
 | 1. **/10**
 |
| 1. **/10**
 | 1. **/10**
 | 1. **/10**
 |

**Total Project points /300 = \_\_\_\_\_\_\_\_\_\_ x .30 =\_\_\_\_\_\_**

**Daily Assignments**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1. /10** | **4. /10** | **7. /10** | **10. /10** | **13. /10** |
| **2. /10** | **5. /10** | **8. /10** | **11. /10** | **14. /10** |
| **3. /10** | **6. /10** | **9. /10** | **12. /10** | **15. /10** |

 **Total D. A. points /150 =\_\_\_\_\_\_\_\_\_\_\_\_\_x .20 = \_\_\_\_\_**

**Semester Test**

**Final Test /200= \_\_\_\_\_\_\_\_\_\_\_\_\_ x .10=\_\_\_\_\_**

FINAL SCORE (Add right hand column)  **\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Semester 2 Grade Register**

**Biology**

**Assessments**

|  |  |  |
| --- | --- | --- |
| 1. **/100**
 | 1. **/100**
 | 1. **/100**
 |
| 1. **/100**
 | 1. **/100**
 | 1. **/20**
 |
| 1. **/20**
 | 1. **/20**
 | 1. **/20**
 |
| 1. **/20**
 | 1. **/20**
 | 1. **/20**
 |
| 1. **/20**
 | 1. **/20**
 | 1. **/20**
 |
| 1. **/20**
 | 1. **/20**
 | 1. **/20**
 |

**Total test points /760 = \_\_\_\_\_\_\_\_\_\_\_ x .40 =\_\_\_\_\_\_\_\_**

**Projects/Lab Activities/Lab Reports**

|  |  |  |
| --- | --- | --- |
| 1. **/50**
 | 1. **/50**
 | 1. **/50**
 |
| 1. **/50**
 | 1. **/50**
 | 1. **/50**
 |
| 1. **/10**
 | 1. **/10**
 | 1. **/10**
 |
| 1. **/10**
 | 1. **/10**
 | 1. **/10**
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| 1. **/10**
 | 1. **/10**
 | 1. **/10**
 |
| 1. **/10**
 | 1. **/10**
 | 1. **/10**
 |

**Total Project points /420 = \_\_\_\_\_\_\_\_\_\_ x .30 =\_\_\_\_\_\_**

**Daily Assignments**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1. /10** | **4. /10** | **7. /10** | **10. /10** | **13. /10** | **16. /10** |
| **2. /10** | **5. /10** | **8. /10** | **11. /10** | **14. /10** | **17. /10** |
| **3. /10** | **6. /10** | **9. /10** | **12. /10** | **15. /10** | **18. /10** |

 **Total D. A. points /180 =\_\_\_\_\_\_\_\_\_\_\_\_\_x .20 = \_\_\_\_\_**

**Semester Test**

**Final Test /200= \_\_\_\_\_\_\_\_\_\_\_\_\_ x .10=\_\_\_\_\_**

FINAL SCORE (Add right hand column)  **\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Record of Daily Assignments**

**Daily Assignment Rubric for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the week # \_\_\_\_\_\_\_\_\_\_\_**

 **1 pt. 2pts.**

**1. On time every day \_\_\_\_\_\_ \_\_\_\_\_\_**

**2. Notes are neat and complete \_\_\_\_\_\_ \_\_\_\_\_\_**

**3. On task \_\_\_\_\_\_ \_\_\_\_\_\_**

**4. Bell work thoughtfully done \_\_\_\_\_\_ \_\_\_\_\_\_**

**5. Contributed positively to class \_\_\_\_\_\_ \_\_\_\_\_\_**

 **Total\_\_\_\_\_\_\_\_**

**Notes:**

**Record of Daily Assignments**

**Daily Assignment Rubric for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the week # \_\_\_\_\_\_\_\_\_\_\_**

 **1 pt. 2pts.**

**1. On time every day \_\_\_\_\_\_ \_\_\_\_\_\_**

**2. Notes are neat and complete \_\_\_\_\_\_ \_\_\_\_\_\_**

**3. On task \_\_\_\_\_\_ \_\_\_\_\_\_**

**4. Bell work thoughtfully done \_\_\_\_\_\_ \_\_\_\_\_\_**

**5. Contributed positively to class \_\_\_\_\_\_ \_\_\_\_\_\_**

 **Total\_\_\_\_\_\_\_\_**

**Notes:**