

PHY 521 - Galaxies (Fall 2024)

Syllabus

Class Times: Tu/Th 2-3:20pm

Location: ESS 450

Instructor: Anja von der Linden

Office Hours: TBD

Course Objectives: The class aims to provide a broad overview of extragalactic astronomy. We will discuss the structure, composition, dynamics and evolution of galaxies, including the study of our own Milky Way as a galaxy, as well as Active Galactic Nuclei, and clusters and groups of galaxies. We will talk about the use of galaxies as probes of cosmology, and of the high-redshift universe.

Required Textbook: Extragalactic Astronomy and Cosmology, 2nd edition, by Peter Schneider, Springer 2015

Course Format: The class will mainly be conducted in a flipped classroom format. Students are expected to read assigned sections of the textbook before class. At the beginning of most classes there will be a short quiz about the assigned reading material. Students can use their notes during quizzes. During class-time, we will further discuss the topic, and work on some research-like assignments, e.g. using telescope archival data. A modest amount of homework will be assigned (some will be carried over from in-class assignments). Towards the end of the class, reading assignments will shift towards recent journal papers.

Grading:

- Daily Quizzes (20%)
- Presentations and participation in class activities (20%)
- Homework (20%)
- Mid-term (20%)
- Final exam (20%)

Student Accessibility Support Center

If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, Stony Brook Union Suite 107, (631) 632-6748, or at sasc@stonybrook.edu. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Academic Integrity

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong.

Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

Critical Incident Management

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Student Conduct and Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.