Course Expectations For Conceptual Physics

Room: 212

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| **Period** | **Class** |
| 1 | Physics |
| 2 | Earth and Space Science |
| 3 | Earth and Space Science |
| 4 | Prep |
| 5 | Willamette Promise Chemistry |
| 6 | Earth and Space Science |
| 7 | Rocketry |
| 8 | Study Hall |

# Needed Supplies

The following items should be brought to class daily:

* Scientific calculator: with a logarithm function and scientific notation
* Notebook\*: Composition Notebook (Quad Lined preferred) and a small binder or folder for handouts/labs/etc.
* Pencil and eraser
* Book: Conceptual Physics – 2006, Publisher: Prentice Hall, Author: P. Hewitt.

Yamhill Carlton High School – General Proficiency Rubric

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| Grading Category | Grading Mark | Definition |
| Exceeding | 4 | The student is able to demonstrate knowledge and skills that surpass the standards. While weaknesses may be present, strengths are dominant. |
| Proficient | 3 | The student is able to demonstrate the knowledge and skills that encompass the standards, while still showing strengths and weaknesses. |
| Approaching | 2 | The student is able to demonstrate the basic knowledge and/or skills of the standards, with a low degree of consistency or accuracy.  The student is not able to meet the level of rigor called for by the standards. |
| Beginning | 1 | The student has demonstrated some of the knowledge and/or skills of the standards, but is far from proficient.  Significant learning gaps and/or misconceptions exist. |
| Missing | M | A student who is missing a summative assessment and has therefore failed to provide sufficient evidence of effort and growth in one or more Proficiency Standard(s) will receive an “M” in that standard. |

*80% Teacher Determined Proficiency Standards*

Over the course of the semester, students will be assessed at least twice on their growth towards proficiency of each Proficiency Standard. This, however, does not mean that a student will be able to “retake” tests.

All Proficiency Standards are assessed at least twice over the course of the semester and students will have the opportunity to reach mastery by the end of the course. For a map of when standards will be visited, please visit my class website.

*20% Career Readiness Learning Standards (CRLS)*

CRLS are fundamental skills essential for success in employment, college, family, and community life (e.g. homework, punctuality, collaboration, communication).

Physics Proficiency Statements:

1. Measurement and Problem Solving – Students will be able to familiarize themselves with the functionality of the metric system and scientific notation

2. Motion and Force – Students will be able to conceptualize the idea of motion and how force affects it.

3. Newton’s Laws – Students will be able to apply Newton’s Laws to physical situations and calculations.

4. Energy – Students will be able to understand the connection between matter and energy and how it applies to momentum and kinetic versus potential energies.

# 5. Two-Dimensional Motion – Students will be able to analyze two-dimensional systems and perform calculations involving kinematic equations.

# 6. Heat – Students will be able to determine the difference between heat and temperature and how it applies to the Laws of Thermodynamics.

# 7. Sound – Students will be able to illustrate the relationships of frequency, wavelength, and energy involved in sound waves.

# 8. Optics – Students will be able to describe the wave-particle duality and explore the historical understanding of light.

# 9. Circuits – Students will be able to understand the basic constructions of circuits and perform calculations involving Kirchoff’s Laws.

# 10. Final Project Unit – Students will be able to summarize one or more physics concepts discussed this year and how it applies to the topic at hand.

# Homework, Quizzes, and Classroom Participation Points

Homework is due at the beginning of the period the period after it is assigned unless otherwise stated. Homework will be checked daily for completeness and points recorded as a package at the end of each unit (on exam days). Homework assignments are written on calendars that are distributed every several weeks. Homework that is incomplete when it is checked in class may be finished later and submitted for half-credit with the unit package.

There are occasional unannounced quizzes over material already covered in class. Specific questions or problems may be taken from a warm-up exercise, lecture practice problem, or homework question. These unannounced quizzes are **open notebook**, and your performance reflects your level of classroom participation, organization, and preparedness.

**\* *Unannounced* quizzes are open notebook**

# Lab Safety

I expect that you come into a lab day with the mindset of responsibility and awareness. Lab equipment can often be fragile and intricate. If carelessness is observed, I reserve the right to have you sit out for the day.

You should be familiar with the location and use of eyewashes, fire extinguishers, and other safety equipment in case of an emergency.

Course Expectations

**You can expect me:**

* To start and end class on time.
* To reply to e-mails as promptly as possible
* To assign homework that adequately covers the material and meets the learning objectives of the course while adhering to the time expectations throughout the course.
* To give exams that accurately reflect the material covered in class and assigned in homework.

**Please have parents/guardians sign/date here:**

**I can expect you:**

* To come to class on time.
* To be attentive and engaged in class.
* To refrain from using laptops, cell phones and other electronic devices during class (unless instructed to do so).
* To spend an adequate amount of time on the homework each week, making an effort to solve and understand each problem.
* To engage with both the abstract and computational sides of the material.
* To seek help when appropriate.