 Required Text & Materials

- *Stars and Galaxies, 6th edition* by Michael A. Seeds
- *Astronomy Through Practical Investigations - AST 102 Laboratory Packet* by Lomaga, Smiley and Warasila, w/ Starfinder & protractor
- A scientific calculator

Prerequisites

Almost everything that is known about phenomena beyond the solar system is inferred by incorporating information from the physical sciences. Physical quantities and their inter-relationships are often most easily described with mathematical formulae. A knowledge of elementary algebra (MA07) is therefore required.

Course Objectives

Upon completion of AST 102 course requirements, the student should

- be comfortable with and be able to make measurements in the metric system
- be familiar with the major constellations of the winter and spring night skies, and understand daily and annual motions
- be familiar with the history of understanding of the solar system and larger universe
- understand the nature of light & electromagnetic radiation, and how it we use it to gather information
- understand the nature and structure of the Sun and how it affects the environment on Earth
- be familiar with the life cycle of stars from birth to death
- know the types and nature of groupings (clusters, galaxies) of stars
- know the current scientific model of the beginnings of the universe
- be familiar with the size scales and distances of galactic and extra-galactic phenomena and the universe as a whole
- understand how our limited point of view and instrument precision limits collection of astronomical information and how we surmount these obstacles
- be able to appreciate and comprehend any current events related to astronomy
Course Outline

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This outline is tentative and may be altered due to the circumstances that occur during the semester. There will be several planetarium sessions for learning constellations and, weather permitting, there will some outside sessions for the same reason. Outside sessions will also include observing stellar and interstellar objects firsthand through telescopes. Since the clearest nights are often the coldest, and since the weather is difficult to predict, always come prepared with warm clothing!

Lab Coursework

Various forms of coursework will be assigned as part of the laboratory section of the class. A majority of the work will be based on the lab exercises found in the Astronomy through Practical Investigations packets. These labs are to be worked on in groups containing no greater than 2 students. However, each student in a group should write up their laboratory exercise individually. Copying another student’s work is strictly forbidden.

Lab coursework will be handed in exactly one week after it is set. Any works that are not turned in when requested will not be accepted, regardless of the reason. If a student knows that they will be absent from a class when an assignment is due, arrangements may be made in advance to turn in the assignment as long as the instructor has granted the student permission prior to the date of the absence.

Office Hours

Dr McCorkle will be available for consultation before and after class and can be reached by email at mccorkle@buoy.com

Grades

The semester grade will be computed in the following manner:

- 50% exams
- 50% lab coursework

A grading curve will not be applied, and there will be no opportunities for extra credit. There will be two planetarium quizzes, will count together as one exam. There will be three lecture exams, the lowest of which will be discarded, and a cumulative final at the end of the semester (which will not be discarded). There will be no makeup exams. If a student misses an exam, the grade will be entered as zero.
Attendance

Because of the nature and amount of material in this course, it is crucial that each student attend every lecture and lab. The College has instituted the following attendance policy, which can be found in the SCCC student handbook:

The college expects that each student will exercise personal responsibility with regard to class attendance. All students are responsible for all that transpires in class whether or not they are in attendance, even if absences are the result of late registration or add/drop activity at the beginning of a term as permitted by college policy. The college defines excessive absence or lateness as more than the equivalent of one week of class meetings during the semester. Excessive absence or lateness may lead to failure in a course or removal from the class roster.

A student may be removed from the class roster by an instructor at any time when, in the judgement of the instructor, absences have been excessive. This policy clearly places the responsibility of attending class on the student, that each student is allowed two absences for the semester, and permits the instructor to withdraw or fail the any student that exceeds the number of absences, and that each student is responsible for any material that was covered during the class of absence.

Withdrawal Policy

Students who wish to withdraw from the course, without academic penalty, must do so by mid-semester (Mar 23, 2009). Any student who as not withdrawn by this date will be required to finish out the semester, regardless of their grade. Therefore, any student who wishes to withdraw, but has not formally done so will be considered to still be in the class, and a final grade will be administered. It is the students’ responsibility to complete the proper withdrawal procedure, not the instructors.

Cheating

Suffolk County Community College has instituted the following policy regarding academic integrity, which can be found in the SCCC student handbook.

Any form of cheating, be it on a formal examination, informal quiz or other submitted material, is a violation of college conduct. Copying material from fellow students or from other sources during an examination may result in a failing grade for the course and/or serious disciplinary sanctions as outlined in the Code of Conduct. When students work together on a project, this becomes a joint responsibility of a group so designated and should be limited to the people and resources agreed upon with the instructor.

Any student who is caught cheating will be punished to the fullest extend of the college’s cheating policy.

Lateness

Students are responsible for arriving on time to class, at 6pm. Attendance will be taken at 6:05