PHYS 1301 (section 020): Fundamentals of Astronomy
Course Syllabus for Spring 2006, TR 8:00-9:15 am

Instructor: Dr. Wayne Keith (942-2524 x227, wayne.keith@angelo.edu)
Office Hours: VIN 123 - MW 9-11, TR 9:30-11, TW 2-3, and F 9-10
Web: http://physics.angelo.edu/~wkeith and http://blackboard.angelo.edu
Text: *Foundations of Astronomy (8th)*, by Michael A. Seeds
Required: scientific calculator, paper, pen/pencil

Course Description: This course is intended to introduce the layperson to astronomy. Specifically, we'll study telescopes, light, the night sky, stars, galaxies, and the universe as a whole. Most of the topics studied in the class will be conceptual, but math will be used in the class. Although it is assumed that the student knows math through the high school algebra level, problems requiring more than knowledge of the basic operations (addition, subtraction, multiplication, and division) will be reviewed extensively in class. The course is three credit hours, however, an optional lab (PHYS 1101) may be taken to satisfy a 4-hour lab science degree requirement.

Course Goal: Introduce you to the scientific method and teach you how to use it to solve problems. Significantly increase your factual knowledge about select topics in astronomy.

Grading: 25% Daily grades: Class participation, attendance, short quizzes (up to one per class session). Four lowest daily grades WILL BE DROPPED prior to computing overall grade.
25% Online chapter quizzes: Taken individually outside of class and may be repeated for higher score. Only highest score achieved for each quiz will be kept for grading.
30% exams (15% each): In-class exams.
20% Final exam: Comprehensive, but concentrating on the final third of the course.
Formula: Overall Grade = (daily average x 0.3) + (quiz average x 0.3) + (midterm x 0.2) + (final x 0.2)

Attendance/Make up policy: No make up quizzes or excused absences will be given for any reason, since four daily grades will be dropped. See instructor to request extra credit assignments to replace missed quizzes, however, there is no guarantee any extra credit will be available.

ADA Statement: Persons with disabilities which may warrant academic accommodations must contact the Student Life Office, Room 112 University Center, in order to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate arrangements can be made.

Academic Honesty: Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is contained in both print and web versions of the Student Handbook.

Final notes: Class discussion is strongly encouraged; please feel free to ask questions, during class or outside of class, about anything that is not clear. Properly preparing for class by reading the notes and textbook will help you, especially with the in-class quizzes.

PHYS 1301.020 Spring 2006 Course Schedule

All dates are tentative and subject to change except **bold** dates.

Date	Lecture #	Tentative Topic
1/17	1	Introduction and Overview
1/19	2	Ch 1. The Scale of the Cosmos
1/24	3	Ch 2. The Sky
1/26	4	Ch 4. Ancient and Medieval Astronomy
1/31	5	Ch 4. Renaissance and Modern Astronomy
2/2	6	Ch 5. Galileo, Kepler and Newton
2/7	7	Ch 5. Relativity
2/9	8	Ch 6. The Basics of Telescopes
2/14	9	Ch 6. Advanced Telescopes
2/16	10	Ch 7. Starlight
2/21	11	Ch 7. Spectroscopy
2/23		**Test 1**
2/28	12	Ch 8. The Sun
3/2	13	Ch 8. Solar Interior
3/7	14	Ch 9. Characteristics of the Stars
3/9	15	Ch 10. The Interstellar Medium
3/13– 3/17		**Spring Break**
3/21	16	Ch 11. The Formation of Stars
3/23	17	Ch 12. Stellar Evolution
3/28	18	Ch 13. The Deaths of Small Stars
3/30	19	Ch 13. Supernovae and the Deaths of Large Stars
4/4	20	Ch 14. Neutron Stars and Black Holes
4/6		**Test 2**
4/11	21	Ch 15. The Milky Way Galaxy
4/13	22	Ch 15. Formation and Evolution of the Milky Way
4/18	23	Ch 16. Properties of Galaxies
4/20	24	Ch 16. Galactic Evolution
4/25	25	Ch 17. Active Galaxies and Quasars
4/27	26	Ch 18. The Universe
5/2	27	Ch 18. Cosmology
5/4	28	Ch 26. Life on Other Worlds
5/9		**Final Exam – Test 3 (Tuesday at 8:00am)**

Online Quiz Due Dates

Quiz Number	Chapters Covered	Date Due (By 11:59 pm)
1	1, 2	Friday, January 27
2	4, 5	Friday, February 10
3	6	Friday, February 17
4	7	Friday, February 24
5	8	Monday, March 6
6	9	Friday, March 10
7	10, 11, 12	Monday, March 27
8	13	Monday, April 3
9	14	Friday, April 7
10	15	Monday, April 17
11	16	Monday, April 24
12	17	Friday, April 28
13	18	Friday, May 5