WALTERS STATE COMMUNITY COLLEGE
Course Syllabus

Course: ASTR1030/1031 – Astronomy
Semester: Spring 2012
Instructor: Mrs. Elena Owen, Room 106, Claiborne County, Phone: 423-851-4772
E-mail address: Olena.Owen@ws.edu
Office Hours: Posted on office door.
Office hours are times the instructor is on campus.
If a student needs assistance, it is recommended that they make an appointment.

FAX: 423-318-2762
Secretary: 423-585-6865 (Sherry Woody)

Required Text & Materials:
Lab Manual: Astronomy Activity and Laboratory Manual, A. W. Hirshfeld, Jones and Bartlett Publishers

Catalog Course Description:
A survey of contemporary astronomy involving topics of current interest, for example: quasars, pulsars and black holes. Traditional topics on planetary, stellar and galactic astronomy will be covered. This course reviews research techniques, current knowledge and theory about the planets, stars, galaxies and the age and origin of the universe.

Course Outcomes (Lectures):
The course syllabus is built around a common core. The subject content for the core is shown as learning outcomes.

Common Core:
A. Scale of Cosmos
B. The Sky
C. Cycles of Sky Motion
D. Origins of Modern Astronomy
E. Astronomical Tools
F. Atoms and Starlight
G. The Sun
H. Properties of Stars
I. Formation and Structure of Stars
J. Deaths of Stars
K. Neutron Stars and Black Holes
L. The Milky Way Galaxy
M. Galaxies
N. Active Nuclei
O. Cosmology
P. Origin of Solar System
Q. Planet Characteristics
R. Meteorites, Asteroids and Comets
S. Life on Other Worlds
General Education Course Designation: Natural Science (4 credit hours)

Course Outcomes (Labs):
The laboratory content has been constructed from traditional core laboratory experiences. The subject content for the laboratories is presented as assessment outcomes. Formal laboratory worksheets and participation in measurement or observation assess the students knowledge and understanding of subject content.

The subject content for the core is shown as learning outcomes.

Common Core:

<table>
<thead>
<tr>
<th>Exercise No.</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Observation in Observatory</td>
</tr>
<tr>
<td>2</td>
<td>Solar System Scale</td>
</tr>
<tr>
<td>3</td>
<td>Mathematics of Astronomy</td>
</tr>
<tr>
<td>4</td>
<td>Telescopes</td>
</tr>
<tr>
<td>5</td>
<td>Star Finder</td>
</tr>
<tr>
<td>6</td>
<td>Constellations</td>
</tr>
<tr>
<td>7</td>
<td>Lunar Geology</td>
</tr>
<tr>
<td>8</td>
<td>Mars</td>
</tr>
<tr>
<td>9</td>
<td>The Sun</td>
</tr>
<tr>
<td>10</td>
<td>Planetarium Visit Field Trip</td>
</tr>
<tr>
<td>11</td>
<td>Stellar Life Cycle</td>
</tr>
</tbody>
</table>

General Education Course Designation: Natural Science (0 semester hours)

Instructional Methods:
1. Video Broadcasts
2. Class discussions of current literature
3. Films
4. Classroom demonstrations
5. Laboratory experiences

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.

The Student Can Expect from the Teacher:
1. Email response within 24 hours during the normal work week. Holidays and vacations excluded.
2. Email during the weekend will be answered on Monday.
3. Exams to be graded and returned in a timely manner.
4. Enthusiasm for the subject and encouragement to help you when you need it.
5. A fair grading system with feedback.
6. Learning that ties concepts into the real world around us.
7. Respect for you as a learner.
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%) 3@133,133,134 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.

Grading Scale:
A = 90% - 100%
B = 80% - 89%
C = 70% - 79%
D = 60% - 69%
F = 0% - 59%

Assignments/Projects:
Students must complete laboratory worksheets and participate in direct viewing thru the WSCC telescope.

Class Participation:
Class participation is important to student learning. Questions are encouraged and the instructor may ask for specific participations through question or activities to illustrate principles.

Exam 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 except as noted above.
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).
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 with disabilities must register with Student Support Services in the Student Services Building, Room U134 (phone 423-585-6892) if they need any special facilities, services, or consideration.

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 phone 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.
**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.
STUDENT PRESENTATIONS TO CLASS

(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)