

Conceptual Physics Fall 2017 (PHYS 140) American University in Vietnam (AUV)

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Course Web Page: <http://www.atmosedu.com/PHSC101/>

Conceptual Physics. This 3 credit lab science course is intended as a general science distribution course for non-science majors and has been specifically designed for student success. If at any time you have any questions, please send me an e-mail. I am here to help guide you through your learning process.

Course description How the world around us behaves depends on the nature of matter and energy. Physical laws are presented throughout the course that describe the interaction of matter and energy. These laws are used to help explain experiences from daily life. For the non-science major, with little or no science background.

Required Materials. Text Book: Conceptual Physics by Paul Hewitt 10th edition. An electronic version is available.

A calculator that adds, multiplies, and divides

Access to MS Word , Excel, and PowerPoint

or open office suite (free) [<http://download.openoffice.org/>]

When submitting written work save your files in MS Word [.doc] format (or .docx) or .pdf format, no other formats are acceptable. Open Office allows you to save in both of these formats. Also try to name your files without any spaces. Example *ThisFile.doc* as opposed to *This file.doc*.

Assessment: <ul style="list-style-type: none">• 1- Mid term Exam: 20%• Final 30 %• Term Project (10 %)• All other assignments combined (40 %)			
	A (100-93%) A- 93-90%	B+ 90-87% B 87-83% B- 83-80 %	C+ 80-77% C 77-70%
	D+ 70-67% D 67-63% D- 63-60%	F less than 60%	

Exams: The readings, homework, and online quizzes are meant to prepare you for exams. The idea is to go back over these things to solidify your knowledge and understanding. Exam study guides include sample exam questions and should be studied.

Term Project: see <http://www.atmosedu.com/PHSC101/project.html> for details.

Inclass reading quizzes will be given periodically throughout the term. Although these quizzes are a small portion of your overall grade, the reading quizzes will help you with other aspects of the course including exams. Some exam questions will be directly from the reading quizzes.

All Other Assignments: Homework will often be presented to you as an MS word document that you can edit by adding your answers and then submit via email to the instructor (rmackay10@gmail.com). Occasionally you will be asked to draw your own figure. It is okay to draw a nice figure by hand and then either scan it or take a digital photo to electronically insert into an MS Word Document or other presentation document. I like to use a paint program to process the image a little before pasting it into a document as this can make the total document size much more manageable. When submitting written work save your files in MS Word .doc format (or docx). Also try to name your files without any spaces. Example *ThisFile.doc* as opposed to *This file.doc*.

Tentative Schedule: <http://atmosedu.com/PHSC101/Schedule.html>
(links to weekly activities and homework)

Course Outcomes:	Course Outcomes Assessment
<ul style="list-style-type: none">• Recall and explain the basic scientific facts, concepts and laws of physical science and how these relate to our everyday experiences.• Distinguish between pseudoscience and the testable and falsifiable predictions of science.• Describe and use the methods of science: the data acquisition and observations, pattern recognition, analysis and modeling that contribute to the understanding of facts, concepts, processes, and theories of physical science.• Solve problems using relevant information,	<ul style="list-style-type: none">• Reading quizzes, level 1 homework, lab questions • Laboratory • Laboratory, video assignment, simulation activities

physical relationships, calculations, graphs, and appropriate units of measurement.	<ul style="list-style-type: none">• Level 2 homework, simulation activities, term project.
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Class Policies

Each student is expected to be courteous to others and observe the rules and regulations of the college at all times.

Attendance Attendance and punctuality are essential for success in this class as well as being a lifelong learning skill. Each student is expected to attend class on a regular basis and to be on time. If you do miss class it is your responsibility to obtain all assignments and/or handouts. In addition, it is your responsibility to make sure that you learn the material covered in class. No makeup points will be given for these assignments so attendance is important.

Class Participation Each student is expected do all class activities. The course is designed to provide scaffolding early in the term to build skills and knowledge needed later in the quarter. The exams will typically be based on topics that are included in readings, online videos, Powerpoint summaries, online quizzes, and labs. Don't fall behind, as it is very difficult to catch up.

It is important to maintain a safe learning environment by showing unconditional respect for others. One must be particularly careful when communicating electronically as often the written word can be perceived differently than intended. This is demonstrated by being respectful of others and their opinions, taking one another seriously, and allowing humor to be a part of the class. Entering into class discussions and asking questions is important but try to be extra courteous to others and their opinions.

Late homework/online quizzes: Late homework or online quizzes will be accepted with a 10 % penalty for up to 24 hours late, 20% penalty for 24 to 48 hours late, and 50% penalty for more than 48 hours late. Homework will not be considered late if it is submitted via Canvas prior to 11:55 PM on the due date. Homework will not be accepted after it has been graded and returned to the rest of the class. The **extra credit** option discussed below

allows you to "make-up" missed assignment points. Online quizzes will not be available after the Saturday following their due date.

Safety is of utmost importance at all times. Since the laboratory environment can present unusual safety hazards the Science division has placed special emphasis on laboratory safety. Please be extra careful while in the laboratory and help us maintain safety campus wide by reporting any potentially hazardous situations immediately to the instructor.

Academic Honesty is required at all times. Honesty is essential at all times during this class. Signing in for someone who is not in class, using homework from a previous term, or plagiarism are examples of dishonest conduct and are grounds for failing this course. Copyright laws, plagiarism rules shall be observed at all times. Plagiarism is representing another's work as your own, or recycling your work and representing earlier work as new work.

Citizenship Always be courteous to yourself, other students, and the instructor. Respect the rights of others to have feelings and opinions that may be different than your own. All students are expect to follow the Clark College

Extra Credit throughout this course students will be given extra credit opportunities which can increase their overall grade by up to **5** percentage points. If a student is interested in developing their own extra credit activity/research project related to a particular aspect of the physical sciences please talk with your instructor first. Written summaries of papers, essays or books related to science issues of particular interest to you are typically worth up to 1 % of your overall grade each. These topics must be approved by the instructor. See [Paper Summary](#) for guidelines. Students may also submit one YouTube video summary related to a class topic of their choice for up to 0.6 % extra credit (~ 6 pts). See [YouTubeVideo Summary](#) for more details. **All extra credit must be turned in by the final.**