WALTERS STATE COMMUNITY COLLEGE  
Course Syllabus

Course: PSCI 1030/1031 – Concepts of Earth and Space Science Laboratory  
Semester: 2012 - 2013  
Instructor: Elena Owen, Office 106, Phone 423-851-4772  
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Dr. A. Henry Swann, Adjunct, Office 114A, Phone 423-318-2775  
E-Mail: Albert.Swann@ws.edu

Course Supervisor: Dr. Jeff T. Horner, Dean of Natural Science, Office NSCI 126,  
Contact: Phone 423-585-6954, E-Mail: Jeff.Horner@ws.edu  
Office Hours: Instructors’ Office Hours are posted on their office doors  
FAX: 423-318-2762 (Morristown Campus)  
Secretary: 423-585-6865 (Sherry Woody)

Required Textbooks:  

Catalog Course Description:  
This is a one-semester course designed for non-science majors based on the Tennessee Science Curriculum (TSC) Standards for K-8 and TBR GenEd learning outcomes for Natural Science. Emphasis is placed on integration of physics concepts into one’s everyday life experience. Topics include motion and Newton’s laws of motion, energy, momentum, gravity, heat, electricity, magnetism, sound and light waves, plate tectonics, rocks and minerals, weather, solar system and the universe in a constructive learning environment. The student will design, develop and implement hands-on science activities for K-8 students. 3 hours lecture/2 hours laboratory

Prerequisites: None

Course Outcomes:  
Upon completion of this course student will:  
1. Describe what physics is and its holistic effect on other science fields.  
2. Understand motion and how Newton’s laws of motion are applicable to daily activities.  
3. Differentiate forms of energy such as heat, magnetism, electricity, temperature, and radiant waves.  
4. Knowledge of geology, with emphasis on types of rocks and their general formations.  
5. Appreciate the components of earth and how weather patterns influence earth.  
6. Recognize and describe the planets within the solar system and relate this solar system within the evolving universe.

The subject content for the core is shown as chapter learning outcomes that are available on the Biology Home Page at www.ws.edu (See Attachment A)
Common Core:

1. Earth and Its Place in the Universe
2. Earth Features
3. Atmospheric Cycles
4. Force and Motion
5. Energy

General Education Course Designation: Natural Science: (4 semester hours)

Instructional and Evaluation Methods:
Lectures and discussion: you are expected to attend class, pay attention and participate actively in discussions by answering questions, asking questions and making comments. You will get more out of the lecture if you have read the material in the textbook ahead of time. Always bring your book with you to lecture. Learning Outcomes for students can be found in the Walters State eLearn page for this course and the Physics section of the Natural Science homepage. Outlines and PowerPoint presentations used in lecture may be available for your review on the Walters State eLearn page for this course.

Reading: The textbook provides a good general introduction to the field of physical science. Most of the topics that are approached in the class are covered by the book. Thus, it will serve to augment lecture and to provide material for discussion. In addition, readings in the book will support the material that you will be studying in labs. The book includes many things that will help you understand the material and study for the tests, including a list of key concepts, chapter summaries, review questions, quizzes and a list of key terms.

Expectations:
Satisfactory performance in college courses generally asks for two hours of study outside of class for each hour in class. This estimate applies to an “average” student expecting an “adequate” (= C) grade. Students aiming higher or those with academic problems should expect to spend more effort than the minimum. Should you procrastinate, not read ahead of time or expect to cram everything on last days before exams this course may not be for you.

Grading Method:
Exams (50%) 4@100 pts = 400 pts
Comprehensive Final Exam (25%) 1@200 pts = 200 pts
Course Project / presentation and Portfolio (25%) 1@200 pts = 200 pts
Total: 100% = 800 pts

Note: Excused absences are at the discretion of the instructor or the administration. No work can be made-up unless the absence is excused.
90 -100%  A
80 – 89%  B
70 – 79%  C
60 – 69%  D
Below 60%  F

**Exam Policy (Make-Up Policy):**
1. **ALL** exams are to be taken at times scheduled by the instructor.
2. **ALL** exams scheduled in the course by the instructor must be taken in order for the student to receive a passing grade.
3. Make-up exams will be given totally at the discretion of the instructor for excused absences only (excused absences include illness, death in family, and military or jury duty). Make-up exams may be different from exams taken at scheduled times.
4. **Make-up exams must be taken before the next scheduled exam.**

**Course Ground Rules:**
**Students should attend the first day of class or contact the instructor prior to the first class.** Failure to do this may result in being dropped from the class.

Plagiarism, cheating, and other forms of academic dishonesty are prohibited.

Students in need of tutoring assistance are encouraged to contact the Office of Student Tutoring located in the Student Services Building, Room L107 at phone number 423-585-6920 or 423-798-7982 for the Greeneville Campus, 865-908-5494 for the Sevierville Campus, 423-851-4762 for the Claiborne Campus.

Students receiving any type of financial aid or scholarship should contact the Financial Aid Office before making any changes to their schedule. Schedule changes without prior approval may result in loss of award for the current term and future terms.

Students who have not paid fees on time and/or are not correctly registered for this class and whose names do not appear on official class rolls generated by the Admissions and Records Office will not be allowed to remain in class or receive credit for this course.

Cellular phones and electronic devices (ipods, headphones, etc.) use during classroom interaction is prohibited. Cellular phones must be turned to the non-audible mode until after class, at which time calls can be received or checked. *(See the Walters State Catalog/Handbook)*
For information related to the cancellation of classes due to inclement weather, please check the college’s Web site at www.ws.edu or call the college’s student information line, 1-800-225-4770, option 1; InfoConnect, (423) 581-1233, option 1045; the Sevier County Campus, (865) 774-5800, option 7; or the Greeneville/Greene County Center for Higher Education, (423) 798-7940, option 4. Also, please monitor local TV and radio stations for weather-related announcements. For additional information on this policy see the college catalog.

In the event of a pandemic or other college declared critical event that impacts the college’s ability to proceed with academic course activities as planned, the college reserves the right to alter this course plan. In the event of a pandemic or other event, please refer to the college’s home web page, www.ws.edu or call InfoConnect, (423) 581-1233 for further information.

Regular class attendance is a student’s obligation. (See the Walters State Catalog/Student Handbook) If for some reason a student misses class, it is his or her responsibility to see the instructor regarding missed assignments and/or activities and to be prepared for the next class. Excessive absences may substantially lower the semester grade. The college requires the instructor to keep accurate records and to report when students are not attending class.

**Students are required to supply a #2 pencil for each lecture exam.**

The wearing of hats and caps in class is not allowed! Students will be asked to remove their hats and caps.

**STAY AWAKE IN CLASS.** Your mere presence in class is not sufficient—you must be able to actively process the information presented! Sleeping in class is disruptive in two ways: the student who is snoozing is not interested and not participating in the classroom discussion; secondly, sleeping in class is considered to be disrespectful to the teacher and other students. The penalty for sleeping in class may range from the student being requested to leave the class with a following conference with the instructor, to notification of the Vice-President of Academic Affairs (in the cases of habitual sleepers). If you have a medical condition that prevents you from staying awake in class, please discuss this with the instructor.

**Safety:**
1. There will be **NO food, drink or tobacco products in the laboratory.**
2. **NO opened-toe shoes** can be worn during lab. You will not be allowed to stay in the laboratory if the lab exercise uses any sort of glassware or chemicals.
3. **NO purses, bags or coats** on top of the student tables.
4. **NO visitors in the laboratory without prior approval of the instructor.**

**Your Right to Know:**
Tennessee Law requires that you are provided notice that some of the laboratory exercises involve contact with chemicals which have been identified with potential health hazards. These chemicals include, but are not limited to: acetone, chloroform, formalin, acids and bases. While every effort has been made to make the materials as safe as possible these chemicals are toxic and you must be responsible for their safe handling. If you feel you may be at a higher risk then normal, if pregnant for example, we recommend you consult your physician.
WSCC Catalog Notification Statement:
All students attending Walters State Community College, regardless of the time and location of the class, must abide by the rules and regulations outlined in the current *Walters State Catalog/Student Handbook* and the current “Walters State Timetable of Classes.” A copy of the *Catalog/Handbook* and the “Timetable of Classes” may be obtained from the Admissions Office on the Main campus or at any of our off-campus sites. You may also access the Catalog/Handbook on-line at the following web address: [http://www.ws.edu/catalog](http://www.ws.edu/catalog).

Alternative Teaching Plan
In the event of a pandemic or other college declared critical event, the lead faculty member for this course will use eLearn to communicate with the students. If the lead faculty member is affected by this event, another member from the teaching team will assume instruction for the course. The course will continue utilizing an online format of instruction and testing.

**ATTENTION:** The Natural Science faculty members are concerned with proper academic advising of students in **ALL** Pre-Professional programs. It is our explicit desire to help you with any advising problems you may encounter.

Material covered will be from:

**Part 1 PHYSICS** Chapters 2 – 10

**Part 4 EARTH SCIENCE** Selected portions from chapters 23 – 26

**Part 5 ASTRONOMY** Chapter 27

**Appendix A, B, C, D**

In class laboratory experiences, group and individual presentations may be drawn from the following activities found in Laboratory Manual, and other sources.

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<td>Dropping the ball</td>
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<td>Dance of the Molecules</td>
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<td>Temperature mix</td>
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<td>Bright Lights</td>
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<tr>
<td>Ohm ohm on the range</td>
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<td>What is a mineral</td>
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PSCI 1030/31  STUDENT PRESENTATIONS TO CLASS  (done in Labs)

(INDIVIDUAL OR SMALL GROUP)

Include the following:

1. Overview
   a. Title
   b. Brief introduction
   c. Learning outcomes (if possible relate to Tennessee Science Curriculum /TSC) age/grade level
   d. Time required for activity
   e. Specific Science concepts (relationships) included in the learning outcomes

2. Supplies (equipment) needed for the activity
   a. Ways to improvise equipment
   b. Sources for supplies

3. Procedure – outline experiment/activity steps

4. Discussion
   a. Science principles used and /or obtained from the experiment
   b. Any sample data or report sheets used
   c. Discussion of an “errors” in the experiment
PORTFOLIO

The Portfolio should be a large loose-leaf 3 ring binder. It should be divided into "sections" with section dividers.

Class handouts (lecture or Laboratory)
Laboratory experiments done by entire class (from laboratory manual along with any additional laboratory sheets handed out by instructor)
Any group presentation material that were handed out
Any instructor demonstration handouts
Any Physical Science (physics/earth science/astronomy) teaching resources
Your presentation to the class
Class notes (optional)