

COURSE NAME: Biology

INTRODUCTION/COURSE DESCRIPTION: The topics you will learn include science engineering practices, structures and processes of molecules and organisms, their interactions, energy and dynamics within ecosystems, inheritance and variation of traits, as well as, unity and diversity within biological evolution.

ESSENTIAL LEARNING OUTCOMES:

1st Semester

- Scientific Practices
 - I can conduct quality science.
- Homeostasis
 - I can describe how an organism maintains homeostasis at an organ system level, down to a cellular level.
- Organelles/Cell Theory
 - I can describe the form and function of organelles and differentiate between different organisms.
- Cell Transport
 - I can describe the role of different features within the form and function of the cell membrane in maintaining homeostasis on a cellular level.
 - I can differentiate between different types of cellular transport and how they function.
- DNA Structure
 - I can model, identify, and explain in detail the structure of DNA.
 - I can explain the base pairing rules of DNA.
 - I can explain why genetic information is significant for organisms and their potential future offspring.
- DNA Replication
 - I can describe the process in detail when DNA is replicated with different proteins and enzymes.
 - I can explain the difference and reasoning for leading and lagging strand replication.
- Cell Cycle



- I can describe all the phases of the cell cycle in order and summarize how cells know when they need to divide.
- I can describe the importance of mitosis and the ramifications of errors.

2nd Semester

- Meiosis
 - I can explain the processes of meiosis and how it generates genetic variation.
- Genetics
 - I can summarize the various forms of inheritance, providing evidence and mathematical probabilities to support your claims.
- Protein Synthesis
 - I can explain the central dogma and the importance of why a two-step process is necessary in order to make proteins.
 - I can describe the roles and functions of the essential types of RNA in protein synthesis while summarizing the steps of transcription and translation.
- Photosynthesis
 - I can summarize the energy transformations including the products and reactants for the biochemical reactions in plants.
 - I can list the photosynthetic equation and describe where each chemical is derived.
- Cellular Respiration
 - I can explain how ATP is generated and used including any energy transformations and locations of processes.
- Natural Selection
 - I can explain the principles of natural selection and how the diversity within a species has resulted in an increase in fitness.
- Patterns of Evolution
 - I can describe the modes and patterns of different types of evolution.

*See a further breakdown of these in the Additional Information section at the end.



SUPPLIES/TEXTBOOK: Discovery Education. Published by Discovery Education, Inc. 2022. Online version only.

Science courses will be piloting new curriculum throughout the first semester

CLASSROOM EXPECTATIONS

- 1. Respect yourself and others
- 2. Maintain high expectations
- 3. 100% participation and engagement
- 4. Ask questions and get answers
- 5. Adhere to the high school student handbook

GRADING SCALE

[Board Policy 505.5R]: Academic marks are recorded as letter grades, denoting the following quality of work:

"A" is the grade of distinction and represents work of superior quality

"B" represents work of excellent quality

"C" represents work of average quality

"D" represents work regarded as passable, according to the minimum requirements of the course in effort and quality

"F" denotes failure to successfully complete the course and no academic credit is received.

All classes that students are enrolled in are figured into the GPA.

All classes (except for AP) will use the same grading scale. The grading scale is as follows:

A+ = 99-100% ↑	A = 93-98%	A- = 90-92%		
B+ = 87-89%	B = 83-86%	B- = 80-82%		
C+ = 77-79%	C = 73-76%	C- = 70-72%		
D+ = 67-69%	D = 63-66%	D- = 60-62%	F = 59% ↓	

*AP courses will be weighted and use the following grading scale:

А	= 4.5	A- = 4.17	B+ = 3.83
В	= 3.5	B- = 3.17	C+ = 2.83
С	= 2.5	C- = 2.17	D+ = 1.83
D	= 1.5	D- = 1.17	

<u>GRADING</u>



REMINDER: We use semester grading building wide. What this will look like, is that the semester will be worth 85% and the semester test will be worth 15%. Each department will have the autonomy to split up the 85% how they see fit on weighting of assessments, daily work, labs, etc. **Grading needs to be uniform for the entire department.**

Grade Post Dates

Semester 1: September 24, October 24, November 25, and January 10 Semester 2: February 13, March 26, April 29, and May 30

LATE WORK

Late work will be accepted up until the end of the essential learning outcome summative assessment (end of unit), and then <u>no</u> late work will be accepted for credit. There will be no penalty for late work until the essential learning outcome summative has been completed, indicating the end of the unit.

When a student is absent from school (whether the absence is excused or unexcused) he/she will be required to make up all work that was missed during the absence. Students shall receive full credit earned for school work made up due to absences and are expected to do so in a timely manner in order to not fall behind. Similar to the late work policy, students will have until the essential learning outcome summative (end of unit) to turn in the work with no grade penalty.

RETAKE POLICY

Students are expected to aim to perform well the first time on assessments. There are times when mastery hasn't been demonstrated due to a variety of reasons. Students choosing to retake must complete the process within one week (5 school days) of receiving back the graded assessment.

If a student wishes to retake, the student must initiate communication with the teacher, complete a retake form (*a form will be created for the building*), and schedule a time to do so. This can be completed during a study hall, a time arranged with the teacher, or before/after school with a teacher of that subject area. In order to qualify for a retake, all necessary work must be turned in prior to the original assessment (i.e. homework, study guides).

Students can retake an individual assessment only one time and are allowed four (4) retakes during the semester per class. Those students enrolled in DMACC and/or



AP classes will follow the course syllabus. There will not be retakes allowed on semester exams for any class.

Note: There are some projects/assignments/assessments that may not qualify for a retake. This will be at the teacher's discretion.

**See additional information at the end of this document. W.I.N.

The purpose of W.I.N. is to provide students with an opportunity for reteaching of specific concepts/skills, retaking assessments, and providing supplemental materials for the essential learning standard(s). Teachers will request students as needed, but students may also elect to go to a specific teacher during this time. Sign-up for W.I.N. takes place every day Tuesday through Friday from the beginning of 2nd period until 9:15 a.m.

ACADEMIC INTEGRITY

All student learning is based on the understanding that everyone is thoughtfully engaged in academic tasks and respectful of the work of others. Academic integrity applies to all aspects of teaching and learning. Class assignments and assessments are tools to help students learn; grades show to what degree students achieve learning goals. Therefore, all assignments and assessments for which students receive grades should result from the student's own effort and understanding.

Behaviors that violate Bondurant-Farrar's standards for academic integrity include but are not limited to:

- **Plagiarizing work:** Whether the source material is from another student, the web or any other medium, students will not appropriate source material and pass it off as their own.
- Sharing work or unauthorized collaboration: Students will not aid or assist other students in any way on individually assigned tasks.
- **Cheating**: All traditional forms of cheating are also unacceptable. This includes behaviors such as capturing images of tests, communicating during exams, etc.
- **Falsifying Information**: Students will not change a grade assigned by a teacher electronically or in the teacher's grade book.

First offense:

• Student will be asked to complete an alternative assignment/assessment potentially under adult supervision



• Appropriate disciplinary actions will be assigned, including but not limited to detention, in-school suspension, parent communication/meeting, or other additional measures

Second offense:

- Student will receive no credit for the assignment/assessment
- Appropriate and potentially more serious disciplinary actions will be assigned, including but not limited to detention, in-school suspension, parent communication/meeting, or other additional measures

ELECTRONIC DEVICE POLICY

Electronic devices such as cell phones, smart watches, headphones, and earbuds, not provided by the school, can cause disruption to the school environment and interfere with student learning. All electronic devices must be concealed during instructional time unless authorized by the classroom teacher for instructional purposes. Students are expected to refrain from using their devices for non-academic purposes. Misuse of devices include but are not limited to taking photos/video in the locker room or restroom, using a device to cheat, using a device to incite violence, using a device to bully, harass, threaten, or intimidate another person including a student or staff member, to disseminate inappropriate photos/videos or other restricted materia, etc.

Bondurant-Farrar High School assumes **NO RESPONSIBILITY** for the loss or theft of any electronic devices nor is it obligated to investigate any loss or theft. If you are concerned about loss or theft, leave the device at home.

Violation of this rule can result in the following, including but not limited to: loss of school privileges, detention, in-school suspension, out-of-school suspension, application of the Good Conduct Rule penalties, or in severe cases, taken before the Board for purposes of expulsion. Depending on the severity of the misuse, local law enforcement may also be contacted.

1st Offense: Verbal warning and request to conceal device

- **2nd Offense:** Minor referral, student places phone on teacher's desk and student will retrieve it at the end of class.
- **3rd Offense:** Major referral (Insubordination), student will be asked to retrieve at the end of the day from the office.



4th Offense: Major referral (Insubordination), parent/guardian will be asked to pick up at the end of day from the office.

Consequences for additional offenses will be determined by building administration.

ADDITIONAL INFO

*All assigned material must be completed and submitted in order to be eligible for to retake an assessment.

**A retake form must be completed and turned in order to be able to retake an assessment.

***All retake tasks must be completed and turned in 24 hours prior to the retake in order to allow adequate time to process and provide feedback

Inquiry based tasks (typically labs and projects) have HARD deadlines. Once the teacher has instructed on the concept it is no longer inquiry. Have these tasks done on time or they will be zeros. It is unlikely retake opportunities will be given on these tasks.

Further breakdown of the essential learning outcomes, standards covered, and essential learning targets can be found at this <u>link</u>.

You can see our daily agenda at this link: <u>https://tinyurl.com/4t4mpa7c</u>

Mr. Maffin Room 124 maffinl@bfschools.org

Mr. Urich Room 126 uricht@bfschools.org