**Physical Science: Energy Syllabus**

**2019/2020**

Corinne Fields

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Room C-15

http://blogs.4j.lane.edu/fields\_c

**Student Access Time**: 8:00-8:25 AM on M, Tu, W, and F unless otherwise indicated

**Course Description**

Physical Science: Energy is a required 12-week course for freshmen at Sheldon High School. The class is designed to enhance students’ science literacy and to provide a foundation upon which subsequent 10th, 11th, and 12th grade science courses can build. It is aligned to the Next Generation Science Standards as adopted by the Oregon Department of Education.

**Subject:** Physical Science

**Credits:** 0.5 (1 trimester). In addition to this course, 9th grade students must complete 1 trimester of Physical Science: Matter to complete their freshman science requirement. The two courses may be taken in any sequence.

**Attendance**

This is a hands-on class with frequent lab and project work. It is 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 are responsible for seeing me within 2 class days 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.

**Getting Assistance**

For make-up work and assistance attend my student access time.

Visit the course blog for a daily list of assignments, due dates, and announcements.

The website is linked on the SHS home page, http://www.shs.lane.edu/ under “Academics > Class Pages > Science Dept > Fields.” Click on the “Class Blog” link below my name/photo.

Or, go directly to: http://blogs.4j.lane.edu/fields\_c

**rerequisites and Outcome**

**Prerequisites and Outcomes**

**Prerequisites**

 Ability to read and understand the textbook and laboratory instructions

 Willingness to be an active learner during class time

**Course Outcomes**

Mastery of Next Generation Science Standards in physical science

 Students will continue to develop academic skills including writing, utilizing the 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 including intellectual openness, inquisitiveness, analysis, argumentation from evidence, interpretation, precision and accuracy and problem solving.

**Subsequent Courses, Sheldon High School** 3.0 Science credits required for graduation

Required: Biology A and B

Choice: Chemistry (C or better in Algebra required) or

 Physics (B or better in Geometry required)

**Grading Policies**

Students’ grades will be based on their performance level on the academic course standards. **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: Lab Reports and Projects (35%), Classwork/Homework (5%), Tests, Quizzes, and Final Exam (60%).

Grading in this class is based on performance towards meeting the academic course standards, which are contained in the NGSS. Lab reports must meet reasonable minimum criteria before they will be graded. Online grades will be updated in Synergy approximately once per week.

Late work may be subject to grading penalties. Homework is due on test day, and will not be accepted late.

**Pass/No Pass Option and Partial Credit**

Students may opt to receive a Pass or No Pass rather than a letter grade, and/or to receive partial credit. ***This decision must be made prior to mid-term grading and submitted in writing to the teacher, who then must submit it to administration and the registrar.***

**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. 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.

**Late Assignments**

All late work is due one week before the end of the trimester.

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 class to complete lab reports, assigned reading in the course textbook, homework assignments, and to prepare for tests and quizzes.

You will not need to work outside of class time every day, but 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 you must respect the needs of fellow students.

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 self-control will face removal from the classroom.

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 in these areas.

Music players and headphones must be off and out of sight during class time.

Cell phones and smart watches may not be used in class or during tests for any reason.

**Diversity Statement**

Our school community challenges students, staff and families to create a student-centered culture that emphasizes intellectual excellence and respect for the qualities each member brings to our community. As such, people of all ethnicities, religions, beliefs, ages, sexual orientations, 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 member of our class and community.

**Course Outline, in sequence**

- Measurement

 SI units

 Scientific notation

 Significant figures

 Graphing

-Describing motion

 Speed & velocity

 Acceleration

-Force

 Weight & mass

 Friction

-Laws of Motion

 Inertia

 Force, mass & acceleration

 Action & reaction

-Energy

 Mechanical energy – kinetic and potential

 Work & power

-Waves

 Harmonic motion

 Sound

 Electromagnetic radiation

Parents/Guardians:

Please read the attached syllabus for the Physical Science: Energy course. Then, sign this cover sheet and detach it for your student to return to me.

Thank you.

Corinne Fields

Instructor

I have read the syllabus:

(Print Parent Name) (Parent Signature) (Date)

(Print Student Name) (Student Signature) (Date)