Parents/Guardians:

Please read the attached syllabus for the Physics and Engineering.

Sign this cover sheet and detach it for your students to return to me.

Thank you,

Christine Buckson

Instructor

I have read the syllabus:

(Print Parent Name) (Parent signature) (Date)

(Print Student Name) (Student signature) (Date)

(Class Period)

Physics and Engineering

2019 - 2020

Instructor Name: Christine Buckson

Email: buckson\_c@4j.lane.edu

Phone: 541-790-6721

Office Location: S1

Office Hours: Mon – Fri: 7:00 - 8:25 AM

Blog: http://blogs.4j.lane.edu/buckson/

Course Description

Physics and Engineering (energy) is a 12-week course required of all freshmen at Sheldon High School. Sheldon Science department faculty has designed it to enhance students' science literacy and to provide a foundation on which subsequent 10th, 11th and 12th grade science courses can build.

Subject Area: Science and Technology

Subject: General Science

NGSS Standards: PS2.A, PS2.B, PS3.B, PS3.C

Room Number: S1

Grade Level: 9

Credits: .5

Attendance

* This is a hands-on class with frequent lab and project work; therefore, it’s extremely important that you attend class every day. Frequent absences will make it difficult for you to be successful in this course.
* If you’ve been absent, you’re responsible for seeing me within 1 class day upon your return to arrange for make-up work. If you fail to do so, it may be impossible to make up the missed work. The easiest method to get make up work is to check the blog at http://blogs.4j.lane.edu/buckson/
* Oregon has one of the shortest school years in the nation. Therefore, it is my professional responsibility to use every single class period to advance student learning. The final exam for this class will be on the final day of the term. Please plan accordingly.

Getting Assistance

General Assistance

* For make-up work and assistance, my office hours are 7:00 – 8:25 AM, every school day, in room S1.

Course Blog

* The course blog is an essential resource for students taking this course. Visit the course blog for a daily log of class activities, assignments, due dates, and announcements. Handouts from class are available for download.
* The website is linked on the SHS home page, http://www.shs.lane.edu/ under the Staff Directory button (bottom of page). Scroll to “Science Department” > “Buckson” > “Class blog” Or, go directly to: http://blogs.4j.lane.edu/buckson/

Grades Online

* Class grades can be viewed at the StudentVue or ParentVue links on the Sheldon High School home page. You will need your 4j username and password. I update grades frequently during the term, so you should always have a good approximation of your current class grade.

Prerequisites and Outcomes

Prerequisite Skills and Knowledge:

* Ability to read and understand the textbook and laboratory instructions
* Ability to be an active learner during class time

Course Outcomes:

* Mastery of Next Generation Science Standards in Physical Science – State of Oregon
* Students will continue to develop Academic Skills: writing, utilizing steps of scientific method, communication conventions of scientists, drawing conclusions from empirical evidence, nature of scientific understanding, laboratory skills.
* Students will continue to develop Key Cognitive Strategies: intellectual openness, inquisitiveness, analysis, reasoning>argumentation>proof, interpretation, precision and accuracy, problem solving.

Subsequent Courses

Sheldon High School: 3.0 Science credits required for graduation

Required:

Biology A and B

Elective:

Chemistry (C or better in Algebra required)

Physics (A or B in Geometry required)

AP Biology

Grading Policies

Students will be graded on their performance level toward the academic course standards only.

Grading Scale

90 - 100% = A; 80 - 89% = B; 70 - 79% = C; 60 - 69% = D; less than 60% = F

Grading Explanation

Your grade in this class is based on the following weighted categories: Tests/Quizzes (52%), Final Exam (8%), Lab reports (20%), Projects (15%), and Homework/Classwork (5%).

There is no partial credit and P/NP option is not available.

\*Plagiarism Statement\*

In accordance with consistent academic standards recognized throughout the educational and professional community, Sheldon High School considers any form of academic dishonesty unacceptable. Cheating, plagiarism (intentionally or unwittingly presenting someone else’s work as your own), and collusion (allowing your work to be copied or assisting others with academic dishonesty) are serious offenses and will not be tolerated at Sheldon. Consequences for such behavior may be any or all of the following: score of zero, parent conference, and disciplinary referral to administration. It is strongly advised that students avoid academic fraud at all times to prepare for higher-learning and work environments where fraud of any kind will result in severe consequences.

Other Grading Policies

I accept late classwork or tests at any time until 5 days prior to the end of the term, with no point penalties for being late. Labs must be made up within 7 days of returning to school from an absence. There will be few exceptions to the lab make up policy. I must rotate lab set-ups frequently and can’t recreate labs after they are taken down.

Please remember that there are no re-takes on tests and quizzes in science classes at Sheldon.

I will make appropriate accommodations for special needs students (such as those with Individual Education Plans and 504 plans).

Classroom Conduct

Study Skills

* Students should expect to spend time outside of the class meeting time to complete lab

reports, assigned reading in the course textbook, homework assignments, and to prepare for

tests and quizzes.

* While you will not need to work outside of class time every day, you should expect to do so

approximately 2-3 times per week.

Classroom Conduct

* This science course offers the opportunity to explore knowledge through a very hands-on and open approach. As a result, occasionally students experience difficulties demonstrating the skills of an independent learner. You should understand that I regard the classroom/laboratory as a learning environment for Science, and that the needs of fellow students need to be respected. I expect students to display respect for all people and materials in the classroom, and students can expect respect from me in return. Students who display poor judgment or control will face removal from the classroom. Examples include: horseplay, abuse of materials or equipment, insubordination, excessive socializing.
* For sanitary and safety reasons, I don't allow food or drink in any science laboratory. I allow food and drinks in the classroom only as long as you clean up after yourself.
* If you need to use the restroom, politely let me know that you are leaving and return in a timely fashion.
* Periodically, you may be required to work independently on projects for this class. You'll be required to stay in an authorized area and check in with the supervisors at these areas.
* Cell phones, music players and headphones must be off and out of sight during class time, especially during tests and quizzes. I should not have to frequently remind you to put your phone away.

Course Materials

* A binder for organization of notes and assignments.
* All lab materials provided.
* Textbook issued: CPO physical science.

Equity

Sheldon High School’s student-centered culture emphasizes intellectual excellence and respect for what each member brings to our community. As such, people of all ethnicities, religions, beliefs, ages, sexual orientations, gender identities, abilities, socioeconomic backgrounds, regions, and nationalities are strongly encouraged to share their rich array of perspectives and experiences.

As part of our commitment to developing and sustaining a vibrant academic community, we strive to create an environment of diversity and inclusivity by respecting and affirming the dignity of each member of our community and by providing and promoting a bias-free environment.

If you feel your differences may in some way isolate you from this community or if you need any specific accommodations, please speak with your instructor about your concerns and what we can do together to help you become an active and engaged participant.

Course Outline – Physics and Engineering, Winter 2019-2020

• Measurement

o SI system of units

o Scientific notation

o Significant figures

o Graphing

• Describing motion

o Speed & velocity

o Acceleration

• Force

o Weight & mass

o Friction

• Laws of Motion

o Inertia

o Force, mass & acceleration

o Action & reaction

• Energy

o Mechanical energy – kinetic and potential

o Work & power

• Waves

o Harmonic motion

o Sound