# University of Rhode Island AST 108: Stars and Galaxies Online Syllabus: 4 Credits

Professor: Dr. D. Gobeille Email: dgobeille@uri.edu

Office: East Hall 313

Class Days: Online Prerequisites: None

**Phone Number:** 401 874 2074

Required Text: OpenStax Astronomy: Availble here: https://openstax.org/details/books/astronomy

Syllabus Policy: This is the very first section of this syllabus because it is the most important. The answers to the vast majority of your questions and emails can be found here or on the Brightspace page for this course. It is understood that by receiving this syllabus on the first day of class and having access to it via Brightspace you will have read and be knowledgeable of all that it entails. It will be the responsibility of the student to be cognizant of this information.

Office Hours: Office hours of the familiar sort are, of course, not held for an online class. Students should email questions to my URI email account or that of the TA.

Contact Information: All communication for this course will happen through your official URI email. My URI email address is dgobeille@uri.edu. The TA for this course, Brett Ruben, can be reached at brett\_ruben@uri.edu.

In general, my response times will be as follows:

6 AM - 6 PM: Response time should be in 2-4 hours, though usually much less.

6 PM - 10 PM: Response times can range from 2-12 hours. Earlier emails have a higher chance of a response.

10 PM - 6 AM: Spotty, response will likely be by 8 AM.

Grades from assignments will be up within 72 hours of their submission.

Course Description: AST 108 is an introduction and overview of cosmology, stars, and galaxies. It is designed to complement AST 118 to give a comprehensive overview of the science of Astronomy. We will cover a range of topics which have been divided into sections listed at the end of this syllabus.

**Excuse Policy:** Any excuse, given for any reason, should take place *before* a deadline, and not afterward. Excuses given after a deadline will rarely be considered. Further, no excuses pertaining to an unfamiliarity with the syllabus or information posted on Brightspace will be accepted.

General Education Areas: This course satisfies URI's general education areas: "Scientific, Technology, Engineering, and Mathematical Disciplines" (Full).

Required Textbook: OpenStax Astronomy textbook: Available for free here: https://openstax.org/details/books/astronomy

Course Goals: Success in a science class can be broken down into several primary components. First and foremost all students are expected to participate fully in the class. Students are further expected to pose and answer questions on an active basis. The key to learning about the physical world is to question everything, including what you believe to be true.

Students will use their learning experiences to understand more about the universe around them, where it came from, and how we currently explore it.

Classroom Protocol: For this online course, Brightspace is our "classroom". When writing emails students should maintain a civil and classroom appropriate tone. Emails should not contain spelling or grammatical errors nor should you use shorthand or incomplete sentences. Please take the time to carefully consider your question so that the TA or I can similarly thoughtfully respond to it.

Students are expected to treat faculty and fellow classmates with dignity and respect. Students are responsible for being familiar with and adhering to the published "Student Code of Conduct" which can be accessed in the University Student Handbook (https://web.uri.edu/studentconduct/student-handbook/).

The importance of regular log-ins and active participation in an online course cannot be overstated. Your grade is dependent on your timely assignment submissions. If you've never taken an online course, "hanging out" on Brightspace will take some getting used to, and it will be easy to forget about the course from time to time.

### Learning Outcomes:

- 1: The student will understand and explain the astronomical topics presented in the course covering modern telescopes and observatories, properties of the Sun and other stars, and large scale structure of the Universe.
- 2: Students will be utilize the tools and methods that astronomers use as scientists to discover and learn about the universe around them.
- 3: Students will be actively engaged in learning through class participation, lecture demonstration, and peer interaction.
- 4: Students will learn to extend and unify basic physical concepts in order to analyze astrophysical scenarios.
- 5: Students will amalgamate basic physical concepts into larger more robust ideas, yielding depth of understanding in more complicated physical situations.
- 6: The student will conquer mathematical hurdles and learn to utilize so called "back of the envelope" calculations to quantify physical concepts.
- 7: The student will use the above to adroitly navigate through both simple and complex physical phenomenon related to the the above astrophysical concepts.
- 8: The student will leave with a solid understanding of the underpinnings of the above astrophysical concepts.

**Technology Requirements:** Computer access to the internet is required in order to successfully navigate this course. Firefox is the recommended browser for Brightspace compatibility and can be downloaded free from www.mozilla.com/firefox. You will need to download and install the Zoom software for video conferencing in class.

For Brightspace help please go to the following URL for Brightspace help: https://community.brightspace.com/helpdesk/s/ or call the Help Desk at 401-874-4357.

Online Learning: As stated above, the best way to begin this course is to click the START HERE link, read the syllabus, and complete the orientation process it walks you through. In addition, you can find more helpful information at this site:

web.uri.edu/learningonline/intro/

This course is divided into five weeks with six days of study and one day of examination per week. Each Week on Brightspace contains the assigned readings, videos, and links to other important content on the internet, written assignments, quizzes, and discussion activities.

Time Requirements: On any given day, a student should expect to dedicate 2-3 hours to this course. Depending on speed, and the ability to "get ahead" this varies by approach and student, but is otherwise a reasonable standard.

**Grading Policy:** The breakdown for individual contributions to your grade is listed below. The course final will be cumulative through the entire semester. Your grade will be given on the basis of: 100 - 94% = A, 93 - 90% = A-, 89 - 87% = B+, 86 - 84% = B, 83 - 80% = B-, 79 - 77% = C+, 76 - 74% = C, 73 - 70% = C-, 70% = D, 90% = C-.

- \* Quizzes = 20%
- \* Lab Quizzes = 20%
- \* Exams = 12% each

Assignments: In total there are 10 quizzes, 5 labs, and 5 exams during the term.

## Description of Assignments:

Quizzes: Each Module will have its own associated quiz reviewing key concepts and ideas from the readings and videos. These will help to assess the understanding of material to date. You have unlimited attempts for each quiz.

Lab Quizzes: Each Week will have its own Lab and associated Lab Quiz. Labs will be held on Wednesday evenings from 6-7 PM and Sunday mornings from 8-9 AM. Lab quizzes will review the material covered in the lab for that week.

**Exams:** These are similar to quizzes but with only 2 attempts. Each attempt will have a random shuffling of questions.

### QUIZZES / EXAMS NOT SUBMITTED BY THE DEADLINE WILL RECEIVE A GRADE OF ZERO.

Please back up your work on a flash drive, email to yourself, and / or store in a cloud. It is a good idea to have a back-up plan in case of computer problems, e.g., a friend's computer, a library computer, etc.

#### Rubric for Success in this Course:

- 1: Be active in online discussions and keep on top of the pace of the course and its assignments while being thoughtfully engaged at all times.
- 2: Work through all study questions.
- 3: Fully understand all study questions.
- 4: Conceptual understanding will reap tremendous results in this course. Memorization will not.
- 5: Seek help when you cannot complete homework questions or understand course content.
- 6: Help comes in many forms:
  - a: Emailing me directly, as discussed above.
  - b: Brett Ruben is the TA for this course. You can reach him via email at brett\_ruben@uri.edu.
  - c: Working in student groups. Group work in class is **always** encouraged. Use of other online methods for communication beyond the spectrum of the course is highly encouraged.

The only caveat to group work is that you be able to understand and explain all concepts independent of the group.

## **Academic Support Services:**

### Accommodations for Special Needs:

Section 504 of the Rehabilitation act of 1973 and the Americans with Disabilities Act of 1990 require the University of Rhode Island to provide academic adjustments or the accommodations for students with documented disabilities. The student with a disability shall be responsible for self-identification to the Disability Services for Students in the Office of Student Life, providing appropriate documentation of disability, requesting accommodation in a timely manner, and follow-through regarding accommodations requested.

It is the student's responsibility to make arrangements for any special needs and the instructor's responsibility to accommodate them with the assistance of the Office of Disability Services for Students.

### **Academic Enhancement Center:**

The work in this course is complex and intensive. To do the best you can, it's a good idea to visit the Academic Enhancement Center (AEC) in Roosevelt Hall. AEC staff assist students with academic skills development as well as course-based content. Options for content tutoring include: joining a Weekly Tutoring Group (for BIO, CHM, CMB, CSC, ECN, MTH, PHY, STA), stopping by a Walk-In Center (for CHM, MTH, PHY), or making a One-Time Group Appointment. AEC tutors can answer questions, clarify concepts, check understanding, and help you learn to study effectively. For a complete description of services and schedules, visit uri.edu/aec, call (401) 874-2367, or stop by the fourth floor in Roosevelt Hall.

### Health and Counselling Services:

URI has on-campus health and counselling services available to students in need. Their websites are:

https://health.uri.edu/

https://web.uri.edu/counseling/

#### **Professional Conduct:**

Cheating and plagiarism are serious academic offenses, which are deal with firmly by the College and University. Scholastic integrity presumes that students are honest in all academic work. Cheating is the failure to give credit for work not done independently (i.e., submitting a paper written by someone other than yourself), unauthorized communication during an examination, or the claiming of credit for work not done (i.e., falsifying information). Plagiarism is the failure to give credit for another person's written or oral statement, thereby falsely presuming that such work is originally and solely your own.

If you have any doubt about what constitutes plagiarism, visit the following website:

http://gervaseprograms.georgetown.edu/hc/plagiarism.html the URI Student Handbook, and University Manual sections on plagiarism and cheating at:

http://www.uri.edu/facsen/8.20-8.27.html-cheating.

Students are expected to be honest in all academic work. A student's name on any written work, quiz or exam shall be regarded as assurance that the work is the result of the student's own independent thought and study. Work should be stated in the student's own words, properly attributed to its source. Students have an obligation to know how to quote, paraphrase, summarize, cite and reference the work of others with integrity.

The following are examples of academic dishonesty:

- i: Using material, directly or paraphrasing, from published sources (print or electronic) without appropriate citation;
- ii: Claiming disproportionate credit for work not done independently;
- iii: Unauthorized possession or access to exams;
- iv: Unauthorized communication during exams;
- v: Unauthorized use of another's work or preparing work for another student;
- vi: Taking an exam for another student;
- vii: Altering or attempting to alter grades;
- viii: The use of notes or electronic devices to gain an unauthorized advantage during exams;
- ix: Fabricating or falsifying facts, data or references;
- x: Facilitating or aiding another's academic dishonesty;
- xi: Submitting the same paper for more than one course without prior approval from the Instructor.

Please note the following section from the **University Manual**:

8.27.17. Instructors shall have the explicit duty to take action in known cases of cheating or plagiarism. The instructor shall have the right to fail a student on the assignment on which the instructor has determined that a student has cheated or plagiarized. The circumstances of this failure shall be reported to the student's academic dean, the instructor's dean, and the Office of Student Life. The student may appeal the matter to the instructor's dean, and the decision by the dean shall be expeditious and final. Such action will be initiated by the instructor if it is determined that any written assignment is copied or falsified or inappropriately referenced.

Any good writer's handbook as well as reputable online resources will offer help on matters of plagiarism and instruct you on how to acknowledge source material. If you need more help understanding when to cite something or how to indicate your references, PLEASE ASK.

Please note: Students are responsible for being familiar with and adhering to the published "Community Standards of Behavior: University Policies and Regulations" which can be accessed in the University Student Handbook.