

Syllabus: Biology

Course Description

Biology is a foundational science course in which students study the science of "life". This course provides both the knowledge and laboratory skills that are foundational to the study of life, including the history surrounding many of the major discoveries in the biological sciences. Concepts addressed in this course include a review of the scientific method, the use of the microscope, techniques required for laboratory dissections, theories of life including micro- and macro-evolution and creationism, characteristics of living organisms, biological classification, biological compounds, biochemical processes, cellular structure and function including cellular transport and reproduction; genetics; viruses; foundational concepts to environmental science; and a comprehensive review of the structure and function of bacteria, protozoans, algae, fungi, plants, and animals. Homework will average 3 - 5 hours per week, including labs.

Attendance and Participation

Both attendance and participation are vital parts of this course; therefore, students are required to attend class sessions and participate actively in discussions. Students are expected to view archives of any missed classes, and are responsible for obtaining any notes or assignments.

Students will be given quarterly grades for both participation and attendance:

- Fifteen percent of the final grade will be attributed to *relevant class participation*. This includes raising one's hand, commenting regularly via microphone/webcam, and using the chat box regularly to contribute to the academic conversation.
- Five percent of the final grade will be attributed to *class attendance*. Being present, being on time, and readiness for class are all factors to be considered in the class attendance grade. *Excused* absences will not detrimentally impact attendance grades.

Grading rubrics are located in the Course Documents folder in each course page.

Assignments & Exams

Students are responsible for reading assigned material *before* the class period in which it is discussed.

Student performance and understanding will be evaluated using a variety of methods. Module tests and quizzes will be assigned for each chapter. Laboratory investigations are an important and essential component of the course. Students will be completing a variety of lab activities including virtual labs on the Late Night Labs website, and hands on labs from the textbook or other sources. Each student will receive an account on Late Night Labs. In addition, they will be required to purchase specimens for dissection. Some of the

experiments use household materials. Students will prepare both formal and informal written lab reports documenting their lab work. These lab reports will be graded. Each student will also complete a mini research project, PowerPoint presentation and oral presentation at some time during the school year.

A cumulative final exam will be given at the end of each semester. All exams should be taken in one sitting and proctored by an adult. Unless directed by the teacher, students are not permitted to use any helps, books, notes or the Internet on any portion of exams. All exams are due at 11:55 PM ET on the date shown. Specific instructions will be provided by the instructor.

Evaluation

The final grade is determined on the following basis:

• Class Attendance	5%
• Relevant Class Participation	15%
• Exams	20%
• Formal Lab Reports	10%
• Informal Lab Reports	15%
• Quizzes	5%
• Homework	10%
• Midterm/Final Assessment	20%

Grading Scale

The following grading scale will apply for all assignments and final grades. 100% – 90% = A; 89% - 80% = B; 79% - 70% = C; 69% - 60% = D; 59% - 50% = E; 49% - 40% = F. All grades are rounded to the nearest whole number.

Late Work

If a student fails to submit any assessment by the due date, it is considered "late."

- Assignments submitted 0-24 hours late will result in a 10 point reduction off earned grade.
- Assignments submitted 24-48 hours late will result in a 20 point reduction off earned grade.
- Assignments submitted 48-72 hours late will result in a 30 point reduction off earned grade.
- Assignments over 72 hours late will not be accepted and the student will receive a zero.
- Parent may request an extension from their child's teacher *prior to the due date* or in the case of an emergency.

While we love grace and the opportunity to exercise it, we also desire to instill a sound sense of responsibility in our students, hence these expectations pertaining to late work.

Exam/Test Retakes

Any student may retake a failed assessment (except quizzes), but can score no higher than 70% on the retake. Retakes must be submitted within one week of the returned, failed test. If the retake is not submitted within one week, the original failing grade will stand.

Academic Dishonesty

Cheating on any assignment is considered academic dishonesty. This includes plagiarism in any form. Cheating will be dealt with in the following manner:

- If a student is caught cheating, he will receive a zero on the assignment and will be placed on academic probation for the remainder of the school year.
- If the same student is caught cheating again, he will likely be expelled.
- No refunds will be granted for students who are expelled due to cheating.
- A Disciplinary Action Form will be submitted by the student's teacher for any instance of academic dishonesty.

Textbooks/Materials

The books needed for the class can be purchased through Veritas Press. It is extremely important that the student has the correct version of these materials.

Biology Course Kit (003558)

- Exploring Creation with Biology Student (044021)
- Exploring Creation with Biology Solutions/Tests (044016)
- A virtual lab kit (included in the price of the class).

The following items are also recommended, but unfortunately, are not available through Veritas Press:

- Dissection specimens that include an earthworm, crayfish, perch, and frog
- Dissection tools

We recommend:

- hometrainingtools.com - Biology Dissection Kit #AM-KTDISS.

Course Calendar

See Course Assignment Sheet, located on course page, for class dates, breaks and all assignments and assessments. Class dates and breaks can also be found on the current academic year calendar.