## PHYSICS 132 LABORATORY – SUMMER II 2018

**Lecture Instructor:** Dr. Robert Friedfeld, Department of Physics and Astronomy  
**Text:** Physics 132 Lab Manual  
**Phone:** 468-2197  
**Email:** rfriedfeld@sfasu.edu  
**Office Hours:** MTWR 12:10-1:30 pm in Room 322I Miller Science Building  
**Laboratory Instructor/Supervisor:** Mr. Ali Piran, Department of Physics and Astronomy  
**Phone:** 468-2391  
**Email:** apiran@sfasu.edu  
**Laboratory Assistant:** Abbey Rickards  
**Lab Class Meeting Time and Place:** TWR, 1:30-4:20 pm, Room 321 Miller Science Building

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<tr>
<th>Lab</th>
<th>Date</th>
<th>Lab Experiment</th>
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<td>1</td>
<td>JULY 11 W</td>
<td>A Simulation of Radioactive Decay</td>
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<td>2</td>
<td>12 R</td>
<td>Counting of Nuclear Radiation</td>
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<td>3</td>
<td>17 T</td>
<td>The Vibrating String</td>
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<td>4</td>
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<td>Organ Pipe</td>
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<td>19 R</td>
<td>Ohm’s Law</td>
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<td>24 T</td>
<td>Series and Parallel Circuits</td>
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<td>7</td>
<td>25 W</td>
<td>The Oscilloscope/RC CIRCUIT</td>
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<td>8</td>
<td>26 R</td>
<td>Mapping Magnetic Fields</td>
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<td>9</td>
<td>31 T</td>
<td>The Ray Box</td>
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<td>10</td>
<td>AUG 1 W</td>
<td>Properties of Converging Lenses</td>
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<td>11</td>
<td>2 R</td>
<td>The Telescope</td>
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<td>The Diffraction Grating</td>
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<td>8 W</td>
<td>Lab Exam in Room 321</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.

### ATTENDANCE POLICY/LAB ABSENCES

1. All students are required to attend all 12 physics 132 lab experiments. Three or more absents may result in getting an F in your physics course (See lecture syllabus also). **Under extenuating circumstances with written document, one lab may be excused during the summer session.**
2. No make up lab
3. Don’t be late.
4. Each lab must be completed during the lab period.

5. 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.
6. The final grade for this course will be determined by determining the average of the best twelve 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.

**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](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 (see the Student Conduct Code, policy D-34.1). 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.