Syllabus

Classical and Modern Astronomy
3+1 Credit Hours
ASTR 1303.502 and ASTR 1103.520
Fall 2020

Instructor: Abigail Rickards, M.S.
Office: Virtual through Zoom
Office Hours: Tu-W 12-2pm

I will be available to answer emails during office hours. If you would prefer to visit over the phone or via Zoom, please schedule a meeting via www.calendly.com/abigailrickards at least one day in advance.

Email: Abigail.Rickards@sfasu.edu

Preferably, use Brightspace D2L to send emails related to the course. If Brightspace is unavailable, send email to Abigail.Rickards@sfasu.edu and include “ASTR 1303” somewhere in the subject line. I will communicate with you about assignments and due dates entirely through Brightspace.

Please Note: The syllabus and course schedule may change at the discretion of the instructor. Notification of changes will be made through Brightspace. Since this is an online course, please remember that this course will continue past Thanksgiving break.

Course Information

Prerequisites

None.

Course Description

Introductory study of planetary astronomy, astrophysics and cosmology. Lecture and laboratory grades are computed into one grade and the same grade is recorded for both lecture and lab. Lab assignments will be assigned and collected through the Brightspace ASTR 1303 lecture.

Co-requisite: ASTR 1103.

This is a survey course that will stress the historical and descriptive aspects of our knowledge of astronomy. The major aim will be to give each student an appreciation and understanding of the
scope and content of our universe. The methods of science will be strongly emphasized. Topics will include: star charts, the night sky, light, telescopes, stars, galaxies, and planets.

**Course Grade**

Each major exam will be graded on a 100-point scale. All exams (including the final) are weighted equally, and the lecture portion of the course accounts for 75% of the total course average. The lecture and lab grades will be combined as shown below and the same letter grade will be recorded for both lecture and lab.

\[
\text{Course Average} = 0.60 \times (\text{Exam Average}) + 0.15 \times (\text{Average of Quizzes and Activities}) + 0.20 \times (\text{Average of Indoor Labs and Night Lab}) + 0.05 \times (\text{Lab Exam})
\]

**Online Exams**

Exams shall be closed book, closed notes and shall represent the student’s individual work. Please refer to the Academic Integrity section below for further details. Exams will be no longer than fifty questions and 120 minutes. Three attempts will be allowed. Further changes to this policy may be made (such as a proctor or webcam requirement) and shall be announced via Brightspace.

**Course Goals**

**Program Learning Outcomes**

The student will demonstrate proficiency in the basic and applied fields of physics and astronomy.

**General Education Core Curriculum**

The Texas Higher Education Coordinating Board has identified six core learning objectives: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives.

By enrolling in ASTR 1303 you are also enrolling in a Core Curriculum Course that fulfills the Empirical and Quantitative Skills requirement. You will see this course on your D2L list.

At one point during the semester, you will receive an assignment that fulfills both the requirements of this course and the needs of Stephen F. Austin State University’s Core Curriculum Assessment Plan with the Texas Higher Education Coordinating Board. When you complete this one assignment, you need to upload the assignment to both your standard course dropbox determined by your Instructor and the “Core Curriculum” dropbox. The Core Curriculum dropbox will be identified by the Objective for which work is being collected. (Examples: Critical Thinking, Teamwork, Social Responsibility Empirical & Quantitative Skills, Personal Responsibility, Communication Skills-Written, Communication Skills-Written & Visual, and Communication Skills-Oral & Visual.) Please note that this only applies to the approved assignment. All other
assignments should be submitted according to regular class operations. If you have any questions, please see your Instructor or the Office of Student Learning and Institutional Assessment.

When you complete the assignment mentioned above, you will upload the assignment to both the AST105 dropbox and the Empirical and Quantitative Skills dropbox.

Please note that this only applies to the specific assignment listed in the matrix below. All other assignments should be submitted according to regular class operations.

If you have any questions, please see your instructor or contact the Institutional Effectiveness Office at (936) 468-1130.

The chart below indicates the core objectives addressed by this course, the assignment(s) that will be used to assess the objectives in this course and uploaded to the D2L Empirical and Quantitative Skills dropbox this semester, and the date the assignment(s) should be uploaded to the D2L Empirical and Quantitative Skills dropbox. Not every assignment will be submitted for core assessment every semester. Your instructor will notify you which assignment(s) must be submitted for assessment in the D2L Empirical and Quantitative Skills dropbox.

1. Resource Development: The students will demonstrate the use of appropriate technology and sustainability in the hospitality industry.
2. Professional Behavior: The student will exhibit the professional behaviors (strong communication skills, a professional image, a good work ethic, and adequate preparation for employment in his/her specific discipline) expected in the fields of Human Sciences and Hospitality.
3. Key Competencies: The student will demonstrate competence in his/her specific discipline using oral and written forms. The student will also demonstrate competence in calculating, interpreting, and understanding ratios, financial statements, and budgets related to the hospitality industry.
4. Service Attitude: The student will demonstrate a positive service attitude.

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<tr>
<th>Core Objective</th>
<th>Definition</th>
<th>Course Assignment Title</th>
<th>Date Due in D2L</th>
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<tbody>
<tr>
<td>Critical Thinking Skills</td>
<td>To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.</td>
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<tr>
<td>Communication Skills</td>
<td>To include effective development, interpretation and expression of ideas though written, oral, and visual communication.</td>
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<tr>
<td>Empirical and Quantitative Skills</td>
<td>To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.</td>
<td>Measurements Lab (Lab 2)</td>
<td>Please see the course schedule for the due date.</td>
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<tr>
<td>Teamwork</td>
<td>To include the ability to consider different points of view and to work effectively with others to</td>
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support a shared purpose or goal.

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<tr>
<th>Personal Responsibility</th>
<th>To include the ability to connect choices, actions and consequences to ethical decision-making.</th>
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<tr>
<td>Social Responsibility</td>
<td>To include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.</td>
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**Course Objectives (Student Learning Outcomes)**

By the end of the course, a successful student will be able to:

1. Recognize that the universe can be described by a few natural laws.
2. Describe the characteristics of objects within the solar system including the sun, planets, moons, asteroids, and comets.
3. Demonstrate a basic familiarity with stellar life cycles, galaxies, and extragalactic objects.
4. Demonstrate skills developed in empirical and quantitative analysis.

**Course Materials**

Required Text: Astronomy (Free Textbook: https://openstax.org/details/books/astronomy)  
Author: Andrew Fraknoi  
ISBN: 978-1-50669-803-8

ASTR 1103, the Astronomy Laboratory, is a co-requisite and a new edition of the lab manual must be purchased through the University Bookstore at https://sfasu.bncollege.com or in person.

Required Technology: This course will be delivered through the university’s Learning Management System (LMS), Brightspace. Each student is required to have access to a computer with internet capabilities in order to access the course. Each student is also required to have a working, university (sfasu.edu) email account.

As a student of Stephen F. Austin State University, you have free access to this course’s Brightspace site. You will need to access the course regularly throughout the semester. Assignments for this course and the associated lab will be submitted electronically through Brightspace, unless otherwise instructed. Some assignments may require audio files. Students must have a working computer microphone or the ability to add audio to files on their computer to complete these assignments. Files with audio are submitted as PowerPoint files. All other submitted files must be in PDF or Word format.
**Technical Support**

If at any point during the course (but especially during quizzes or exams) you experience technical difficulties in Brightspace, please let your instructor know immediately. The instructor will work with you to determine an appropriate response (alternate delivery method or extension of due date) ONLY IF you have emailed the instructor before the deadline for submitting the assignment. As a result, it is imperative that you do not wait until the last minute to complete assignments.

You will also need to contact the SFASU Brightspace Support Team by email (d2l@sfasu.edu) or phone (936.468.1919) for technical help.

**Class Attendance and Excused Absence: Policy 6.7**

Regular, punctual attendance, documented participation, and, if indicated in the syllabus, submission of completed assignments are expected at all classes, laboratoried, and other activities for which the student is registered. For this course, attendance will be based on participation in quizzes, discussion boards, labs, and exams. Based on university policy, failure of students to adhere to these requirements shall influence the course grade, financial assistance, and/or enrollment status. The instructor shall maintain an accurate record of each student’s attendance and participation as well as note this information in required reports and in determining final grades. Students may be excused from attendance for reasons such as health, family emergencies, or student participation in approved university-sponsored events. However, students are responsible for notifying their instructors in advance, when possible, for excusable absences. Whether absences are excused or unexcused, a student is still responsible for all course content and assignments. Students with accepted excuses may be permitted to make up work for up to three weeks of absences during a semester or one week of a summer term, depending on the nature of the missed work. Make-up work must be completed as soon as possible after returning from an absence.

**Face Coverings**

Masks (cloth face coverings) must be worn over the nose and mouth at all times in this class and appropriate physical distancing must be observed. Students not wearing a mask and/or not observing appropriate physical distancing will be asked to leave the class. All incidents of not wearing a mask and/or not observing appropriate physical distancing will be reported to the Office of Student Rights and Responsibilities. Students who are reported for multiple infractions of not wearing a mask and/or not observing appropriate physical distancing may be subject to disciplinary actions.


**Academic Integrity**

Academic integrity is a responsibility of all university faculty and students. Please ensure that all work you post or submit is your original work, and that any material belonging to others is properly cited according to our discipline’s manual of style (APA).
Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

**Student Academic Dishonesty: Policy 4.1**

Abiding by university policy on academic integrity is a responsibility of all university faculty and students.

Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to:

- using or attempting to use unauthorized materials on any class assignment or exam;
- falsifying or inventing of any information, including citations, on an assignment; and/or;
- helping or attempting to help another in an act of cheating or plagiarism.

Plagiarism is presenting the words or ideas of another person as if they were one’s own. Examples of plagiarism include, but are not limited to:

- submitting an assignment as one’s own work when it is at least partly the work of another person;
- submitting a work that has been purchased or otherwise obtained from the Internet or another source; and/or,
- incorporating the words or ideas of an author into one’s paper or presentation without giving the author credit.

For additional information about academic dishonesty, please read and abide by the complete university policy at SFASU Academic Dishonesty Policy.

**Academic Accommodation for Students with Disabilities: Policy 6.1 and 6.6**

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325 (936.468.3004) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to SFASU Disability Services.