COURSE SYLLABUS

Physics 133.04 Introductory Astronomy Credit Hours: 3 Spring – 2008

Meeting Times: 9:30–10:50am, Tues & Thurs.

Location: 105 Farrington

Instructor: Alan Butler; B.A., M.S.

Office: 315 Farrington
Voice: (936) 294–4943
Email: rab012@shsu.edu

Office Hours: T-Thu: 1–3 p.m.

Course Description: This is a survey course designed to cover most aspects of astronomy and astrophysics. The textbook used for this class is conceptual in nature, although some basic mathematics must be included to gain a proper perspective of astronomy as a science. There are no pre–requisites for this class.

Course Outline: The following topics will be covered in this course:

- Our place in the universe
- How science works the scientific method, overview of basic math skills.
- Understanding gravity, motion, and energy
- History of astronomy; navigation, "time" by the stars
- Matter and energy in the universe
- Light and electromagnetic radiation
- Telescopes and related instruments; detecting radiation
- Terrestrial planets: Earth, Mercury, Venus, & Mars
- Jovian Planets: Jupiter, Saturn, Uranus, & Neptune
- Satellites of the Jovian planets
- Asteroids, comets, and Pluto
- Formation of the Solar System
- The Sun
- Extrasolar planets
- Search for extraterrestrial life

Required Textbook: "The Cosmic Perspective (Media Update)," 4th edition. By Bennett, Donahue, Schneider & Voit. (ISBN 0–8053–9296–3)

Required Materials: "Mastering Astronomy" Student Access Kit, which comes bundled with (free) new textbooks. If a used textbook is bought, the access kit must be purchased separately from the website www.masteringastronomy.com.

Attendance Policy: Because my lectures do not present the subject matter in the same sequence as the textbook, attending class will be important to you.

Homework & Quizzes: Homework and Chapter Quizzes will be assigned and posted on the "Mastering Astronomy" website (www.masteringastronomy.com). Homework and quizzes will be graded after each session, providing instant feedback to students. All assignments are due on the last class day, (at the latest) allowing students a great amount of flexibility. However, it is strongly recommended that they be utilized to prepare for exams, and completed in a timely manner.

Semester Grade: Your semester grade will be calculated by taking a weighted average of the categories below, and the result will be assigned an appropriate letter grade according to the grading scale shown. Exams will consist of 2 in-class exams during the semester, followed by a comprehensive Final, which is not optional. Students must provide a <u>scan-tron</u> for each exam. All exams will be multiple—choice, and closely related to the assignments and the material covered in class. **Only at my discretion will any make—up exams be given, and written justification for missing an exam will be required.**

 Homework
 25%

 Quizzes
 10%

 Midterm #1: (September 12)
 20%

 Midterm #2: (October 10)
 20%

 Final Exam: (October 31)
 25%

Grading Scale:

A: 90% – 100% B: 75% – 89% C: 60% – 74% D: 50% – 59% F: 0% – 49%

Classroom Rules of Conduct: Students will refrain from any classroom behavior that (intentionally or unintentionally) disrupts the learning process, which thereby impedes the mission of the university. Cellular phones and pagers must be turned off in class. The classroom is not a place to eat, sleep, read newspapers, making offensive remarks, talk at inappropriate times, make offensive remarks, or engaging in any other form of distraction. Inappropriate behavior will result in a directive to leave the class. Students who are especially disruptive will be reported to the Dean of Students for disciplinary action in accordance with university policy.

Visitors in the Classroom: Only registered students enrolled in this course may attend this class. Anyone wanting to visit the class should make prior arrangements with the instructor. In all cases, visitors must not distract or disrupt the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office.

Academic Dishonesty: All students are expected to engage in academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in all academic experiences, both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The university and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to – cheating on an exam, other academic work to be submitted, plagiarism, collusion, and / or abuse of resource materials.

Students with Disabilities: SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines, with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may adversely affect your work in this class, then you should register with the SHSU Counseling Center, and talk with me about how I can best assist you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Counseling Center.

Religious Holidays: Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: "a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20...." A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed. For the complete university policy, see: http://www.shsu.edu/~vaf_www/aps/documents/861001.pdf