

SYLLABUS

P S 1101: Introduction to Physical Science Lab – Fall 2005

Also available at: http://physics.angelo.edu/~coppeli/fall_2005/ps1101/PS1101syl_F2005.html

Instructors:

| | | |
|--|--|---|
| Dr. Christian Poppeliers VIN127.....ext230 email: cpoppeli@angelo.edu | Dr. David Bixler VIN121.....ext225 email: david.bixler@angelo.edu | Dr. Charles Allen VIN126.....ext231 email: charles.allen@angelo.edu |
| Dr. Christian Aars VIN128.....ext229 email: caars@angelo.edu | Dr. Wayne Keith VIN123 | |

PHONE: Office line-942.2524; Physics Dept. Office-942.2242

Meeting Times:

| | | | |
|------------------------|--------------------|-------------------|--------------------|
| 01Z-Poppeliers M1-2:50 | 03Z- Keith T1-2:50 | 05Z-Keith W1-2:50 | 07Z-Allen TH3-4:50 |
| 02Z-Aars M3-4:50 | 04Z-Bixler T3-4:50 | 06Z-Aars W3-4:50 | |

Lab Course Description:

This course serves as a laboratory introduction to the Physical Sciences, and is intended to accompany the Physical Science 1301 course. Concurrent enrollment in PS1301 and PS1101 is required.

Goals for this course:

To explore through experimentation the physics of motion, energy, heat / thermodynamics, electricity, light / optics, and atomic / nuclear physics and to gain understanding in the methods of science.

Required Text and Materials:

▪ "Introductory Physical Science Laboratory Experiences", by Sauncy and Bixler
*This lab manual is free of charge. HOWEVER, the manual must be printed out prior to the lab meeting. Access to the lab manual requires a user ID and a password which will be distributed in the PS1301 lectures or by your lab instructor. EACH STUDENT MUST PRINT OUT THE LAB MANUAL AND BRING IT TO EACH CLASS MEETING.

▶ A link to the lab manual <http://physics.angelo.edu/~tsauncy/FA2005/PS1101/ps1101.html> ◀

▪ Parscore form (clean & not crumpled etc.) AND a sharp #2 pencil (REQUIRED for examination days)
▪ Calculator with scientific notation capability - PLEASE NOTE THAT EVERY STUDENT IS **REQUIRED** TO BRING HIS/HER OWN CALCULATOR TO LAB EVERY WEEK.

Student Expectations:

▪ All students are expected to be in class on time and to attend all class meetings.
▪ Each student must bring his/her OWN lab manual to class. Additional copies are NOT available
▪ Most lab experiences require individuals to work together in groups of approximately 6-8 students. Each student will be **required to submit INDIVIDUAL work** during each lab meeting for grade evaluation; answers to questions should **always be in your own words**. DO NOT COPY ESSAY ANSWERS FROM EACH OTHER. No student will be given credit for any copied answers.
▪ The full attention and participation of EVERY student in the class is expected.
▪ Food, candy, gum, drinks, or tobacco are NOT allowed in the laboratory at any time. No electronic devices, other than calculators (including cell phones, audible pagers, personal stereos, etc.) may be used in the lab at any time.

Grade Assessment:

▪ Daily Grade (50%) - The "daily grade" includes: Lab Experience Hand-In Page (handed in for each lab meeting), attendance (recorded at each lab meeting), class participation, and unannounced in-class quizzes.
▪ Lab Exams (50%) - There will be 2 lab exams during the semester. Each exam will count for 25% of the overall lab grade.

Makeup/Absence Policy:

▪ There are no make-ups for missed lab meetings or for any quizzes administered during those meetings. If you must miss a lab due to University business, you may request to attend another lab meeting. THESE ARRANGEMENTS MUST BE MADE IN ADVANCE. **Students without advance arrangements approved by all instructors WILL NOT BE ALLOWED TO ATTEND ANY ALTERNATE SECTION OF LAB.** ATTENDANCE WILL BE TAKEN AT EACH LAB MEETING.
▪ **There are no make-ups for lab exams.** Please refer to the lab schedule for relevant dates. For very special and unavoidable circumstances, a student may request special arrangements to take an exam early. Such requests will be considered on an individual basis by the instructor, and must be made *no later* than ONE WEEK PRIOR TO THE DATE OF THE SCHEDULED EXAM.

Special Notices:

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is contained in both print and web versions of the Student Handbook.

Persons with disabilities which may warrant academic accommodations must contact the Student Life Office, Room 112 University Center, in order to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate arrangements can be made.

Course Schedule P S 1101: Intro Physical Science Laboratory-Fall2005

Fall 2005 Laboratory Schedule:

| WEEK | Lab Activity (relevant text sections) |
|---|--|
| 1 | LABS DO MEET THIS WEEK! PRINT OUT LAB MANUAL! Scientific Thinking |
| 2 | <i>No labs this week: Labor Day Holiday on Monday!</i> |
| 3 | Distance, Velocity, and Acceleration |
| 4 | Forces, Newton's Laws |
| 5 | Conservation of Energy lab |
| 6 | Red Hot or Cold Stuff |
| 7 | Sink or Float |
| 8 | Lab Mid Term Exam (Material coverage: Lab Experiences weeks 1-7) |
| 9 | Hot Air Balloon |
| 10 | Ohm Sweet Ohm |
| 11 | Visible Spectrum |
| 12 | Lenses and Mirrors or Light and Shadow* |
| 13 | <i>No Lab this week (Thanksgiving Holiday on Thursday)</i> |
| 14 | Radioactivity |
| 15 | Lab Final Exam (Material coverage: lab Experiences weeks 9-14) |
| <i>Week of FINAL EXAMS in courses PS1101 does NOT meet</i> | |