

High School Biology One - Course Syllabus

Course Title: Biology, 4201/4202, Full year course, 1 credit

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Course Dates: September 11th - December 11th, January 22-May 6

IF YOU KNOW YOU WILL BE MISSING SEVERAL CLASSES, PLEASE RESCHEDULE TO TAKE THIS COURSE IN A DIFFERENT YEAR.

Class Schedule: Every Monday, 10:30-12:00 OR 2:30-4:00 at Twindly-additional weekly work to be completed at home.

Teacher's role is to: Deliver a quality curriculum in an engaging format with clear expectations and learning outcomes, be prepared for class, communicate assignments and information clearly using Google classroom, and email grades to advisors within one week of semester's end.

Parent's role is to: Check your child's grades regularly on google classroom, know what assignments are due and when, assist your students as needed, oversee student's learning, collect work samples for grade conferences, and give a semester grade using the teacher's input.

Student's role is to: Respect the teacher and classmates, complete all homework, know their grade in the course, and come to class every week, on time and prepared. The student is responsible for getting help, asking questions, and scheduling tutoring when needed.

Course Description: In Biology One, students will explore the fundamental concepts of biology, gaining an understanding of the structure, function, and interactions of living organisms. Through hands-on activities, discussions, and reading from the Friendly Biology textbook, students will develop a strong foundation in biology and cultivate problem solving skills.

Course Objectives: By the end of this course, students will be able to:

1. Demonstrate a comprehensive understanding of basic biological principles and concepts.
2. Describe the structure and function of cells, organs, and organ systems.
3. Explain the processes of genetics, taxonomy, and ecological interactions.
4. Analyze real-world biological phenomena using scientific inquiry.
5. Communicate effectively about biological concepts through written and verbal means.

Required Materials:

1. Friendly Biology textbook
2. Chromebook (there are some on-site if you do not own a personal device)
3. Notebook
4. Homework assignments
5. Open mind and enthusiasm for learning!

Optional Materials:

There is an audiobook option available. There was great success for students that used the audiobook in conjunction with the textbook.

Go to the following webpage: <https://friendlybiology.com/order.html>. Scroll to the bottom of the page. Choose SECULAR edition. Save your receipt for reimbursement.

Class Rules:

1. Be punctual and prepared for each class, including completing prior week's assignments.
2. Use Chromebooks responsibly and for class-related activities only.
3. Participate actively in class discussions and activities.
4. Respect classmates' opinions and ideas.
5. Follow all school policies and classroom rules.

Grading Policy:

- 33% homework
- 33% tests
- 34% weekly classroom labs

Course Schedule:

Unit 1: Taxonomy and the Catalogue of Life

- Ecology
- Levels of biological organization
- In-depth look at the 5 biological Kingdoms
- Frog dissection

Unit 2: Body Systems

- Movement
- Nutrient Delivery
- Sensory
- Endocrine

Unit 3: Characteristics of Life

- Biology fundamentals
- Chemistry foundations
- Carbohydrates
- Lipids
- Proteins
- pH

Unit 4: The Cell

- The cell part 1
- The cell part 2
- DNA
- Cell division
- Chromosome duplication
- Protein synthesis

Unit 5: Genetics

- Methods of reproduction (very basic, i.e. animal vs. plant)
- Punnet squares

Assessment:

- Weekly homework assignments
- Weekly in-person lab assignments
- Weekly tests on each chapter

Communication:

- Google Classroom will be used for announcements, assignments, and resources.
- Google Classroom Codes: First Semester: **wv7coal** & Second Semester: **w7rddon**
- Office hours T-TH from 9:30-3:30 for questions and additional support.

*Please note that this syllabus is a general framework and may be subject to adjustments throughout the course. Your engagement, active participation, and commitment to learning will greatly contribute to your success in Biology One.

Looking forward to an exciting year of exploring the wonders of biology!

Parent signature: _____

Student signature: _____