**MYP Year 4 Science Syllabus**

**Biology**

**9th grade 2015-2016**

Instructor: Dr. Christina Bowers

Room: 2.09

Meridian Phone: 512-660-5230

Website: [www.drbowers.weebly.com](http://www.drbowers.weebly.com)

e-mail: [c.bowers@mwschool.org](mailto:c.bowers@mwschool.org)

Conference periods: A 10:05-11:35 & B 2:15-3:45

Tutorials: T 7:30-8:15 & Th 3:50-4:30

**Course Description**

Do humans have anything in common with flatworms? What lessons can a bacterium teach us about ourselves? This course will address these and other questions as we engage in a year-long consideration of what it means to be *living*. We will evaluate the factors that determine interactions in biological systems. A balance of laboratory investigation with interactive class activities will introduce the fundamental concepts and guiding principles of biology, and provide opportunities to develop and apply analytical skills. Throughout our course, we will explore global connections and human impacts relevant to biology. Units of study are designed to stimulate curiosity and inquiry as we tackle problem solving, construct explanations, judge arguments and learn to make informed decisions regarding scientific research.

With each new unit, unifying key and related concepts will guide our discussions and help us to connect the “big ideas” within the field of Biology.

**Course Goals**

**Biology students will:**

1. **learn** to *properly* use a variety of tools and equipment available for use in the MWS science laboratory
2. **practice** *safe* handling procedures for equipment and materials in the MWS biology laboratory
3. **learn** to *ask* appropriate questions and design scientific investigations
4. **document** work in a journal for labs and in a binder for class discussions
5. **organize** class materials in a class binder with dividers designating appropriate subheadings
6. **use** and **develop** models to explain scientific process
7. **analyze, evaluate, critique** scientific explanations using evidence and logical reasoning

**Biology Students will strive to:**

**U**se Evidence

**A**sk MANY questions

**B**e Curious

**C**ultivate wonder

**I**dentify confusions

**T**HINK (like a biologist!)

**(U ABC IT)**

**Classroom Expectations**

1. Observe safety guidelines at all times
2. Respect people, things, and ideas
3. Use time wisely
4. If others are speaking, listen
5. If you miss it, make it up
6. Always TRY

**Topics will be updated and assignments posted on the class website on a regular basis. If you have questions or concerns, please don’t hesitate to ask. I value communication!**

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| **Scope and Sequence** | **Time** | **Date** |
| Unit 1: The Nature of life | 4 weeks | August – September |
| Unit 2: Chemistry of Life | 4 weeks | September |
| Unit 3: Cellular Systems | 4 weeks | October - November |
| Unit 4: Physiological Systems | 4 weeks | November-December |
| Unit 5: Coding Nature | 4 weeks | January-February |
| Unit 6: Genetics and Heredity | 3 weeks | February-March |
| Unit 7: Biodiversity | 3 weeks | April-May |

**Required materials**

1. Planner
2. Binder with dividers for handouts and notes
3. Composition notebook for labs
4. Spiral notebook or paper for note taking.
5. Pencils (regular and colored), pens, scissors
6. Glue sticks

Students will be issued online access for our Textbook: ***Biology*** by Miller and Levine 2015 ed.

# **Grading and Discipline Policies follow Meridian World School Guidelines**

**Discipline:**

Disruptive behavior is any action that impedes learning or creates a safety hazard for fellow students and will not be tolerated at any time. Any student engaging in unsafe behaviors is subject to prompt removal from the laboratory setting. Referral process will follow the Meridian school policy.

**Grading:**

20% - Homework, daily work and some class activities (minor)

30% - labs and quizzes (minor)

50% - exams, lab reports, projects (major)

**Late Work and Re-testing**

Late work will be accepted with a penalty of deducted points. The school wide penalty is 10 points per school day late. Work that is 5 or more days late cannot receive higher than a 50. Late work will not be accepted for a grade after the end of the grading quarter. All assignments must be turned in before that unit’s final assessment to receive any credit. Retests on major assessments are possible, with a maximum grade of 70. Requests to retest are STUDENT RESPONSIBILITY and must be submitted within 1 week of the major assessment.

**Make Up Work:**

Students have the same number of class periods as missed school days to make up missed work. Tutorials and/or Saturday school are encouraged to ensure understanding of missed content. Missed lab activities may be substituted with alternative assignments.

**Academic Dishonesty**:

Plagiarism or any other form of cheating is a violation of the Meridian Honor Code and will be referred to the Assistant Principal for further consequences

**9th Grade Biology Syllabus 2015-1016**

**Verification of Receipt**

After you have read this syllabus, please sign below, fill out the contact information, and return this page to me.

Sincerely,

Christina Wilson Bowers

*I have read and understand the policies covered in Dr. Bowers’ 9th Grade Biology Syllabus.*

*Print Student’s Name Print Parent/Guardian’s Name*

*Student Signature Parent/Guardian Signature*

**Student’s Name:**

**Address:**

**Home Phone:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Student Cell Phone:**

**Student Email Address:**

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| --- | --- |
| **Parent #1 Name** | **Relationship (mother, father, etc.)** |
|  |  |
| **Work / Cell Phone Number** | **e-mail address** |
|  |  |

|  |  |
| --- | --- |
| **Parent #2 Name** | **Relationship (mother, father, etc.)** |
|  |  |
| **Work / Cell Phone Number** | **e-mail address** |
|  |  |