Biology for High School Students
Honors Credit Option

Grades:	**8-12**
Day:	**Tuesday**
Time:	**9:00 AM - 10:30 PM ET**
Length of Class:	**30 Weeks**
Semester:	**Fall, Winter, and Spring**
Tuition:	**$600.00**
Credit:	**1 Laboratory Science** **Honors Credit Option**

Class Dates:

Fall 2023

Week 1: Week of September 11

Week 2: Week of September 18

No classes from September 25 – October 6, 2023 – Jewish Holidays

Week 3: Week of October 9

Week 4: Week of October 16

Week 5: Week of October 23

Week 6: Week of October 30

Week 7: Week of November 6

Week 8: Week of November 13

No classes from November 20 – 24 – Thanksgiving Holidays

Week 9: Week of November 27

Week 10: Week of December 4

Make-Up Days: Week of December 11

Time off for Christmas and New Year's! Enjoy the holidays!

Winter 2024

Week 1: Week of January 8

Week 2: Week of January 15

Week 3: Week of January 22

Week 4: Week of January 29

Week 5: Week of February 5

Week 6: Week of February 12

Week 7: Week of February 19

Week 8: Week of February 26

Week 9: Week of March 4

Week 10: Week of March 11

Make-Up Days: Week of March 18

Please note that there are two breaks during this year's Spring term, for the observances of Eid and Passover.

Week 1: Week of March 25

Week 2: Week of April 1

Week of April 8: No Classes due to Eid (Muslim) Holiday – Eid Mubarak to our Muslim families!

Week 3: Week of April 15

Weeks of April 22 and April 29: No Classes – Spring Break – Happy Passover to our Jewish families!

Week 4: Week of May 6

Week 5: Week of May 13

Week 6: Week of May 20

Week 7: Week of May 27

Week 8: Week of June 3

Week 9: Week of June 10

Week 10: Week of June 17

Make-Up Days: Week of June 24

Instructor's Name: **Heather Getson**
Instructor's Email: **jhgetson@gmail.com**
Instructor's Phone: **(517)442-9015**
Office Hours: **By Appointment**

Description of Class:

Biology is the study of life and living organisms. We will use a hands-on, inquiry-based approach to explore the physical structure, chemical composition, function, and development of life on Earth.

Class Approach:

Instructional strategies include modeling exercises, laboratory experiments, virtual labs, projects, class discussions, and problem-solving exercises.

Goals:

At the end of this course, students will be able to

- Demonstrate specific knowledge about biological concepts and themes
- Evaluate scientific claims and issues that affect daily life
- Critically read biological literature
- Communicate effectively about biological subjects

Textbook:

Click link below for Amazon page
Holt McDougal Biology: Student Edition
2012 by Holt McDougal
ISBN-13: 978-0547586663

Excerpts from other texts will be provided via Canvas as PDF downloads

Additional Supplies/Resources Needed:

Students are expected to come to class prepared with a

- pencil
- ruler

- eraser
- a notebook
- loose-leaf and/or printer paper

Students should have a headset with microphone, a webcam, a computer and stable internet connection. Access to a printer is also required.

Materials will be required for labs (will mostly be household materials) and you will be notified about these materials 1-2 weeks prior to the lab via Canvas announcement.

It is recommended that parents supervise their children during labs. Please note that some labs will be completed only by the teacher, while the students observe.

Requirements:
Students are expected to take part in class discussions and demonstrate a knowledge of their weekly reading assignment completed beforehand.

Weekly Homework:
Weekly homework will be a combination of reading, writing, research, and questionnaires. Occasionally, short laboratory procedures will be part of the weekly homework as part of the inquiry-based framework of the course. Clear instructions (including video when needed) will be provided for these labs.

Homework Policy:
Late assignments will be penalized 5% per day, for a maximum of 3 days. After 3 days, the student will not receive any marks for late homework. Late quizzes and exams will not be accepted.

If you will have an issue meeting a deadline, please contact me to discuss.

Additional Policies:
Attendance is expected at all classes. Students are expected to be respectful to one another during class debates and discussions. Students must practice safe lab procedures during laboratory activities.

There will be a strict zero-tolerance policy in regard to plagiarism and cheating. "Cheating" is defined as unauthorized help on an examination or assigned course material. A student must not receive from any other student or give to any other student any information, answers, or help during an exam. “Plagiarism” is defined as the taking of a person's ideas, words, or information and claiming those properties as one's own. The use of all ideas, words, or information from any source must be properly referenced and due credit must be given to its author. All cheating and plagiarism infractions will result in a grade of “0” for the assignment.

Evaluation:

In-Class Participation – 5%
Weekly Assignments – 25%
Unit Tests and Projects – 25%
Midterm Exam – 20%
Final Exam – 25%

Grading Scale:

Percentages/Grades
100-90: A
89-80: B
79-70: C
69-60: D
59 – 0: No effort: F

Anticipated Course Units:

Unit 1: Nature of Science
Unit 2: Chemistry of Life
Unit 3: Cell Structure and Function
Unit 4: Cell Processes (Metabolism and Division)
Unit 5: Meiosis and Genetics
Unit 6: Central Dogma and Biotechnology
Unit 7: Biodiversity and Principles of Evolution
Unit 8: Ecology
Unit 9: Human Body Systems
Unit 10: Final Project

Anticipated Weekly Course Schedule:

Week	Topic
Week 1	Introduction, Lab Safety
Week 2	Chemistry of Life - Part 1
Week 3	Chemistry of Life - Part 2
Week 4	Cell Structure and Function Part 1
Week 5	Cell Structure and Function Part 2 (Extra Honors Assignment)

Week 6	Cells and Energy - Part 1
Week 7	Cells and Energy – Part 2
Week 8	Cell Growth and Division – Part 1
Week 9	Cell Growth and Division – Part 2
Week 10	Midterm Test Review
Week 11	Cell Processes: Mitosis and Mendel Part 1
Week 12	Meiosis and Mendel Part 2
Week 13	DNA and Proteins – Part 1
Week 14	DNA and Proteins - Part 2
Week 15	Principles of Ecology – Part 1
Week 16	Principles of Ecology – Part 2
Week 17	Interaction in Ecosystems – Part 1 (Extra Honors Assignment)
Week 18	Interaction in Ecosystems – Part 2
Week 19	The Biosphere – Part 1
Week 20	The Biosphere – Part 2
Week 21	The Tree of Life
Week 22	Viruses and Prokaryotes – Part 1
Week 23	Viruses and Prokaryotes – Part 2
Week 24	Protists and Fungi – Part 1
Week 25	Protists and Fungi – Part 2
Week 26	Plant Diversity
Week 27	Invertebrate Diversity
Week 28	Vertebrate Diversity - (Extra Honors Assignment)
Week 29	Human Systems and Homeostasis

Week 30	Final Project (Honors students will write a paper with this project) There will also be an extra test for the honors students.