Botany and Zoology 2018-2019 Ms. Bonny Blankenship bonny.blankenship@knoxschools.org

CLASSROOM OUTCOME:

Botany and Zoology surveys the major phyla of the plant and animal kingdoms. The course covers the evolution and diversity of plants and animals and emphasizes the distinguishing characteristics of each kingdom and groups within the kingdoms. Cells, cell processes, structure and function, and the importance of plants and animals to various ecosystems will be covered. Botany topics will include vascular and non-vascular plants. Zoology topics will include vertebrates and invertebrates. Material will be presented in a variety of ways: through lectures, labs, articles, class discussions, projects, and reinforced with homework assignments. This classroom will not discriminate against the religious beliefs of any student.

COURSE OVERVIEW:

From Molecules to Organisms: Structure and Process

- 1. structure and function of plant and animal cells
- 2. membrane permeability
- 3. growth and nutritional requirements for plants
- 4. cellular respiration and photosynthesis

Ecosystems: Interactions, Energy, and Dynamics

- 1. flora and fauna of terrestrial and aquatic biomes
- 2. adaptations of organisms to their environment
- 3. impact of humans on biological diversity
- 4. the role of plants in ecosystems viability
- 5. effect of invasive species on biodiversity in a given habitat
- 6. socioeconomic impact of invasive species and/or genetic modification of plants for food
- 7. Designing a model of a system to address real world issues of crop production Heredity
 - 1. reproductive strategies in plant and animal kingdoms

Biological Change: Unity and Diversity

- 1. Changes in organisms over the geologic time scale
- 2. mechanisms of evolution and natural selection and how they affect allele frequencies
- 3. modern classification of organisms
- 4. molecular analysis of organisms to determine classification
- 5. survivability or organism groups based on their adaptations
- 6. impact of biodiversity on humans

MATERIALS NEEDED:

- 1. 3 ring binder (minimum 1 ½ inch)
- 2. Loose leaf notebook paper
- 3. Pencils
- 4. black/blue ink pens
- 5. Pack of 24 colored pencils
- 6. Highlighter
- 7. 1 box nitrile powder free gloves (size large or extra large)

Class Fee: \$30 for the year. Address checks to Gibbs High School. Please write your name somewhere on the check so that I am 100% sure that you are the person who gave me the money. Fee will cover lab specimens, kits and other consumables. The quantity and quality of lab activities in this course will be determined by the amount of fee monies collected.

Resources:

- Textbooks: A class set of the following books will be available: *Introductory Botany: Plants, People, and the Environment*. Pacific Grove: Brooks/Cole, 1997 and *Integrated Principles of Zoology* 12th Ed. McGraw-Hill Science 2003
- Videos: Discovery Education, United Streaming, Nova: Hunting the Elements, Cosmos: A Spacetime Odyssey, Radioactive Wolves (PBS), Lab Safety Video, The Power of the Periodic Table, Chemistry, Bill Nye (there are several in this series), BBC Life, BBC Planet Earth 1 and 2, BBC Blue Planet 1 and 2. NOVA (PBS), Nature (PBS), Myth Busters (there are several in this series).

PBS Kids, NASA site, USGS site, National Geographic Society site, Howard Hughes The Virtual Lab Series, The Making of the Fittest The Complete Series, Your Inner Fish, The Origin of Species, University of Tennessee Departments (EEB, BCMB, Micro, Botany, Chemistry, and Physics), Shape of Life The Story of the Animal Kingdom, and Eyewitness Video Series.

- Magazines and Articles: bbc.com, teachertube.com, schooltube.com, the Science Spot, Science, Nature, Washington Post, Times, Wired Science, American Chemical Society, NASA, USGS, NOVA (PBS), Nature (PBS), National Geographic Society, University of Tennessee Departments (EEB, BCMB, Micro, Botany, Chemistry, and Physics), Chemistry, Journal of the American Chemical Society, Angewandte Chemie, Chemical Comunications, Chemical Reviews, Accounts of Chemical Research, Chemistry-A European Journal, Chemistry Letters, Bulletin of the Chemical Society of Japan, Helvetica Chimica Acta, Canadian Journal of Chemistry, Atmospheric Chemistry and Physics
- Statement concerning the option of alternatives for material deemed objectionable by parent/student: If you do not approve of a specific resource or assignment listed in this syllabus, please make your request to me in writing and an alternative assignment and/or materials will be provided. The request should include your name, the child's name, the specific activity/materials in which you do not want your child to participate or to which you do not want them exposed, and the nature of your objection.

Safety Procedures: All labs are important for students because they are another way to understand the concepts that we are learning in class. Please sign and return the laboratory safety contract after you have read and understood lab expectations.

• If you are not dressed for a lab, you will earn a 0 for the lab. Sitting out for improper lab attire is done to make sure that you and others are safe in the lab.

ASSESSMENT:

Expectations/Skills/Competencies:

The students will be assessed on the learning standards and associated skills found in the curriculum and used in the classroom. These standards can be found on the website.

Grading Policy:

Your grades will be calculated using the point system. I encourage you keep up with your own grades using the following formula:

Points you earned X 100

Points possible

For example: if you score 30 out of 35 points on an assignment, then you would calculate your grade as follows: 30/35 = .857 which would then be multiplied by 100 to give a score of 85.7 percent.

Grading Scale: A = 93-100 B = 85-92 C = 75-84 D = 70-74 F = Below 70

Explanation of Assignments & Projects:

The following list contains the usual point distribution. I reserve the right to adjust the assignments and points per assignment as I see fit:

- 1. All tests will be worth 100-200 points.
- 2. Quizzes are worth 20-60 points each.
- 3. Labs are worth 20-100 points each.
- 4. Homework is worth 5-50 points each assignment.
- 5. Your notebook may be checked at various times in the semester for a grade.
- 6. Throughout the semester various projects/papers will be assigned worth 50-200 points each.
- 7. The December midterm given during finals week will be worth 200 pts.
- 8. The final exam will be worth 15% of the yearlong grade.

Seniors who have no more than two absences per class during the semester (or 1 absence in a 9-week course) and a minimum of an "80" average may opt out of the class's final exam (This exam cannot be a state, IB, or AP exam).

Make-Up Work Policy/Late Work Policy:

The student must request make-up assignments within three (3) days after returning from the absence. Failure of a student to initiate a request for make-up work within three (3) days will result in a lost opportunity for credit for that assignment. Tests must be made up within a week. Students will be expected to be prepared to participate in all previously assigned classroom activities, including tests, quizzes, on the day he/she returns to class. For planned absences (doctor appointments, trips, college visits, etc.), students should consult with their teacher about completing work prior to being absent. Long-term projects, papers, and reports are due, regardless of an absence, and should be sent to school if the student must be absent. I do not like to take late work but will accept it within the unit of study. For example, if you miss an assignment during unit 1, it must be turned in before the unit 1 exam is given. There will be a deduction of points for late work. Late work will be worth 50% of the grade earned.

Grade Post Policy:

In order to give timely feedback, I will try to update grades at least once per week. Grades will be posted on Aspen.

GENERAL EXPECTATIONS:

Students:

Attendance Policy: Student attendance is essential. Unless absolutely necessary, students should be in class. Classroom activities, labs, videos, discussions, and experiences cannot always be recreated. Makeup assignments will be given, and students will have 3 days to make up assignments and a week to make up tests. If a student is absent for three or more days, arrangements can be made with the teacher. In some instances labs or quizzes may not be made up. In such cases, the student will not be penalized but will be responsible for the missed material.

Classroom Policy/Procedures: Throughout the year the Student Handbook rules will be followed. To further ensure that we work well together, here are my classroom rules:

As a student you are expected to:

- 1. **Be polite to each other and to me.** This means that cruel remarks, bullying, profanity and rude gestures are absolutely NOT acceptable.
- 2. **Be prepared for class.** In order to learn, you need to have all of your learning materials (books, homework, notes, and writing utensils) with you. I do not like to take late work. Being prepared includes turning your work in on time. There will be a deduction of points for late work. 50% of the total possible points will be deducted from the earned score.
- 3. **Be on time to class.** When the bell rings, you are expected to be in your seat and ready to learn. Class time is valuable and cannot be replaced. In most circumstances, you will not be excused from class to run errands or go to the bathroom unless it is an emergency.
- 4. Make up all work missed due to excused absences within three days and tests within a

<u>week.</u> YOU are responsible for getting the work that you missed from me. If you are out of class for longer than three consecutive days, you can talk to me about extending the due dates.

- 5. Participate in class.
- 6. Respect my property, and I will respect your property. Leave the room like it was before you were here. Do not write on desks or throw paper on the floor.
- 7. <u>Do your own work.</u> You will not learn if you copy someone else's work. Be responsible for yourself and your own learning. Cheating will not be tolerated and will earn zeros.
- 8. <u>Get involved in group projects and group work.</u> You are a valuable part of your learning group. Other group members are counting on you.
- 9. <u>Be neat.</u> I need to be able to read your work in order to grade it. Take pride in what you do. Sloppy work does not leave me with a good impression.
- 10. Do not bring food, drinks (including water), or gum into the classroom.
- 11. Cell phones and other devices off and out of sight for entire period unless otherwise instructed by teacher. There is a new extra credit opportunity available this year. Upon entering the classroom, students can turn off their phones and place them in the assigned cell phone holder for the entire period. I will take a picture once the tardy bell rings to see whose phones are present. Students who turn in their phones will earn 1 bonus point per class period. I will keep track of this and put the bonus points in every 2 weeks. I do not tolerate texting, etc during my class! Cell phones are a distraction that prevents the student from paying attention and learning the material. Attached to this syllabus is an article that was on WATE citing research about how cell phones lower student grades.
 - a. 1st offense phone will be taken by the teacher and kept at her desk until the end of the class period and I will contact parents
 - b. 2nd offense and beyond phone will be turned in to the office at the end of the period along with an office referral and contact with parents
 - c. Phones and smart watches will be collected on test days and placed in assigned cell phone holder, they will be returned after ALL tests are completed and turned in. Students caught using a phone during a test/quiz for whatever reason will receive a zero with no chance of a re-take.
- **Failure to follow classroom expectations will result in disciplinary actions as defined in the Student Handbook.

Honor Code: Students are expected to complete their own assignments and assessments. Also, they are expected to not share their answers or assignments with other students. If students are caught cheating, disciplinary actions will be taken. Zeros will be assigned.

Plagiarism: According to Harbrace Handbook, 15th ed. "Plagiarism is defined as presenting someone else's research, or opinion as your own without proper documentation, even if it has been rephrased. It includes, but is not limited to the following:

- 1. Copying verbatim all or part of another's written work;
- 2. Using phrases, figures, or illustrations without citing the source;
- 3. Paraphrasing ideas, conclusions, or research without citing the source;
- 4. Using all or part of a literary plot, poem, or film without attributing to the work to its creator." Plagiarism is a form of stealing and academic fraud. Students who are found guilty of plagiarism will face consequences of a zero for the assignment. Parents will be informed of the plagiarism.

Consequences of a Violation of the Classroom Policies:

- 1. Verbal Warning
- 2. Meeting with student to discuss behavior outside of class.
- 3. Student writes up a behavior plan, within which he/she will define ways that the behavior will be fixed.
- 4. Call home to parents
- 5. Referral
- 6. Conference with parents.
- 7. Conference with parent, principal, student, and teacher
- **Steps may be skipped or implemented in a different order based on the severity of the offense.

Communication Strategy: If a parent or guardian has a question or a comment, I would love to talk with you. I am here to help you and your student in any way that I can.

• Office Hours/Contact Information/Email: My plan period first semester is 1st block (8:30-9:50) and second semester 3rd block (12:44-2:04). Appointments can be made during this time as well as before and after school. The best way that I can be reached is through email or a written note. My email address is bonny.blankenship@knoxschools.org. If preferred, guardians may also choose to call the school and leave a message at 865-689-9130 ext. 1103.

Intervention Strategy:

If you need extra help, just ask. I am usually available both before and after school to answer any questions or to tutor, but you usually need to ask ahead of time so that we can make arrangements to make sure that I am there to help.

If you or your parents have questions or concerns at any time, feel free to call me at the school, or email me at bonny.blankenship@knoxschools.org. I will return your call or email as soon as I can. Thank you. I hope that we have a great year! The information portion of this paper on the next page needs to be returned to me signed and dated by both you and your parent/guardian. Sincerely,

Bonny Blankenship

Please return the below section to Ms. Blankenship's Bot/Zoo Class.

I have read and understand the class expectations of Ms. Blankenship's botany and

zoology class.	•			
Student name:				
	Student signature	date		
Class period:	_			
Parent information note or call at any tire	<u>n:</u> (If you have any fui ne.)	ther questic	ons, please fo	eel free to write a
What is the best time	e <u>and</u> phone number to	contact you	ı if necessar	y?
If email is a good way address?	y of contacting you, wh	aat is your (t	he guardian	ı's) email
I have read and unde	erstand the classroom	guidelines.		
parent/guardian sig	nature date			
Any questions, comm	nents or concerns can	be written b	elow.	
Supplemental Mater	ials			
to view the education	lemental materials info nal videos, magazines, nny exceptions below).			
parent/guardian sign	 nature and date			