Biology

BIOLOGY COURSE DESCRIPTION

The Biology Georgia Standards of Excellence are designed to continue student investigations of the life sciences that began in grades K-8 and provide students the necessary skills to be proficient in biology by focusing on the identification of patterns, processes, and relationships of living organisms. These standards include more abstract concepts such as the interdependence of organisms, the relationship of matter, energy, and organization in living systems, the behavior of organisms, and biological evolution. Students investigate biological concepts through experiences in laboratories and field work using the process of inquiry.

Biology students start by developing an understanding of the cellular structure and the role these structures play in living cells. The students develop a fundamental understanding of the role of bio-macromolecules, their structure and function as related to life processes. The students then analyze how genetic information is passed to their offspring and how these mechanisms lead to variability and hence diversity of species. They use cladograms and phylogenetic trees to determine relationships among major groups of organisms. Biology students are able to recognize the central role the theory of evolution plays in explaining how the diversity observed within species has led to the diversity of life across species through a process of descent with adaptive modification.

TEACHER CONTACT INFORMATION

Name	Email	Room Number	Tutoring Hours
John Barger	john.barger@barrow.k12.ga.us	1.411	Monday 2:45-3:15 or by Appointment
Courtney Jane Folsom	courtney.folsom@barrow.k12.ga.us	1.411	By appointment

COURSE PACING GUIDE

1. Ecology & Energy / weeks 1 - 2.5
2. Biochemistry / weeks 2.5-3.5
3. Cells & Homeostasis / weeks 3.5-6
4. Photosynthesis and Respiration/ week 6
5. Cell Reproduction and Protein Synthesis / weeks 7-9
6. Meiosis & Genetics / weeks 9 - 12
7. Evolution & Classification / weeks 12 - 16

ASSESSMENT AND GRADING SYSTEM

Final course grades will be determined based on the following:

Assessments	**Weighting**		**Assignment Multipliers**	
Formative	Units 1, 6 and 7:	15% each	Tests and Corrections	X 5
	Units 2, 3 and 5:	10% each	Projects	X4
	Unit 4:	5%	Labs	X3
			Quizzes	X2
Summative	GMA	20%	Daily Work/HW	X1

TEXTBOOK AND REPLACEMENT PRICE

The primary textbook for this course is Biology, 2008 Holt. The replacement cost for this textbook is $76.50. If a student damages or loses their textbook, an additional textbook cannot be issued unless the lost or damaged textbook is paid for. Students are responsible for the cost of any broken supplies while working in the classroom or laboratory.

REQUIRED MATERIALS

In order to be successful in class, students need to have the following with them in class each day:

- 3-ring binder with notebook paper, pen & pencil
- Section dividers
- Index cards
- Scissors
- Colored pencils, crayons, or markers

MAKE UP/LATE WORK & TEST CORRECTION POLICY

- In the case of an absence, it is the student's responsibility to get missed assignments and schedule a time to make-up labs, tests, and quizzes.
- Daily assignments will not be accepted late for credit; however, if students complete and turn in an assignment prior to the end of the unit then the zero will be removed from the gradebook.
- Students who wish to retake a test may do so if they have met the following requirements:
    - The student must attend a tutoring session (before school, after school, or during ELT)
    - The student must complete a test review or study guide

Retakes will cover the failed section or standard and will take place two weeks after the original test. The retake test will be administered during ELT or before or after school. Instructional time will not be used for retakes. Any points earned on the retake will be added to the original test score.

ATTENDANCE / BEHAVIOR POLICY

Students are expected to adhere to the AHS attendance policy and classroom discipline expectations. Responses to violations are as follows:

Classroom Discipline

Offense	Response
1st	warning
2nd	parent call
3rd	detention
4th	referral

Attendance

Offense	Response
3 consecutive	parent call
5 overall	above & refer to counselor
5 consecutive	above & attendance letter
10 overall	above & parent conference

1. Be respectful of yourself, your teacher, and your peers.
2. Follow directions from the teacher and all directions in the student handbook/agenda.
3. Be attentive - you may not put your head on your desk and/or sleep.
4. Be in your seat and prepared for class when the tardy bell rings. Tardy procedures will follow school policy.
5. I cannot have students roaming the halls and missing class instruction. You are expected to take care of personal business on your own personal time. Please limit trips to the bathroom to class change time, unless it is an emergency. If you have a cell phone, you will need to leave it in the classroom when you leave.
6. Cell phones are not to be used in the classroom unless it is for an approved educational activity.

Laboratory Component

Approximately 10% of instructional time will be spent in lab. Much of this time will be devoted to hands-on laboratory work with an emphasis on inquiry-based investigations, with a minimum of one conducted for each 9-week period. These investigations require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their progress. In addition, students will also participate in additional labs and activities in order to further enhance student understanding and to reinforce the science practices.