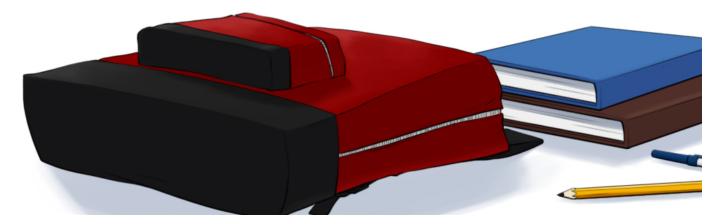
# Syllabus



### **Quick Links**

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### What You Should Already Know

Physical science is pretty broad, including both chemistry and physics. Among the topics you will learn about in this course will be motion, forces, energy, matter, chemical reactions, electricity, and waves. As we go into greater detail to understand physical science, take the time to observe the world around where you live. PHYS 41 is an introductory physical science course. You will be expected to be able to perform basic algebra throughout the course.

### **Course Learning Outcomes**

Upon successful completion of this course, you will be able to do the following:

- 1. Describe the motion of an object in terms of position, velocity, acceleration, and time.
- 2. Describe forces acting on objects and how they affect the motion of objects.
- 3. Explain the transformation of energy among various forms.
- 4. Describe properties of matter and the structure of atoms.
- 5. Balance basic chemical equations.
- 6. Explain how electricity is produced.
- 7. Describe properties of different kinds of waves.

### **Course Materials**

Physical Science 41 is a self-contained course, which means that there is no separate textbook for this course. You will need a scientific calculator for this course. You will be allowed to use your calculator on the final exam.

I have also included a periodic table of elements and a formula guide (found in appendix A and B, respectively). You may use the periodic table and the formula guide on the unit quizzes and the final exam.

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# **Course Organization**

### **Assignments**

Physical Science 41 contains eight units. Each unit contains four or five lessons that will teach you about different aspects of physical science. Before you begin each lesson, you should watch the lesson introduction video. These lesson introductions will help you understand real-world applications of the concepts you are about to learn.

As you read through the lesson material, you will find some Self Check questions at the end of each lesson. Be sure you can answer all of these questions correctly, as you will see more of the same in the unit quizzes and final exam.

If, after working on the Self Check questions, you are still struggling with a particular concept, use the virtual classroom CD for more help. The virtual classroom has folders with practice problems for each lesson. Each problem also has a video of me solving the problem step by step. Try to solve the problems on your own. If you need help with a particular problem, then click on the video button to watch the video.

There are eight unit quizzes (one for each unit). Most of the unit quizzes consist of about twenty to twenty-five multiple-choice questions each. The unit quizzes are open book and open notes, but the final is closed book and notes, although you may use the periodic table and formula guide found in the appendices.

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### **Exams**

The final exam is comprehensive and will cover all course lessons.

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## Grading

### **Grading System**

Physical Science 41 contains eight graded unit quizzes. Each of these lessons is weighted the same for grading purposes. Each lesson assignment is worth 7% toward the course grade.

The self checks, review activities, and practice final will not count toward your final grade. You may resubmit them as often as you like and use them as review tools.

Your final course grade will be calculated in the following manner: The eight unit quizzes will count for a total of 56 percent of your final grade (or 7% each). The other 44 percent of your final grade comes from the final exam. If you work diligently and follow the guidelines I described above, you will not have a problem passing the final exam and the course.

The grading scale is listed below; below 60 percent is failing.

Grading Scale	
Α	93-100
A-	90-92
B+	87-89
В	83-86
B-	80-82
C+	77-79
С	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
E (fail)	0-59

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