General Physics I  
PHYSICS 101.003  
Department of Physics, Engineering, and Astronomy  
Spring, 2018  

Description  
General Bulletin Description  
General Physics I - (PHYS 1305) - Presentation with a minimum of mathematics of the basic concepts of mechanics, light and sound. May not be used to meet graduation requirements by students majoring in the College of Sciences and Mathematics. Computation of lecture and laboratory grades into one grade; same grade recorded for both lecture and laboratory. Co-requisite: PHY 101L.  

This is a survey course which will familiarize the student with concepts of waves, sound, light, and mechanics. The major aim will be to give each student an appreciation and understanding of the physical universe. A conceptual rather than a mathematical point of view is emphasized.  

Program Learning Outcomes  
This is a general education core curriculum course and no specific program learning outcomes for the physics program are addressed in this course.  

Core Curriculum Objectives  
The Texas Higher Education Coordinating Board has identified six objectives for all core courses: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives.  

PHY 101 is a general education core curriculum course and fulfills the Empirical and Quantitative Skills general education core curriculum requirement. Another "shell" course has been created to collect student artifacts to meet this state requirement. You will see this course on your D2L list.  

The wording that follows in red comes from the University. We do the assessment in Spring terms of odd years, but I am including the wording so it does not get lost.  

During this semester, you will receive an assignment that fulfills both the requirements of this course and the needs of Stephen F. Austin State
University’s Core Curriculum Assessment Plan with the Texas Higher Education Coordinating Board.

When you complete this one assignment, you need to upload the assignment to both the PHY 101 dropbox and the Empirical and Quantitative Skills dropbox. If you have any questions, please see your instructor or contact the University Assessment Specialist at (936) 468-1267 or email jstringfield@sfasu.edu.

The chart below indicates the core objectives addressed by this course, the assignment(s) that will be used to assess the objectives in this course and uploaded to the D2L Empirical and Quantitative Skills dropbox this semester, and the date the assignment(s) should be uploaded to D2L Empirical and Quantitative Skills dropbox. Not every assignment will be collected for assessment every semester. Your instructor will notify you which assignment(s) must be submitted for assessment in the D2L Empirical and Quantitative Skills dropbox.

<table>
<thead>
<tr>
<th>Core Objective</th>
<th>Definition</th>
<th>Course Assignment Title</th>
<th>Date Due in D2L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empirical and Quantitative Skills (CO 3)</td>
<td>To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.</td>
<td>The Simple Pendulum Project</td>
<td>Not assessed this term</td>
</tr>
</tbody>
</table>

**Student Learning Outcomes**

By the end of the course, successful students will be able to:

**SLO 1:** Recognize that the world in which they exist can be described by a few natural laws.

**SLO 2:** Demonstrate a basic familiarity with concepts of waves, sound, light, and mechanics.

**SLO 3:** Describe natural phenomena in a conceptual manner rather than mathematically.

**SLO 4:** Demonstrate skills developed in empirical and quantitative analysis.

**Materials**

The text is *Conceptual Physics*, twelfth edition by Paul G. Hewitt (ISBN 9780321909107). The readings indicated in the Course Outline (below) correspond to chapters from this text and should be read prior to discussion of the material in class. PHY 101L, the Physics Laboratory is a corequisite and a new edition of the lab manual is available in the bookstore. You will also need to register with Top Hat by going to the website. We will use Top Hat for attendance tracking, participation, and homework. This application uses your smartphone, so make sure your phone is charged when you come to class.

**Top Hat**

We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message.
You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student- Top-Hat-Overview-and-Getting-Started-Guide) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

An email invitation has been sent to you, but if don’t receive this email, you can register by simply visiting our course website: https://app.tophat.com/e/321853

Note: our Course Join Code is 321853.

Top Hat will require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing.

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491.

Email
The course is fully developed in Desire2Learn. I will use the email system here since it is a closed email facility. All course business should be directed through D2L.

Exams
There will be four major exams, each covering a limited amount of lecture and text material. The dates of these exams are listed in the course outline on the next page. Each student must provide a SCANTRON form number 882-ES in order to take each exam. The last exam will not be comprehensive. No make-up exams will be given except by EXCUSED absence.

Homework
Students may improve exam scores in three ways. Review questions will be assigned for each section of the course. Secondly, attendance will be taken daily, which can earn a total of 5% per exam. (That is, of the 15% assigned to the participation grade, one-third is given for attendance.) Finally, homework will be assigned using Top Hat. The exact breakdown in credit is in the table below.

Participation
You must bring your smartphone to class every day. Attendance will be taken using the phone on most days during the first 60 seconds of class and throughout the class time. To make sure that you are going to arrive to class on time, you can set your watch here: http://www.time.gov/. During class, we will engage in discussions and occasional activities using Top Hat. Participation in these activities will form part of your final grade. You cannot earn 'class participation' points if you don’t have your phone. If you are observed using two phones, you will receive no credit for the 'In-Class Participation Grade' portion of your final grade. Top Hat allows you to show your participation in the class. Therefore, if you leave class after answering a question, it will result in a zero for that participation grade. If you are absent, late for class, or forget your phone, then you will get a zero for the participation grade for that day.

Grading
Each major exam will be graded on a 100-point scale. No grade curving is done on any grade in this course. The lecture and lab grades will be combined and the same grade will be recorded for both lecture and lab. All exams (including the final) are weighted equally, and the lecture portion of
the course accounts for 75% of the total grade. Fifty percent of the lab grade comes from the lab exam.

<table>
<thead>
<tr>
<th></th>
<th>% of Lecture</th>
<th>% of Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (equally weighted)</td>
<td>60</td>
<td>45</td>
</tr>
<tr>
<td>Review Quizzes (D2L)</td>
<td>15</td>
<td>11.25</td>
</tr>
<tr>
<td>Homework (Top Hat)</td>
<td>15</td>
<td>11.25</td>
</tr>
<tr>
<td>Class Participation (Top Hat)</td>
<td>15</td>
<td>11.25</td>
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</tbody>
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A 90-100  B 80-89  C 70-79  D 60-69  F <60

**Policies**

**Attendance Policy**
The number of *unexcused* absences that you accumulate will be posted on D2L. You have **one week** after the posting to bring written excuses for absences that occurred since the previous posting. If you do not bring written excuses before the next posting, these absences cannot be excused.

If you have five unexcused absences, your final grade will be reduced one letter grade. If you have six or more unexcused absences, you will receive an "F" in the course.

**Acceptable Classroom Behavior**
For the benefit of your fellow students and your instructor, you are expected to practice common courtesy with regard to all course interactions. For example:

- Be considerate toward your classmates and instructor and arrive to class on time.
- Do not leave class early and do not rustle papers in preparation to leave before class is dismissed without speaking with your instructor first.
- Avoid classroom distractions. Be attentive in class: stay awake, do not read newspapers, etc.
- If you are late to class or must leave early please inform your instructor in advance (enter or leave quietly, don’t walk across the front of the classroom (use the side aisles) and don’t walk in front of the projector).

Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy 10.4). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc.

The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the *Early Alert Program*. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

**Academic Integrity**
Abiding by university policy on academic integrity is a responsibility of all university faculty and students. Faculty members must promote the components of academic integrity in their instruction, and course syllabi are
required to provide information about penalties for cheating and plagiarism as well as the appeal process. *(Much of this information will be provided through internet links.)*

**Definition of Academic Dishonesty**

Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to: (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) falsification or invention of any information, including citations, on an assignment; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism include, but are not limited to: (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from the Internet or another source; and (3) incorporating the words or ideas of an author into one's paper or presentation without giving the author due credit.

Please read the complete policy and the appeals process at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp) and [http://www.sfasu.edu/policies/academic_appeals_students.asp](http://www.sfasu.edu/policies/academic_appeals_students.asp)

**Withheld Grades**

At the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

**Students with Disabilities**

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. This syllabus and other course materials can be made available in other formats. This course meets certain objectives of the ExCET/TEKS. A copy of the objectives and course correlations is available in the ExCET Advisor's office.