

# BIOLOGY

Mrs. Stephanie Monahan

Office: B231/233 Classroom: B231 & B233

Phone: x5621 [smonahan@dbqschools.org](mailto:smonahan@dbqschools.org)

## Course Description:

This course is designed for those students who desire a thorough background in basic biology and a strong basis for further science study.

The course of study in Biology includes all the major themes essential to understanding life. This is often achieved through problem solving, laboratory experiences, and group activities. The text material provides the factual foundation necessary to understanding the principals of life discussed in the course.

## Standards:

Iowa Core Curriculum/Next Generation Science Standards

- Cellular Processes: HS-LS1-5 & HS-LS1-7
- Cell Cycle/Meiosis: HS-LS1-4 & HS-LS 3-2
- Heredity: HS-LS1-1, HS-LS3-1, HS-LS3-2, & HS-LS3-3
- Evolution: HS-LS4-1 through HS-LS4-6
- Human Body: HS-LS1-2, HS-LS1-3, & HS-LS1-6
- Ecology: HS-LS2-3, HS-LS2-4, & HS-LS2-8

Please refer to the website - <http://nextgenscience.org/> - for specific details regarding each standard.

## Assessments:

Student understanding will be continuously monitored throughout the course. A mix of formative assessments will be given during the chapter, these include (but are not limited to) online quizzes (submitted through Canvas), "exit tickets", traditional quizzes, self-reflections, labs, and class discussions. Not all formative assessments will be formally graded and entered in PowerSchool, those that are will be appropriately labeled and suggestions for improvements will be given. At the end of each chapter a summative assessment will be given to determine the level of comprehension each student gained. The summative assessment may be a traditional exam, performance assessment, or individual/group project. Advanced notice will be given for summative assessments.

If absent on an assessment day students will be allowed to complete the missed work. The student will be responsible for communicating the desired date/time to make up the assessment, which must not take place during this or other scheduled classes during the day.

## Content:

<b>Semester 1</b>	
First Quarter <ul style="list-style-type: none"><li>• Chapter 1 – The Science of Biology</li><li>• Chapter 7 – Cell Structure &amp; Function</li><li>• Chapter 8 – Photosynthesis</li><li>• Chapter 9 – Cellular Respiration</li></ul>	Second Quarter <ul style="list-style-type: none"><li>• Chapter 10 – Cell Growth &amp; Division</li><li>• Chapter 11 – Introduction to Genetics</li><li>• Chapter 12 – DNA &amp; RNA</li></ul>
<b>Semester 2</b>	
Third Quarter <ul style="list-style-type: none"><li>• Chapter 15 &amp; 16 – Darwin's Theory of Evolution</li><li>• Chapter 18 – Classification</li><li>• Chapter 31 – Comparing Invertebrates</li><li>• Chapter 33 – Comparing Chordates</li></ul>	Fourth Quarter <ul style="list-style-type: none"><li>• Chapter 37 – The Circulatory and Respiratory Systems</li><li>• Chapter 38 – The Digestive System</li><li>• Chapter 35 – The Nervous System</li><li>• Chapters 3, 4 &amp; 5 – Ecosystems and Population</li></ul>

\*\*THIS CALENDAR IS SUBJECT TO CHANGE\*\*

### **Instructional Strategies:**

This course will implement a variety of instructional strategies each chapter. At times, strategies will push the comfort and/or creative limits of the student, but the intent is to get students to understand and apply the content through various means. Small cooperative groups may be created using results from formative assessments. Student choice will be given on several formative and summative assessments and students are encouraged to voice their ideas and suggestions.

### **Resources:**

This course is designed around the Prentice Hall textbook *Biology* (Miller & Levone, 2008). Although it is not required, students may check out their own copy of the book if interested (see Ms. Bontemps in the Library).

All Biology students will have an account on Canvas, which will serve as our Learning Management System. Access can be found at: <https://dubuque.instructure.com/login/canvas>

Lastly, a Symbaloo resource site is provided on the course homepage in Canvas. With one click, you can access several different tutorial sites, presentation tools, and additional resources.

### **Academic/Behavioral Expectations:**

The student expectations listed below are posted in my classroom and will be continually addressed throughout the year as needed. I expect you to exhibit these characteristics inside the classroom as well as while walking in the hallways, attending extracurricular activities, participating in pep assemblies, and any other school related function.

1. Be Kind: Support One Another
2. Work Hard
3. Show Initiative
4. Never Be Afraid to Ask Questions
5. Be Honest
6. Take Responsibility for Your Actions

Please manage your technology in a mature, respectful manner. Use of any electronic device (iPod, iPad, laptop, phone, mp3, etc.) without permission *could result in the loss of your technology*. When we are working on our iPads or laptops, please stay off your social networking pages unless given permission. There will be times when you will be allowed access to these resources and responsible, respectful behavior is expected. The school policy for electronic devices described in your agenda will be applied.

Consequences for inappropriate behavior, attire, attendance, and language will be determined at that time. All school policies described in your agenda will be applied.

### **Grading Plan: How will my grade be calculated?**

All course work will fit into the following categories: participation, projects, assignments, quizzes, or tests. Your percentage grade will be calculated based on your total points earned divided by the total points possible. *Extra credit may be made available throughout the year as determined by the teacher.*

The grading scale is as follows:

A	93 – 100%	B-	80 – 82%	D+	67 – 69%
A-	90 – 92%	C+	77 – 79%	D	63 – 66%
B+	87 – 89%	C	73 – 76%	D-	60 – 62%
B	83 – 86%	C-	70 – 72%	F	Below 60%

### **What is the assignment policy?**

I expect all assignments to be completed on time.

- If you are absent the day an assignment is given, please check the class planner or ask a friend. All content missed can be found in your class' designated folder and on Canvas.
- Once a quarter has ended, assignments from that prior quarter will not be accepted. For example, during second quarter, missed work from first quarter will not be accepted.
- If you are unable to complete an assignment the day it is due, please see me.
- If you miss notes, please copy them from a friend or copy/print them from Canvas.
- When in doubt, ask! That is why I work here.

### **Communication Plan**

All course communication will take place via our LMS and/or school email on O365. Please feel free to contact me anytime by email or phone with comments, questions, or concerns.

**email address:** [smonahan@dbqschools.org](mailto:smonahan@dbqschools.org)

### **my school day schedule is as follows:**

hours 1-3:	Biology in B231
hour 4:	Prep in office
hour 5:	Study Skills in D163
hour 6:	Biology in B233
hour 7:	Sophomore House Planning

\*\*Once the first phase of construction is completed in November, all of my classes will be held in B231.

**phone number:** (563) 552-5621 voicemail, the best chance of reaching me personally is before school, between 10:10 and 10:40 am, and after school.

\* I may change this syllabus at any time.

**BELIEVE IN YOURSELF. YOU ARE A  
LEARNING MACHINE. WITH TIME AND  
HARD WORK YOU CAN GET BETTER AT  
ANYTHING YOU WANT. TAKE RISKS.  
TRY NEW THINGS. MESS UP. FALL  
DOWN. RAISE YOUR HAND. ENJOY THE  
PRESSURE. FEEL THE FEAR BUT DARE  
GREATLY. LET IT RIP. SPEAK UP. BUST  
OUT OF YOUR COMFORT ZONE.  
ALWAYS REMEMBER THAT GETTING  
BETTER IS NOT PRETTY, THAT THERE  
ARE NO GIFTS, AND YOU GET BETTER  
WITH PRACTICE, PERIOD. SEEK OUT  
CHALLENGES. MAKE IT GAME LIKE. DO  
THE HARD THINGS. ENJOY EVERY  
MINUTE OF IT.**

**TRAIN UGLY**