

Biotechnology and Safety: 2019-20120

Course Information: In Biotechnology I, students will apply advanced academic knowledge and skills to the emerging fields of biotechnology such as agricultural, medical, regulatory, and forensics. Students will have the opportunity to use sophisticated laboratory equipment, perform statistical analysis, and practice quality-control techniques. Students will conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Biotechnology I will study a variety of topics that include structures and functions of cells, nucleic acids, proteins, and genetics.

Teacher Information:	Tori Thornton	Agriscience Department
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	512-281-9710 ext. 1172	

Materials: You will need the following items in class everyday: composition notebook (should be left in class), pen or pencil, and clothing/shoes appropriate for working in a lab setting. (Lab activities will be announced at least one day in advance).

Grading:

- Class participation
- Notebook check grades
- Written tests, quizzes, worksheets, warm -ups
- Daily Assignments
- Tests / Projects

Turning in Work:

- Due dates will be given for all assignments and tests; including make-up work.
- Each student will be responsible for keeping all work in his/her notebook.
- Credit cannot be given for work that is not done. **DO YOUR WORK!!!**

Make-up Work:

- It is YOUR responsibility to request your make-up work and the date that it is due. This should be done the day you return to school. Participation grades typically cannot be made up. Refer to Grading section.

***I encourage you to obtain access to the parent portal in order to keep up with your grade average. Five days before the end of the six weeks is not a good time to try to “catch up”. You will receive your updated average on each test that is handed back to you.

Rights and Responsibilities: We each have rights in the classroom that allow the school to function effectively. In order to protect these rights we also have specific responsibilities. Below is a basic list of the most important rights and responsibilities you have as a student.

Rights	Responsibilities
1. Students have the right to learn.	1. Students are responsible for turning in work on time, being quiet during test time, coming to class prepared to learn, and following all class procedures.
2. Students have a right to hold their own.	2. Students are responsible for respecting all people and their opinions. Please raise your hand before speaking out, don't shout at people, listen and reflect on opinions of others before passing judgment.
3. Students have a right to know their grades.	3. Students are responsible for keeping an updated record of all grades. Please hold on to all assignments after they are returned as proof in case there is a discrepancy in the grades.

Classroom Expectations: The following expectations should be followed at all times during class:

1. Be in your seat ready to learn on time.
2. Come to class prepared and dressed appropriately for the day's activities.
3. Respect your fellow classmates and your teacher at all times with your words and actions.
4. Use classroom materials and supplies carefully and keep them in good working condition. PUT MATERIALS AND TOOLS AWAY WHEN YOU FINISH USING THEM.
5. Your phone or other electronic device should be used for class activities only.
6. Take care of personal business before class. This includes potty time and seeing other humans.
7. You will not be allowed to go to see another teacher without a prior note from that teacher. If you have a note, I will determine if I will let you go or not.
8. Please...please...do not be in violation of the dress code. If violation is detected, you will be sent to the office.
9. Give your best effort possible on class activities.
10. DO RIGHT!

If a student chooses to break a rule, the following will apply:

1. Warning
2. Consequences handled by the teacher.
3. Teacher/Parent Conference
4. Sent to the principal's office

***NOTE:** Extreme disruption will be cause for the student to be sent to the principal's office immediately without going through steps 1-3.

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Course Sequence:

1.	Introductions, Get to Know Activities
2.	FFA and SAE Opportunities
3.	Laboratory Safety
4.	What is Biotechnology?
5.	Raw Materials in Biotechnology
6.	Basic Skills of the Biotechnology Workplace
7.	DNA (Deoxyribonucleic Acid)
8.	Proteins
9.	Identifying a Potential Biotechnology Product
10.	Spectrometers and Concentration Assays
11.	Production of a Recombinant Biotechnology Product
11.	Bringing a Biotechnology Product to Market
12.	Introduction to Plant Biotechnology
13.	Biotechnology in Agriculture
14.	Medical Biotechnology
15.	DNA Technologies
16.	Biotechnology Research and Applications Looking Forward

Note:

Conditions of this syllabus may be modified, and if so, will be announced in class.

Biotechnology : 2018-2019

Sign and Return to Class by August 31, 2018.

I (Parent/guardian name) _____, the
parent of

(Student name) _____ have taken time to
read fully and go over the Biotechnology syllabus with my child. I hereby understand and I
agree with the content of the syllabus, and will allow my child to follow it.

I (Student's name) _____, have taken the
time to read fully and understand the Biotechnology syllabus for the class. I hereby agree to
follow to follow the syllabus.

Student name (Printed): _____ Date: _____

Student signature: _____ Date _____

Parent/Guardian name (Printed): _____ Date _____

Parent/Guardian signature _____ Date _____

Parent/Guardian Email:

Parent/Guardian Phone Number: _____