

**BIOLOGY SYLLABUS
SYCAMORE HIGH SCHOOL
2019-2020 School Year**

This syllabus is intended to provide a guide to class expectations and schedules. If necessary, the syllabus may be changed to accommodate the needs of the class. It is the responsibility of the student to be aware of and understand the requirements listed in this syllabus.

Course Description:

This laboratory based course centers on the understanding of the structure, function, and interaction of living organisms. Topics of study include investigations into ecology and the interactions of organisms in an ecosystem, comparisons of cell processes and how they play a role in the human body, the structure of DNA and its role in the cell cycle and the types of cell division, an examination of genetic diversity, mutations, and inheritance patterns, and the application of genetics into evolutionary concepts that provide a foundation for biological processes. Students in biology should have basic science skills such as creating a data table, making a graph, and taking measurements. Biology is a lab class. Students are expected to work in collaborative groups for labs and projects. Communication of collected data and scientific concepts in the form of presentations and/or lab reports is expected.

Prerequisite: Passing grade in Physical Science or teacher recommendation

Level: 9, 10, 11, 12 Semesters: 2 Credits: 1 Biology is an NCAA accredited course.

Teacher: Scott Horlock

Location: Room G208

Office hours: Monday - Friday zero hr, 3rd hr, before or after school by appointment.

E-mail: shorlock@syc427.org

Phone: 815-899-8160

Website: classroom.google.com

Textbook: Exploring Life Biology by Prentice Hall

Course Objectives:

The Biology course is designed to provide students an active learning experience where students will address the Science Departments Critical Outcomes through biological topics.

Science Department Critical Outcomes:

1. Students will recognize and investigate problems, and formulate and propose solutions supported by reason and evidence. (Cited from the ISBE State Standards)
2. Students will formulate hypotheses based on observations, and conduct controlled experiments to test the identified hypotheses.
3. Students will follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. (Cited from the Literacy Core Standards)
4. Students will organize, analyze, and evaluate data.
5. Students will demonstrate an understanding of the relationship(s) between the structure of matter and its properties and functions.
6. Applying conservation laws, students will demonstrate an understanding of matter and energy transformations in various processes and cycles.
7. Students will relate how various forces drive natural processes.

8. Students will use existing organizational and classification systems to connect scientific facts and concepts.
9. Students will demonstrate an understanding of the relationships among science, technology, and society in historical and contemporary contexts. (Cited from the ISBE State Standards)

Tentative Course Schedule:

DATES	TOPIC	CHAPTERS
08/14 - 09/18	Unit 1: Ecology	34, 35, 36
09/19 - 09/20	Unit I Test	
09/21 - 10/01	Ecology PBL project	
10/02 - 11/06	Unit 2: Organization of Matter & Energy Flow	4, 5, 7, 8
11/07	Unit 2 Test	
11/08 - 12/11	Unit 3: Cell membranes, transport & homeostasis	6, 32
12/12 - 12/13	Unit 3 Test	
12/14 - 12/17	Prepare for final exams	
12/18 - 12/20	Semester 1 Final Exams	
12/21 - 01/06	Winter Break	
01/06 - 02/03	Unit 4: cell cycle, meiosis, DNA & genes	9, 11.1 & 11.2
02/04 - 02/05	Unit 4 Test	
02/06 - 02/20	Unit 5: Protein Synthesis	11
02/21	Unit 5 Test	
02/22 - 03/18	Unit 6: Patterns of Inheritance	10
03/19	Unit 6 Test	
03/21 - 3/29	Spring Break	
03/30 - 04/07	PBL Group Project	
04/08 - 05/13	Unit 7: Biological Evolution	14, 15
05/14 - 05/15	Unit 7 Test	
05/16 - 05/19	Prepare for Final Exams	
05/20 - 05/22	Semester 2 Final Exams	

Student Work:

Students will complete a variety of assignment types during Biology. Examples of this work include but are not limited to: reading assignments, practice questions, at home work, graphing, lab reports, quizzes, tests and projects.

- Work will be evaluated using a weighted scale.
 - Practice (counts toward 16% of overall grade): this includes activities such as reading assignments, worksheets, daily class work, and formative assessments (quizzes). There are approximately 20 practice points per week for each unit. The number of points may change due to unit length or if the teacher deems it necessary for their class (e.g. an extra formative assessment is given to track student understanding).
 - Lab Work (counts toward 24% of overall grade): Each unit will have a number of labs and a lab assessment for an approximate value of 100 points.
 - Assessments (counts toward 40% of overall grade): There are 3 assessments (unit tests) and one project per semester. Point values vary depending on content.
 - Semester Final Exam (20% of overall grade): Semester finals are comprehensive.
- The number of points in each category may vary with each topic of study.
- Quiz (formative assessment) retakes are encouraged. Students can retake the formative quizzes until 2 days prior to the unit test. The most current quiz score will be entered into the gradebook. Quiz retakes may be required to help with a student's understanding of important content.
- Due to their nature, some in-class activities and demonstrations may not be made-up.
- **LATE WORK:** Any assignments (homework, class work, laboratory reports, etc.) handed in after the due date (late work) will be accepted with a 50% deduction in the student's score if handed in before the corresponding summative assessment. All assignments handed in after the summative assessment will be given no credit (zero points).

Absences:

- It is the responsibility of the student to meet with the teacher at an appropriate time (before or after school is recommended) to discuss work that needs to be made up due to an absence.
- A student will be given one day to make up missed assignments for each day of an *excused* absence. For example, if a student misses two days of school, that student will have two days after returning to school to make up missed assignments.
- For a prearranged absence (field trips, in-school functions, vacations, college visits, AP exams, standardized testing, etc.) it is the student's responsibility to contact teacher prior to the absence to determine what the student will be missing in class. All homework and other assignments must be completed in advance, unless otherwise arranged with the teacher. Failure to complete assignments in advance may result in loss of all credit for that work.
- Labs that are missed due to an excused absence must be made up within a week of returning to school.

Grading Scale:

A+= 98-100	B+ = 87-89.9	C+ = 77-79.9	D+ = 67-69.9	Below 60% = F
A = 93-97.9	B = 86-83.9	C = 73-76.9	D = 63-66.9	
A- = 90-92.9	B- = 80-82.9	C- = 70-72.9	D- = 60-62.9	

- Grades are calculated and updated as frequently as possible.
- Current grades are posted on Infinite Campus. If you haven't signed up for an account go to www.syc427.org, click on the *Campus Portal* link, and follow the instructions. Students are encouraged to track their own progress on Infinite Campus as well.
- Scores will not be rounded up (e.g. a 79.99 is a C+).

Technology in the Classroom:

Technology in the classroom includes but is not limited to calculators, chromebooks, lab computers, electronic probeware, audio/visual media equipment, CPS systems, ELMOs, etc. Students are expected to use this technology in an appropriate, safe, and responsible manner. Any student who fails to meet these expectations may lose the privilege of technology use and/or be charged for repair/replacement of the equipment.

Online Resources:

Students are expected to use the class websites to stay informed about assignment due dates, quiz and test dates, share lab data, communicate with groups, take quizzes, and download important information such as study guides. The primary website will be Google classroom but there is a secondary website that students may also use.

Google Classroom:

- Each section of Biology will have a "Google Classroom." This is an online location where students can communicate with the instructor, track assignments and due dates, find copies of assignments/handouts, as well as submit and complete assignments. Google classroom is accessible from anywhere that has an internet connection via the student's school gmail.
- Go to <https://classroom.google.com> you will need your school email which is set up following the format ID#@syc427.org (Example: if your ID number is 0000 then your email is 0000@syc427.org).
- Use the appropriate class code listed below.
 - 1st hour - b0t99co
 - 2nd hour - pi5ytr
 - 7th hour - s6x8zb
- Parents who wish to access this information will need to use their student's email and password.
- It is expected that students check their school email on a daily basis.
- Some assignments will be completed via the Google Classroom interface. Any student difficulty or limitations with access to Google Classroom should be communicated to the teacher immediately.

Cell Phones

Cell phone use is not allowed unless the teacher has given specific permission. Please keep cell phones out of sight. Any use of an electronic device while a test or quiz is being given will be considered cheating and will result in a score of zero and there will not be an opportunity for a re-take.

Parents are encouraged to monitor their student's cell phone usage during school hours.

If an emergency arises please call the main office (899-8160) and the student will be contacted immediately.

**Continuous infractions of the Sycamore High School Acceptable Use Policy (AUP) may result in removal from the class with a failing grade.

Daily Supplies:

Pencil/Pen	Textbook (Exploring Life)
flash drive (optional)	Paper (loose leaf or spiral notebook)
lab notebook (spiral or composition)	Graph paper
basic scientific calculator	thin dry erase markers (optional)
Colored pencils or markers (optional)	3-Ring Binder (optional)

Classroom Expectations:

- ✓ ***Show respect for and be considerate of your classmates, yourself and your teachers***
- ✓ Come to class with a positive attitude and always give your best effort.
- ✓ Come to class on time, be in your seat ready to go when the bell rings
- ✓ Be prepared, come to class with the appropriate materials and assignments.
- ✓ Follow directions
- ✓ Use class/lab time appropriately.
- ✓ Follow laboratory safety rules during lab time.
- ✓ Clean up after yourself
- ✓ Follow school rules as printed in the student handbook.

Consequences of Inappropriate Behavior:

1st Offense: Verbal warning

2nd Offense: The student may be removed from the room for a short period of time or asked to serve a detention with the teacher before or after school.

3rd Offense: The student will be sent to the Dean

**Note: Any student may be immediately sent to the Dean if an incident warrants it.

Academic Dishonesty:

Any student suspected of or found cheating on a test or quiz may receive a grade of “zero” on that test or quiz. Any students found copying labs, activities, projects, or homework will split the grade of the finished product. Note: Any use of a cell phone during class where a test or quiz is being given may be considered cheating due to the ability to text message, photograph, etc.

By signing below, you are acknowledging that you have read the syllabus and the safety guidelines for Mr. Horlock's Biology class.

Student Name (printed): _____

Signature: _____

Parent/Guardian Name (printed): _____

Parent/Guardian Signature: _____