



**Course:** ASTR 400/500  
**Term:** Fall 2023  
**Room:** Herman Brown 227  
**Class:** Wed, 12:05-12:55

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## **INSTRUCTOR CONTACT INFORMATION**

**Instructor:** Matthew G Baring  
**Office:** Herman Brown 366  
**Email:** [baring@rice.edu](mailto:baring@rice.edu)

## **COURSE OBJECTIVES AND LEARNING OUTCOMES**

This course is conducted at both the undergraduate (ASTR 400) and graduate (ASTR 500) levels, a 1-credit seminar class that meets every Wednesday lunchtime during the semester. The course may be repeated for credit. Junior and senior astrophysics majors and all astronomy/astrophysics graduate students should sign up for this class each semester.

**Course Description:** Speakers in the seminar series include experts from around the world who come to Rice to discuss their research. Rice faculty, graduate students and undergraduates also participate by giving talks, the graduate students every semester and the undergraduates every other semester. Student talks do not necessarily need to be on their own research, and often are of a "journal club" form, addressing a recent paper or papers in the literature of interest to the student and of their own choosing. Full-hour talks should be 45 minutes in length, and half-hour talks 20 minutes, with 5 minutes for questions. The entire class must vacate the room before 1 pm, so it is essential that talk durations meet these time constraints.

It is up to the speakers to ensure that their talks display properly, so please check your presentation ahead of time. Titles and abstracts should be provided to Dr. Baring no later than Friday lunchtime in the week before the scheduled talk, so that the course Web page can be updated and notices can be distributed.

**Objectives and Learning Outcomes:** The goal of this course is to give students exposure to, and experience in giving and evaluating oral presentations on current astronomical research. This can include, but is not limited to, their own research projects. Students will be exposed to a range of topical research on the nearby, distant and early Universe, and gain an appreciation for the research being done in the department and in the larger science community. For undergraduates, this will help frame their interest in possibly pursuing research in the future at the graduate level. For graduates, the course will broaden their perspectives on the fields of astronomy, astrophysics and cosmology, even extending to space physics. By the end of the course students will gain skills in oral presentation and communication, and be able to evaluate whether a talk is clearly organized and accessible. This is invaluable training for an array of professions and potential careers down the line, including industry, business and academia.

**Feedback to Students:** An essential part of the learning process is that students should receive an appraisal of their presentation performance, identifying strong elements and providing pointers for improving their communication style and ability. Students who work with a faculty member should received feedback on their talks from their advisers. Dr. Baring will be available to provide feedback to all other students and answer any questions they have concerning their performance immediately after the class. This feedback contributes to the learning outcomes of the course.

## **ASSESSMENT**

The course is graded on a Pass/Fail basis. Attendance to at least around 80% of the presentations is required to pass (i.e., 10 of the 13 seminars scheduled this semester), and students must present a talk as described above.

## **COURSE LOGISTICS INFORMATION**

This course will be taught both in person and on Zoom. All students will present their talks using a Zoom session login. The purpose of this is to have the talks accessible to those who cannot be in the classroom, and also to have them recorded for asynchronous viewing. This protocol matches what has been done for this class the last four years. For remote speakers including students who cannot be in the classroom on the day of their talk, the Zoom format is suitable and helpful.

## **DISABILITY SUPPORT SERVICES**

If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Support Services (Allen Center, Room 111 / [adarice@rice.edu](mailto:adarice@rice.edu) / x5841) to determine the accommodations you need; and 2) talk with Prof. Baring to discuss your accommodation needs *during the first two weeks of class*.

Any letter from DSS to the instructor requesting accommodations for the student should be delivered in the first three weeks of semester, so that Prof. Baring can plan accordingly.

## **TITLE IX RESPONSIBLE EMPLOYEE NOTIFICATION**

Rice University cares about your wellbeing and safety. Rice encourages any student who has experienced an incident of harassment, pregnancy discrimination, gender discrimination or relationship, sexual, or other forms interpersonal violence to seek support through The SAFE Office. Students should be aware when seeking support on campus that most employees, including myself, as the Instructor, are required by Title IX to disclose all incidents of non-consensual interpersonal behaviors to Title IX professionals on campus who can act to support that student and meet their needs. For more information, please visit the <http://safe.rice.edu/> webpage or email [titleixsupport@rice.edu](mailto:titleixsupport@rice.edu).

## **COURSE SCHEDULE**

A dynamic schedule of the seminars that is updated throughout the semester can be found at the ASTR 400/500 course web pages at <http://www.ruf.rice.edu/~baring/astr500/astr500.html/>.