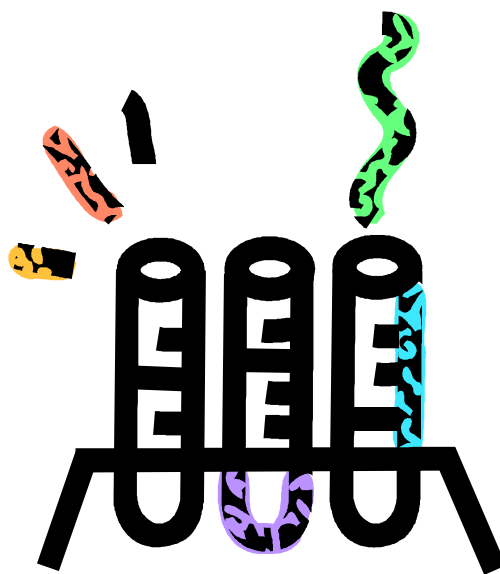
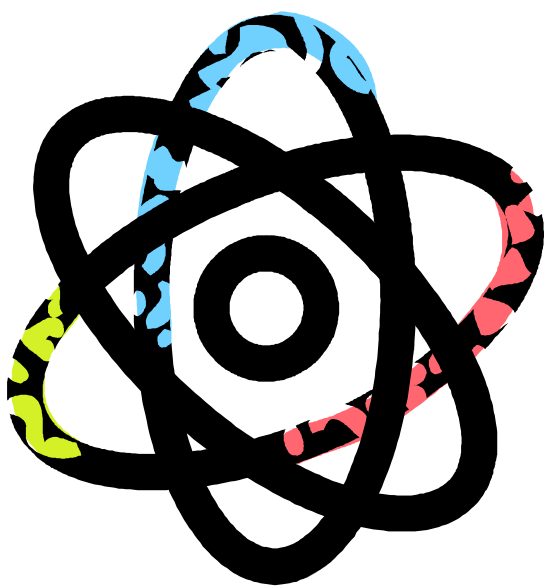




Mrs. Kessel's

**Syllabus for
Science Class**



2023 – 2024

Applied Science

Hello, my name is Mrs. Casey Kessel. I will be your Applied Science teacher for the 2023-2024 school year.

I have outlined various areas of the classroom for your safety as well as your classmates. We will review this syllabus at the beginning of the year and I ask that it be returned, signed by both you and your parents/guardians.

For every chapter that we complete, we will try to do some or all of the following tasks: lecture, lab/demo labs, a project (either individual or group work), homework, quizzes, and a test. For every module that is completed, we will follow the outline covered in the books. This is just a rough draft; each chapter/module will be different. **DO NOT** write in the module books!

We will follow the student handbook for a majority of student behavior, but I do have particular lab/classroom rules that will apply to my own classroom. We will go over those rules now.

Start of Class

1. Come into the room and sit in your assigned seat.
2. Read the weekly assignments on the white board and familiarize yourself with the week.
3. If an assignment is due, hand into your tray with the appropriate class.

End of Class

1. Make sure that all materials are picked up around your desk or in the lab before you leave class.
2. If we are working in the lab, make sure you allow yourself ten minutes to clean up the lab and surrounding areas.
3. If we are working at our desks on homework, work until the bell rings unless otherwise instructed to do so.
4. I give you class time to work, so utilize your time wisely!

Lab Safety

1. When working in lab, any misbehavior will result in an automatic zero for that lab and sitting quietly at your desk until the bell rings.
2. No eating, chewing gum, or drinking any beverage during lab experiments.
3. When we are working in the lab, remember to dress appropriately for that day and the material present. If we are working with any kind of chemicals, NO sandals, girls will pull their hairs back, and protective safety gear will be utilized such as goggles, lab aprons, and/or gloves. Most of our labs will not need this type of protective gear.
4. If any equipment is broken because of misbehavior, it will be YOUR responsibility to replace/pay for that broken equipment. We borrow all materials from the RACTC. Other schools will also be using the equipment. Make sure to take care of all materials at our school and for the next school that will be using it.

5. When and if we work with chemicals, consider all chemicals to be considered dangerous and corrosive.

Classroom Work

1. All homework, quizzes, tests, and labs need to be completed with a **pencil**. I will announce how I want your projects to be completed (either typed, pencil, or pen). If a pen is used for homework, I will ask you to copy the original assignment to a new assignment in pencil. I will NOT accept homework if completed in pen.
2. When working in the classroom, all work is to be done by oneself unless instructed to do so by Mrs. Kessel as partner or group work.
3. When handing in homework, hand all work into your tray according to your class. I will announce the date for when a particular assignment is due.
 - a. If an assignment is not turned in, a zero will be entered on PowerSchool. A student has the opportunity to receive full points for the assignment if he/she talks to Mrs. Kessel about why it is late and completes a new assignment completed in the classroom. A 5% point deduction of the overall grade will diminish from the total points of the assignment for every day the assignment is not turned in.
 - b. Communication is key! Be sure to talk or email me if a situation comes up! We will also be using Teams so you can message me through that as well.
4. Make sure you have extra work along with you, especially after tests, to work on when you have completed all work for your science class.
5. We will complete four different sets of modules this year:
 - a. Robotics
 - i. Programming and working the robot
 - ii. Working with the carousel and conveyer belts
 - b. Electronics
 - i. Direct current electricity
 1. Voltage, current, and resistance
 2. Schematic symbols and diagrams
 3. Metric prefixes
 4. Resistor color code
 5. Variable resistors
 6. Series and parallel circuits
 7. Ohm's Law
 - c. Bio-Chem.
 - i. Plant rapid cycling *Brassica rapa*
 - ii. Air-, Soil-, and Water-contamination
 - iii. Genetics and building a model of a DNA molecule
 - iv. Restriction analysis of lambda DNA
 - v. DNA extraction from fast plants and restriction analysis
 - d. Mechanics/Hydraulics/Pneumatics
 - i. Mechanics
 1. First, second, and third class levers
 2. Inclined planes
 3. Wheels and axles
 4. Pulleys

5. Gears
6. Block and tackle systems
7. Force in mechanics
- ii. Pneumatics
 1. Pressure regulators and needle valves
 2. Manual and solenoid directional control valves

Make-up work

1. Any make-up work is **YOUR** responsibility.
 - a. Work will be posted on the white board at the beginning of the week. I will announce roughly a week before when we are going to have a test. Work will also be posted on my website (more about that later).
2. If you know you are going to be absent on a particular day (extracurricular activities or sport days), get the assignment before you leave.
3. If you have no control over being absent a day, it is your responsibility to either find someone to get the assignment for you or ask when you return.
4. All make-up work will get one school day to complete (unless you have talked to me prior to the assignment due date).
5. If you are going to be gone on a test day, you should make up the test before you leave or can make it up the next day you return, unless otherwise instructed by Mrs. Kessel.
6. I have a class website. (<https://kesselscience.weebly.com/>) Please use this website for classroom notes and weekly assignments. I will review that website in class.
7. You will be accepting an invitation from Microsoft Teams. Please use Teams on your phone or a computer for any assignments that are posted. You can also use the chat feature on Teams to communicate with me as well. We will set this up in class.

Leaving the Classroom

1. If you need to use the bathroom, you need to raise your hand or ask me at my desk. Excessive use in the bathroom will result in discontinue use.
2. Only one student will be able to leave the room at a time unless instructed otherwise to do so. For the bathroom, a max of 5 minutes will be allowed.
3. You should have all materials and work with you when you come to class. If a student does not have all materials and it is required for the day, he/she may receive a tardy in PowerSchool.
4. If another teacher needs to speak to you, you are required to have a pass in order to leave the room. The teacher could also communicate with me through Teams. Communication is key!

Cell phone usage

1. Cell phones are not allowed in my classroom for personal use.
2. I am a type 1 diabetic. Sometimes I have to look at my phone when I get too high or low with my blood sugars. I will always tell you when I need to look at my phone. If this is how I treat my phone, I expect the same out of you!
3. Life comes up! If you need to use your phone for an emergency, please ask before you use it. Otherwise, I will take your phone away from you.

4. We will follow the rules for phone usage in the student handbook set by the school.
5. I have a smart watch. I will look at it periodically when notifications come up. I will be looking at my watch for use in emergency situations for either my blood sugars or if I need to do something on Teams with the school. I know you will get notifications as well. I expect the same procedures that I will follow. Do not respond on your watch! You will only be allowed to use your watch if asked otherwise I will take your watch from you.

Grades

Your cumulative grade will be a combination of the following tasks. I have different weights for each category of work.

- Homework
- Labs
- Tests
- Quizzes
- Projects (will be explained more when the assignment is given)

The grade scale is as follows:

- A – 100% - 92%
- B – 91% - 82%
- C – 81% - 72%
- D – 71% - 62%
- F – 61% or less

Discipline Procedures

Each situation of disruptive behavior will be discussed by the student and Mrs. Kessel. If a negative behavior (being disruptive in class, picking on other students, etc.) continues, Mrs. Sandra Ledbetter, principal of NEHS, or Mr. Jaden Schoch, assistant principal of NEHS, will be included along with your parents. In rare occasions, if the student is so disruptive or rude, this student will be sent to Mrs. Ledbetter's office for the day. The student will have to talk to Mrs. Kessel and Mrs. Ledbetter or Mr. Schoch about returning to class the next day. Each discipline behavior is unique and will be addressed when needed. You are responsible for your own behavior! Keep it positive!

Discretion: Any other materials/rules/procedures will be covered accordingly.

Student Signature: _____

Date: _____

Parent/Guardian Signature: _____

Date: _____