



Dual Enrollment PHYSICS

PHYSU 1301, PHYSU 1302, PHYSU Lab 1101, PHYSU Lab 1102

Course Syllabus

Hanna High School 2007-2008

Teacher: Mrs. Kaden ukaden@bisd.us

Room: A109

Conference Period: 1st /8th Period

Phone: Hanna High School (956)548-7600

Course description:

This course provides an introduction to both classical and modern physics. You will receive credit for PHYSU 1301, PHYSU 1302, PHYSU Lab 1101, and PHYSU Lab 1102. The courses focus on developing conceptual understanding and problem-solving abilities using algebra and trigonometry.

The college-level physics courses will cover Newtonian mechanics, thermodynamics, waves, sound, optics, electricity, magnetism, atomic physics, nuclear physics, and special topics.

Students will build upon their previous science and mathematics courses and as a result gain content knowledge and appreciation of the concepts of Physics, science and technology.

Technology-rich and inquiry based labs will help students to understand the concepts covered in the course and deepen the understanding of scientific methodology.

College Students Status:

Students enrolled in the dual enrollment program are college students. College credit and high school credit will be earned at the same time. You are working toward completion of coursework that will be on your college transcript. This is a permanent, official college record that will strongly influence future financial aid and college/university application submissions, etc. It is very important that you understand how the final grade in this course can affect your future.

Withdrawing from the class past the deadline OR failing the class will affect your future college financial aid and your future college academic status. Do not enroll in this course if you are not committed to staying in the course, studying and passing the course/s.

Withdrawing/dropping a dual enrollment course:

Remember, all dual enrollment students ARE college students and are required to follow all UTB/TSC guidelines. No exceptions.

IMPORTANT DATES AND NOTES:

- September 12, 2007 is the **deadline** to withdraw without recorded grade.
- October 29, 2007 is the **deadline** to withdraw with a **W**.
- December 8, 2007 is the last class day.
- Students are strongly encouraged to form study groups to help each other with homework or to study for exams.
- Be early, not late for class, focused and ready. Read the textbook and stay ahead of your instructor's lecture.
- Please **turn off** cellular phones and pagers during class.

Labs:

Labs and lab reports are a required part of dual enrollment physics. **A completed lab notebook is required** for credit for PHYSU Lab 1101, and PHYSU Lab 1102.

Course Goals and Expectations:

Students are expected to spend at least five hours a week on homework or independent studies in addition to a daily 50-minute class period.

Book:

“Conceptual Physics” by Paul G. Hewitt
 “Physics” Fifth Revised Edition by Douglas C. Giancoli

Online resource:

Course webpage- <http://www.bisd.us/hanna/physics04> , www.utb.edu

UT Online Homework- <http://hw.utexas.edu/>

Book webpage- <http://www.phschool.com/science/cpsurf/index.html>

COURSE CONTENT

| <u>1st Semester</u> | <u>2nd Semester</u> |
|--|--|
| 1 st 6 weeks | 4 th 6 weeks |
| Unit I. Mechanics/Kinematics | Unit IV. Vibration and Waves/ Sound and Light |
| 2 nd 6 weeks | 5 th 6 weeks |
| Unit I. Mechanics/Dynamics | Unit V. Electricity and Magnetism |
| 3 rd 6 weeks | 6 th 6 weeks |
| Unit II. Properties of Matter/Energy Conservation | Unit VI. Atomic and Nuclear Physics |
| Unit III. Heat | Special Topics |

SKILLS TO BE LEARNED

This course will develop skills essential for success in high school, in college or university studies in general. This course will help you to comprehend and explain the phenomena that occur in your environment. By choosing to take this course, you have committed to meet the following expectations:

1. Learn, analyze, identify, synthesize, and manipulate knowledge and skills;
2. Think critically;
3. Budget time effectively and efficiently—expect homework daily;
4. Develop successful study skills;
5. Engage in electronically-assisted research and/or communications;
6. Develop multi-media and oral presentation skills;
7. Apply physics knowledge to specific fields, such as medicine and technology;
8. Apply scientific reasoning inside and outside the classroom;
9. Demonstrate writing skills;
10. Fulfill an honor code commitment.

PROJECTS

- Laboratory investigations,
- Research on biographies of famous scientists and investigating current events in science, using the Internet as resource.
- Research topics, useful physics links etc. will be published on the Internet for your use.

MATERIALS

Bring to class every day

Pencils and paper, ruler

Scientific calculator,

Binder with four dividers:

1. Formulas,
2. Notes & reviews,
3. Assignments/homework, worksheets,
4. Quizzes& tests, miscellaneous

GRADING

Your grade will be determined as follows:

For each six weeks progress report the average of the major assessments (at least three) will count twice as much as the average of the minor assessments (at least five). College grades are reported at the end of the course

A (100%-90%), B (89%- 80%), C (79% -70%) , F below 70%

MAKE-UP WORK AND TESTS, RETEST

According to B.I.S.D. policies. Keep in mind-no retests in college!

You have the responsibility to see me to request that work.

If you are absent the day of the test, you are responsible for the test the day you come back.

CHEATING

I do not expect cheating to occur. Copying of other students work including labs will be severely punished!

If you are caught you will automatically be given a zero.

If you are caught cheating on a test, a retest will not be given (see handbook).

STATEMENT ON ACADEMIC DISHONESTY:

Students are expected to be above reproach in all scholastic activities. Students who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the university. "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit for any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. " Regents' *Rules and Regulations*, Series 50501, Section 2.2. Since scholastic dishonesty harms the individual, all students, and the integrity of the university, policies on scholastic dishonesty are strictly enforced. (Refer to the Student Reference Manual for more information)

CLASSROOM RULES

1. Bring all materials to class daily.
2. Be in your seat ready to work when the bell rings.
3. Listen attentively – raise your hand to speak.
4. Respect others and their property – including school property.
5. Obey all school rules.
6. ***FOLLOW LAB SAFETY RULES (no food or drinks in classroom!)***
7. ***Use of Internet according to B.I.S.D. policies.***

CONSEQUENCES

- Verbal warning, student - teacher conference,
- Call parents,
- Referral to office
- Following steps according to B.I.S.D. policies