

Astronomy 1400 – Section 002

Solar System Astronomy

Instructor: Dr. Keith West
Office: Science Building, Room 116
Office Hours: MW 9:00-10:30, and other office hours by appointment.
Contact Information: TBD

Textbooks: Two texts are required for this class:

1. The Solar System: The Cosmic Perspective (6th Edition) by Bennett, Donahue, Schneider, and Voit (ISBN 879-0-321-63366-8), and
2. Astronomy 1400: Solar System Astronomy Lab Manual produced by the Texas Tech Department of Physics

In addition to these required textbooks, other texts will be used for supplemental information throughout the course.

Lecture Schedule: TR 8:00-9:20 in Room 7 of the Science Building. Class starts promptly at 8:00; please do not be late.

Laboratory: There is a required laboratory that is part of this course. You will receive one grade for the lecture and laboratory combined – they are not separate courses. *If you fail the laboratory portion of this class, you will fail the course.* In addition to the weekly lab meetings (Physics Building, Room 121), you have the opportunity to visit the Texas Tech Observatory for some nighttime observations and the Texas Tech Moody Planetarium as part of your lab grade. All necessary information regarding these activities will be posted on the observatory website (linked from the Texas Tech Department of Physics homepage) or in your lab manual. If no lab is listed on your schedule, see your professor immediately. The “Discussion” listed on your schedule is the off-campus part of the lab.

Course Purpose: This course will satisfy a four-hour laboratory science requirement; it has no pre-requisite. The course is intended for both students who are interested in astronomy and those who are not necessarily “science-oriented” but still need to satisfy a science requirement. For those interested (or who become interested) in astronomy, this course will give you the tools to continue astronomy as a lifelong interest. For those who are not as excited, it is still critical for you to have a fundamental understanding of the basics of science if you are to take your place as an educated member of society. Remember, the population at large determines the role of science in society – not just scientists.

Grading: There are a total of 165 possible points distributed between four components of the class:

1. Homework: 20 points
2. Laboratory/Observing: 50 points
3. Midterm Exam: 35 points
4. Final Exam: 60 points

Homework: There will be nine (9) homework assignments, each worth 2 points (2 points are therefore given to you for “free” if you complete all eight assignments).

You must submit your completed homework assignment by the beginning of class on the day that it is due. *No late homework will be accepted*; therefore, for each homework assignment you do not submit timely, you will receive a grade of 0. Since periodically life happens during the semester, you may submit one (1) paper as a “replacement” for a missing homework assignment. Papers do not replace poor grades – they are meant to help students when something unavoidable happens and they cannot complete their homework assignment.

Papers: Papers completed as homework replacement are due no later than the end of class on the day the following homework assignment is due. *No late papers will be accepted*.

Papers must be five (5) pages in length, on an astronomical topic of your choice (the topic must be approved by your professor in advance). All work must be original; use proper academic citations as appropriate (if you have questions, you may ask your professor or the Texas Tech University Writing Center). Papers must be submitted using 12-point Times New Roman font (Greek characters generated using the “Symbol” font may be used if appropriate). All paragraphs must be single-spaced, and all pages must have one-inch margins (top, bottom, left, and right). A maximum of three (3) appropriately sized graphics may be used.

Exams: The midterm exam will cover material up to the date of that exam; the final exam will be comprehensive and will include material from class discussions and the supplemental texts; both exams will include materials from the laboratory portion of the class. Please do not ask if something we discuss in class or during your laboratory sessions will be on one of the exams – simply assume that it will.

Grading Scale:

Number of Points	Final Grade	Number of Points	Final Grade
165 or more	A+	115 – 131	C
149 – 164	A	99 – 114	D
132 – 148	B	Less than 99	F

Attendance Policy: No attendance will be taken, but material will be covered that is not in the textbook and this material is guaranteed to be on both the midterm exam and the final exam. It is therefore to your advantage to attend class.

Class Policies:

- Reading materials other than the assigned reading and other irrelevant activities are not allowed since they distract other students and your professor. If you become a distraction, you will be asked to leave the class.
- No electronics of any kind (including laptops, tablet computers, iPads, cellular telephones, pagers) are allowed in class unless the need for such devices is required for a disability that is documented by Student Disability Services and AccessTech.
- Any student who, because of a disability, requires special arrangements in order to meet class requirements should contact their professor as soon as possible to make the necessary arrangements. Students should present appropriate verification from Student Disability Services during your professor’s office hours. *Note: Instructors are not allowed to provide classroom accommodations until appropriate verification from Student Disability Services has been provided.*
- Responsible citizenship among college students includes honesty and integrity in classwork; regard for the rights of others; and respect for local, state, and federal laws as well as campus standards. Students are responsible for understanding the standards of the “Code of Student Conduct” and the Student Handbook. In the spirit of the code, a student’s word is a declaration of good faith acceptable as truth in all academic matters. Therefore, cheating and attempted cheating, plagiarism, lying, and stealing of academic work and related materials constitute violations of the Code of Conduct. These violations will not be tolerated, and if caught, each student involved will fail the class and be asked to leave.

Tentative Class Schedule

<i>Week Starting</i>	<i>Topic(s) Covered</i>	<i>Week Starting</i>	<i>Topic(s) Covered</i>
14 January	Syllabus, Ch. 1	18 March	Chapter 7
21 January	Chapters 1 & 2; Laboratory Introduction	25 March	Chapter 8
28 January	Chapters 2 & 3	1 April	Chapter 9
4 February	Chapter 3	8 April	Chapter 10
11 February	Section S1	15 April	Chapter 11
18 February	Chapter 4	22 April	Chapter 12
25 February	Chapter 5	29 April	Chapter 13
4 March	Chapter 6; Midterm Exam	6 May	Review
11 March	Spring Break – No class	Final Exam	13 May @ 7:30 – 10:00

Note: This schedule will be your reading assignment unless otherwise changed by your professor, and this schedule may change.