IMPORTANT: If you have successfully completed Astronomy 2 and Astronomy 5, you may not take this course for credit.

This syllabus applies only to those students taking Astronomy 10 Online and not at a Sierra College campus site.

Course Description: Elementary Astronomy (3 units), Lecture Course - General principles and the fundamental facts of astronomy. Designed primarily for students not majoring in a physical science or mathematics.

To satisfy the Sierra College general ed. laboratory science requirement, students should also enroll in Astronomy 11, Astronomy 14, or equivalent either concurrently or in a future semester.

Instructors: David Dunn and Chuck Pullen

Course Codes: 80306, 84778 (Dunn); 80307, 84780 (Pullen)

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Office Hours: Daily M-F via online communications. Your instructor may choose to be online more often. This is an online course. Face-to-face meetings may be possible – email your instructor to enquire.

Included by Reference: The Canvas documents “Schedule of Course Activities”, “Grading Policies and Procedures”, and “Netiquette” are considered part of this syllabus. Your First Tasks Assignment requires you to study them and you will have a test on them and this syllabus.

“Third-Hour” Assignments

Astronomy 10 is a 3-unit lecture course, which for most traditional on-campus 3-unit courses usually means that you attend 3 hours of lecture during a given semester week. However, in Astronomy 10, on-campus students attend 2 hours of lecture and a third hour in “third-hour” (and hence its name), where the majority of time is spent working on a variety of hands-on activities. This separation of lecture and hands-on activities is maintained with the online version of Astronomy 10 with Homework Exercises (SmartWork) directed at the required text and Third-Hour Exercises aimed at using your required charts/maps/software.

Please note: Third-Hour does not count towards lab credit. Check with an academic counselor to determine if your educational goals require you to take the lab.
**VERY IMPORTANT – DROP POLICY**

If you decide that you will be drop this class, then please drop this class yourself. The Instructor may drop a student for lack of participation and, then again, the instructor might not.

Also, if you think you may have to withdraw or drop this class, be sure to understand that there are two deadlines for which you must be aware. One deadline allows you to drop the class, receive a refund, and avoid a “W”. A second, later deadline allows you to withdraw with no refund and receive a “W” on your transcripts. For this particular online course, these dates are as follows:

- September 3  Last day to add and last day to drop, receive a refund, and avoid a “W”
- October 30   Last day to withdraw and get a “W”
- December 8   Last day of instruction

**Textbook and Materials** (Buy now at on or off campus stores):

- **Required Text:**  *Understanding our Universe, 2nd ed.*, by Stacy Palen, Laura Kay, Brad Smith, & George Blumenthal (Looseleaf) (**via bookstore**)
- **Required Maps:**  Star Maps (Constellation Charts) SC-001 and SC-002
- **Required Chart:**  *Sky Gazer’s Almanac* for current year and Latitude 40 deg North.
- **Required CD/Software:**  *Starry Night*, College Edition, 7.0 (upgraded to 7.6)
- **Required Equipment:**  *The Night Sky Planisphere* (9” cardboard or plastic) by David Chandler covering latitudes of 30-40° North. **NOTE:** If you cannot find Chandler’s 9” planisphere, other 5”-9” planispheres should work.

Options to getting the Text, SmartWork, and Starry Night Software

1. The Sierra College Bookstore sells a bundle that includes the Text, SmartWork Code, and Starry Night 7.0 software which will likely be cheaper than purchasing each item separately. The bookstore also offer an eBook, SmartWork, Starry Night 7.0 package

2. The text is available as an E-book from the SmartWork web site ([https://digital.wwnorton.com/universe2](https://digital.wwnorton.com/universe2)). This requires you to buy access to SmartWork and the Starry Night software separately also from the same web page. Cost is about $80 if you buy the E book text with SmartWork from the Publisher and Starry Night from [http://www.starrynighteducation.com/product_12.html](http://www.starrynighteducation.com/product_12.html). SmartWork is a part of the online homework, but cannot be accessed until the start of the semester (we need to give you instructions etc…).


**IMPORTANT:** Registration into SmartWork 3.0 is required by the end of the second week. Access to SmartWork 3.0 come with a new textbook or can be purchased online.

SmartWork 3.0 is a part of the online homework, but cannot be accessed until the start of the semester (we need to give you instructions etc…).
Astronomy Department, SmartWork 3.0, and Canvas Web Sites

The Astronomy Department maintains a web site with a variety of features at the web address: 
http://astronomy.sierracollege.edu/. Be sure not to confuse the materials found on the Astronomy 10 web page with the online version of the course; the material on our department web site is for on-campus students. We appreciate any comments or suggestions for improvement.

The course text has a companion web site at https://digital.wwnorton.com/universe2. All students must register on this web site in order to complete homework assignments. Before you register, you will need an Access Code (supplied with a new text bought through the Bookstore or purchased at the SmartWork web site), a SmartWork Course ID (to be given to you by your instructor when you complete the “First Tasks” assignment), and an Astronomy 10 Student ID (also to be given to you by your instructor when you complete the “First Tasks” assignment). DO NOT ATTEMPT TO REGISTER FOR SMARTWORK UNTIL TOLD TO DO SO BY YOUR INSTRUCTOR.

Besides being the place to work on homework assignments, the SmartWork web site also has very valuable resources to help students improve their proficiency in astronomy. For example, there are simulations done by Author of the textbook to aid you in understanding difficult concepts.

All Sierra College students automatically receive accounts in the online Canvas environment (see http://lrc.sierracollege.edu/dl/OnlineClasses/Index.htm for details) and obviously Astronomy 10 Online is being offered through this environment.

General Instructor Expectations of Students: We expect each student to give his or her best effort in participating in class activities and accomplishing assigned tasks. Daily “attendance” in the Astronomy 10 Online Canvas site is crucial to a student’s success. Of particular importance are the Announcements, Discussions, and Modules sections.

We expect students to adhere to their behavior responsibilities as detailed in the Sierra College Student Handbook. Cheating, plagiarism, or any other forms of dishonesty are considered grounds for an immediate course grade of F (with a permanent designation of “academic dishonesty”) and possible dismissal from Sierra College. Finally, students are expected to adhere to the Policies and Procedures given at the end of this syllabus. Additionally, students are expected to follow proper “Netiquette” as outlined under Course Documents in Canvas and in the post in Miscellaneous Forum under Discussions in Canvas.

Student Expectations of Instructors: You can expect our best effort in teaching the principles of astronomy. We hope to impart in our students a sense of excitement in observing and studying nature’s show in the cosmos. We are very open to suggestions for topics that students wish to discuss or improvements in the course content and/or presentation. If you are experiencing severe difficulty with a particular instructor, bring your concerns to the attention of the Astronomy Department Chair or the Science and Mathematics Division Dean.

Grading and Attendance

1. The final grade in this class is based on total "assigned" points (500):
   A = 90% or more of total points assigned (= 450)
   B = 80% or more, but less than 90%, of total points assigned (= 400)
   C = 70% or more, but less than 80%, of total points assigned (= 350)
   D = 60% or more, but less than 70%, of total points assigned (= 300)
2. A three-part 100-point Midterm Exam will be given at the times and places (in Canvas) as shown on the General Schedule of Activities. A Star Quiz worth 30 points and a two-part Final Exam worth 110 points will be given during the last week of class. Any exceptions to the exam schedule will be noted in class.

3. Homework exercises are worth 10 points each. There are 20 questions with each question worth 0.5 point. A final homework score that includes a half-point is rounded up to the next highest integer. See the General Schedule of Activities for the exact due dates.

4. Third-Hour exercises are worth 10 points each (except for the first and last one – these are worth 5 points) There are more questions on these exercises than are graded. A pseudo-random process is used to determine which ten (or five) questions are graded (one point per graded question). See the General Schedule of Activities for the exact due dates.

5. A 10-point quiz will be given at the beginning of the semester to test you on what you have learned about the Syllabus and Schedule of this online course.

6. Extra Credit may be earned for special activities described on the Extra Credit Options sheet. Any single extra credit activity may earn no more than 5 points. The maximum number of points for extra credit during the semester is 25 points. Extra credit may be turned in at any time up until the last day of class. See the General Schedule of Activities for the exact due date and time.

7. Bonus point quizzes or exercises may be given at the instructor's discretion. These points, like extra credit can only enhance your grade.

8. The maximum total points a student may earn through extra credit and bonus is 25.

9. A student may be dropped from class for excessive “absences”. See the Sierra College catalog for the definition of excessive absences – it’s about 3 weeks of non participation. For an online course, “absence” in general means a lack of a periodic appearance in the Astronomy 10 Online Canvas environment and the lack of the regular submission of assignments.

Policies and Procedures – Very Brief Version (read full document as previously instructed)

1. The “First Tasks” assignment must be completed to the instructor’s satisfaction by the due date before any other assignment/exam can be submitted for credit. Students will be dropped for failure to complete “First Tasks”.

2. The student will also be dropped for failure to register in SmartWork and completing Assignment 01 by the end of the second week of classes.

3. Tests and quizzes cannot be made up. If a problem exists, notify your lecture instructor before the test/quiz date. However, even with prior notification, an instructor is not obliged to extend any test/quiz deadline.

4. Late homework exercises are not accepted under any conditions. These exercises are due by 11:59 pm on the days indicated in the General Schedule of Activities (Fridays of the week they are assigned). Homework exercises are completed in the SmartWork environment.

5. Late Third-Hour exercises are not accepted under any conditions. These exercises are due by 11:59 pm on the days indicated in the General Schedule of Activities (Fridays of the week they are assigned). Third-Hour exercises can be found in the “Modules” section of the Astronomy 10 Online Canvas environment. Late or missed Assignments cannot be made up. Extra Credit / Bonus Assignments can provide some relief up to the maximum semester limit of 25 points.

6. Students are expected to check the grading accuracy of their exams/quizzes, exercises, and bonus/extra credit. Students are also expected to check their posted grades for accuracy (the Gradebook is in Course Documents under Pages). Canvas’s internal grade book is not used in this course – ignore it. Students are given one week after a given deadline to bring any errors to the attention of their lecture instructor. Under no circumstances will grade accuracy be
discussed after the final grade-reporting deadline established by the Sierra College Admissions and Records office. This deadline is usually set in the week after the last week of class.

7. Students are expected to understand completely the document “Astronomy 10 Online – Grading Policies and Procedures” found in the Course Documents section under Pages of the Astronomy 10 Online Canvas environment.

8. Examples of behavior subject to a grade F with academic dishonesty:
   - The use of answer keys from previous semesters.
   - Giving answers to another student without any attempt by this student to participate in the exchange of ideas leading to the answer.

Course Student Learning Outcomes

1. Students analyze basic science and core physics, to discover how they apply to astronomy.
2. Students will relate core concepts in basic science to stellar astronomy, assessing the various factors that are important to stellar evolution.
3. Students will synthesize information from various sources (classroom instruction, online resources, etc) to produce a coherent understanding of galactic/extragalactic astronomy.
4. Students will use concepts from planetary astronomy to investigate the types of different planetary classes and other objects in the solar system.

Thank you for electing to take Astronomy 10 Online. We hope you will enhance your knowledge and appreciation of astronomy and enjoy the subject as much as we do.

The Sierra College Astronomy Department Staff