PHYSICS 132 LABORATORY – SUMMER II 2019

Lecture Instructor: Dr. James Adams, Department of Physics, Engineering and Astronomy

Text: Physics 132 Lab Manual

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Office Hours: Monday, Wednesday, Thursday 3-5 pm or by appointment.

Laboratory Instructor/Supervisor: Dr. James Adams, Department of Physics, Engineering and Astronomy

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Laboratory Assistant: Michael Flowers

Lab Class Meeting Time and Place: TWR, 1:30-4:20 pm, Stem Room 301
Stem Building

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<tr>
<th>Lab</th>
<th>Date</th>
<th>Lab Experiment</th>
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<tr>
<td>1</td>
<td>JULY 17 W</td>
<td>A Simulation of Radioactive Decay</td>
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<td>2</td>
<td>18 R</td>
<td>Counting Radiation</td>
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<td>3</td>
<td>23 T</td>
<td>The Vibrating String</td>
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<td>4</td>
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<td>Organ Pipe Lab</td>
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<td>5</td>
<td>25 R</td>
<td>Preliminary Ohm’s Law Exercise</td>
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<td>30 T</td>
<td>Ohm’s Law Lab</td>
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<td>7</td>
<td>31 W</td>
<td>Series and Parallel Circuits</td>
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<td>8</td>
<td>1 R</td>
<td>The Oscilloscope/RC CIRCUIT</td>
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<td>9</td>
<td>AUG 6 T</td>
<td>The Ray Box</td>
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<td>10</td>
<td>7 W</td>
<td>Properties of Converging Lenses</td>
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<td>11</td>
<td>8 R</td>
<td>The Telescope</td>
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<td>12</td>
<td>13T</td>
<td>The Diffraction Grating</td>
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<td>13</td>
<td>14 W</td>
<td>Lab Exam in Room 305</td>
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The following items are to be supplied by the student and must be brought to each lab session.

Pencil, eraser, graph paper, ruler with centimeter scale, Laboratory Manual, calculator

Please come prepared to do each lab by reading the lab manual exercise for that day before coming to lab. You may also want to read pertinent sections of the text. Use the data sheets provided in the lab manual to record data and answer questions.

Lab Policy

1. There will be no make-up labs

2. Each lab must be completed during the lab period.

3. Excused absences must be approved by Mr. Piran within two days of the absence.

4. Each experiment grade will be based on the experiment and a possible pop quiz. Pop quizzes can include questions over the present as well as the most recent laboratory exercise.
5. Experiment grades and absences will be posted each week in the lab. It is your responsibility to check these postings each week in order to identify errors in the previous week's grade or absence assignment. You have ten days from the date of each posting to correct any such errors.

6. The final grade for this course will be determined by determining the average of the best eleven weekly lab grades of weight one with the final lab exam grade with a weight of three. The final grade will be a percentile grade given to your lecture professor. This grade will constitute 25% of your course grade and the grade you will receive for the lab will be the same grade that you receive for the lecture.

132L. Electricity, Sound, and Light Laboratory (PHYS 1102) – One semester hour, three hours lab per week. Computation of lecture and laboratory grades into one grade; same grade recorded for both lecture and laboratory. Corequisite: PHY 132. Lab fee required.

Attendance Policy:

The class attendance is the responsibility of each student. All students are expected to attend class regularly. Poor attendance may affect your understanding of the materials and ultimately your grade in course. There is no penalty for those who miss classes; however, your experiment average will be drastically affected if you have three or more absences.

Exemplary Educational Objectives for the Natural Sciences

1. To understand and apply method and appropriate technology to the study of natural sciences.

2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry, and to communicate findings, analyses, and interpretation both orally and in writing.

3. To identify and recognize the differences among competing scientific theories.

4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.

5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

Program Learning Outcomes:

List the program learning outcomes addressed in this course as identified in the course matrix for your degree program. If your department requires a listing of all Program Learning Outcomes (PLOs) on the syllabus, please identify those that are directly taught in this course. If this is a general education core curriculum course and no PLOs are taught in this course then insert the following statement under this heading:

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

List all student learning outcomes (SLOs) for this course including the course specific student learning outcomes that support the PLOs above. In general, SLOs in a course that support the PLOs are specific and include the exact knowledge, skill or behavior taught in the course that supports the more global PLOs. For additional information on meaningful and measurable learning outcomes see the assessment resource page
http://www.sfasu.edu/assessment/index.asp

The PHY 132 laboratory and lecture are fully integrated and share the same learning outcomes and course objectives.

Academic Integrity (A-9.1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

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) the falsification or invention of any information, including citations, on an assigned exercise; 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 are (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 an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy (A-54)

Ordinarily, 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 terms 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. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Acceptable Student Behavior

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. 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 policy 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 iCare: Early Alert Program at SFA. Information regarding the iCare program is found at https://www.sfasu.edu/judicial/earlyalert.asp or call the office at 936-468-2703.