# **Physics 100 Course Syllabus**

Welcome to Physics 100!

## **Important Information**

Course: Physics 100

Meeting times: M, W, Th 3:00-5:00

Instructor: Dr. Kira Burt

Email: [kira.burt@sfcc.spokane.edu](mailto:kira.burt@sfcc.spokane.edu) (best contact method!)

Phone: (509) 533-3668

Office: 28-234 (may also be found in 28-229 or 28-220)

Class Website: <https://apps.spokane.edu/EasyWeb/Default.asp?id=3485> (you can find copies of the syllabus, class calendar, assigned work, and various solutions and updates here and at our Canvas page throughout the year)

## **Course Description**

This quarter we will cover many of the major topics in physics, including basic mechanics, work and energy, waves and sound, the atom and its nucleus, and special relativity. We’ll learn about the history of physics and its contribution to our everyday lives as well as its impact on humanity throughout the centuries. Our study will be mostly conceptual – minimal math skills are needed, but will be used as you develop your intuition for problem-solving in physics.

## **Course Pre-requisites**

* Knowledge of basic mathematics
* Reasonable fluency in English

## **Course Objectives**

Physics 100 is included in the SFCC courses that teach you the skills described in the first item on the *College Learning Abilities* list: “Analysis/Problem Solving: Students will access, evaluate and apply information from a variety of sources in a variety of contexts.” In this sequence you will:

* Solve physics problems using the concepts and techniques studied in class
* Communicate physics concepts in verbal and written form
* In laboratory experiments, carefully record and analyze data and form scientifically sound hypotheses and conclusions
* Learn some of the history of physics discoveries and its relevance to everyday life as well as other disciplines

## **Required Materials**

* Texbook: Physics, 10th edition by Cutnell & Johnson
* MasteringPhysics: Homework will be assigned online through the Pearson MasteringPhysics portal.

There are different options for purchasing the textbook as well as online access:

* An unbound copy with access may be purchased through the bookstore (ISBN 9780133913965)
* An unbound copy with access may be purchased online at: <http://www.mypearsonstore.com/bookstore/conceptual-physics-books-a-la-carte-plus-masteringphysics-0321935780>
* An e-text only version with access may be purchased here: <http://www.mypearsonstore.com/bookstore/masteringphysics-with-pearson-etext-instant-access-0321940571>
* You’ll also need a basic calculator, phones will not be permitted

## **Assignments and Exams**

Assignments will consist of:

* Online homework assignments (usually one per chapter)
* In-class work (this will be handed out nearly every session)
* Lab reports or handouts (labs will be group work, done on a weekly or semi-weekly basis)

There will be three exams through the quarter, plus a final comprehensive exam on **December 14th**. We will also have graded review and problem-solving sessions before every exam.

## **Grading**

Grades are weighted as follows, as a percentage of your final grade for the quarter:

Final exam: 20%

In-quarter exams: 10% each (30% of total grade when combined)

Labs: 15%

Online homework: 15%

In-class assignments: 10%

Review/problem-solving sessions: 10%

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| --- | --- | --- |
| Percentage | Numerical Grade | Letter Grade |
| ≥ 95 | 4.0 | A |
| ≥ 92 but < 95 | 3.9 | A- |
| ≥ 90 but < 92 | 3.7 |
| ≥ 87 but < 90 | 3.5 |
| ≥ 85 but < 87 | 3.3 | B+ |
| ≥ 80 but < 85 | 3.0 | B |
| ≥ 75 but < 80 | 2.7 | B- |
| ≥ 70 but < 75 | 2.3 | C+ |
| ≥ 65 but < 70 | 2.0 | C |
| ≥ 60 but < 65 | 1.7 | C- |
| ≥ 55 but < 60 | 1.3 | D+ |
| ≥ 50 but < 55 | 1.0 | D |
| < 50 | 0.0 | F |

## **Attendance/Make-up Work Policy**

I do not have an attendance policy as such – if you miss class, you will miss the in-class assignment for that day, and those points cannot be made up unless you notify me *before* missing class.

If you must miss an exam, let me know and I will make arrangements for you to take the exam before the scheduled time. There will be only one make-up assignment/exam per student per quarter.

Labs cannot be made up.

## **Late Work/Late Arrival Policy**

If you are in class, please keep your phone on silent and do not disturb others. Arriving late is also disruptive; please do your best to be on time for class. If you are more than 10 minutes late for a lab session you will not be able to participate.

Late work is generally not accepted. If you have extenuating circumstances please contact me privately.

## **Academic Integrity**

The Student Code of Conduct may be found here:

<http://spokanefalls.edu/Resources/StudentLife/_docs/WAC132Q-10_StandardsofConduct_2015.pdf>

Academic dishonesty, including cheating and plagiarism, will be reported to the Student Conduct Officer. I encourage collaboration on in-class assignments and laboratory experiments, but your work must be your own. Consequences for academic dishonesty can range from a loss of grade for an assignment to expulsion from SFCC.

Additionally, your conduct in class affects the learning of your classmates. In order for learning to take place, students must feel safe; this safety is due all students, not only those who share your values and beliefs. For this reason, courtesy, thoughtfulness, and acceptance are essential in our discussions in and out of the classroom. Acceptance should not be confused with agreement; one need not agree with a person to listen, and one must listen well in order to disagree respectfully. Every student in this course has a voice and so deserves the courtesy of attentive listening and the freedom to express diverse ideas. If any student believes they are not receiving this due courtesy, please contact me as soon as possible and I will work to resolve the issue.

## **Accommodations**

If any student has a health condition or disability that may require accommodations in order to effectively participate in this class, please do one of the following:

* Contact me after class
* Contact Disability Support Services in building 17, Room 201, or by phone at (509) 533-4166

## **Emergency and Safety Procedures**

* Lab safety guidelines are experiment-specific and will be detailed by me before we begin the experiment
* If an emergency occurs, please remain as calm as possible. Should evacuation of the building be required, quickly gather your belongings and follow my directions to the evacuation point