

Astronomy 3019: Astronomy & Astrophysics 2

Lecture Location: Florida Gym 260

Lecture Times: MWFs, 10:40 AM – 11:30 AM (4)

Discussion Section Times/Locations: See the schedule at the end of the syllabus; you will be assigned a section from your responses

Instructor: Dr. Paul Sell
Office: Bryant Space Sciences Center, Room 318 (temporary)
Office Hours: Monday and Wednesday at 11:45AM – 12:45PM and by appointment
Contact Information: psell@ufl.edu
Course Website: Canvas/E-Learning

Teaching Assistant: Amy Gottlieb
Office: Bryant Space Sciences Center, Room 401
Office Hours: Tuesdays and Thursdays at 10:30AM – 11:30AM and by appointment
Contact Information: agottlieb7@ufl.edu

☞ *Please always send any written correspondence to both instructors.*

Textbook: You must purchase the required text (the same text used for Astronomy 3018: Astronomy and Astrophysics 1): *Foundations of Astrophysics*, by Ryden, Peterson (ISBN 978-0-321-59558-4).

Other references may be used for supplemental information throughout the course.

Brief Description: This is an introductory course in Astronomy and Astrophysics designed for students majoring in astronomy, physics, math, or engineering. This course pairs with AST 3018, discussing about half of the major topics in astronomy. While the other course focuses on stellar astrophysics and the interstellar medium, this course primarily focuses on planetary science, relativistic phenomena, Galactic and extragalactic astrophysics, and cosmology.

Detailed Description of the Graded Course Structure

Attendance/Class Participation: Attendance will be taken in class at random times through occasional, random sign-in sheets or in-class group work, the latter also giving you an opportunity to review the material. The number and frequency of these is at the discretion of the instructor and 1-2 (depending on the number given during the semester) will be dropped or counted as extra credit for your final grade. Given this lenient policy, please do not contact the instructor about missed classes unless you have a serious ongoing problem or you have excused absences consistent with university policy: <https://catalog.ufl.edu/UGRD/academic-regulations/>

attendance-policies/. You may need to make calculations, so you should always bring a working scientific calculator to class in addition to your usual materials for taking notes.

Homework: Five problem sets will be assigned as homework throughout the semester. You must submit your completed written homework assignment at the beginning of class on the day that it is due (or it is considered late). Late homework is penalized 25% per day; exception: when answers must be posted promptly for exam studying, no late homework after that point will be accepted. Working in groups is allowed, although if you do, discuss the problem/solution and then write your own answers without looking at the other students' paper; also write the names of the people you worked with on the submitted homework. Each student is required to show all work and hand in separate homework solutions. No emailed homework.

Exams: There will be two exams given over the course of the semester: one midterm exam and a final exam. The final exam will be focused on the material after the midterm (generally not comprehensive) but may include concepts from before the midterm; both exams will include material from lecture and the book. The Final Exam is scheduled for 12/11/2019 @ 7:30 AM - 9:30 AM. Please bring a working non-programmable scientific calculator, at least two pencils (with erasers), and your ID with you to both exams.

Course Grade Summary Breakdown: Each of the components of class described above will be assigned the following weights to determine your final score:

- Homework: 35%
- Attendance/Class Participation: 15%
- Midterm Exam: 20%
- Final Exam: 30%

Grading Scale: (<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>)

Score	Grade
93% – 100%	A
90% – 92%	A–
87% – 89%	B+
83% – 86%	B
80% – 82%	B–
77% – 79%	C+
73% – 76%	C
70% – 72%	C–
67% – 69%	D+

Score	Grade
63% – 66%	D
60% – 62%	D–
Less than 60%	F

Class/University Policies:

- Please put your phones and, unless you are taking notes, your laptops away during class: no Facebook, Twitter, texting, etc.
- Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Disability Resource Center during the instructor’s office hours. Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification has been provided.
- Responsible citizenship among college students includes honesty and integrity in classwork; regard for the rights of others; and respect for local, state, and federal laws as well as campus standards. Students are responsible for understanding the standards of the “Code of Student Conduct” and the Student Handbook. From the Academic Honesty Guidelines and Student Conduct Code in the University of Florida Undergraduate Catalog: “Academic Honesty: The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge are diminished by cheating, plagiarism, and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff, and administrators who practice dishonest or demeaning behavior.” Any student caught cheating will be referred to the Honor Code Chancellor.
- Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Tentative Class Schedule (41 total hours; 12 chapters; 3 hr/chapter + 5):

Week Starting (hr)	Topics Covered	Week Starting	Topics Covered
08/19 (2)	Introduction to the Course, Chapter 8	10/14 (3)	Chapter 18
08/26 (3)	Chapter 8/9	10/21* (3)	Chapter 19
09/02 (2)	Chapter 9	10/28 (3)	Chapter 20
09/09* (3)	Chapter 10	11/04* (3)	Chapter 21
09/16 (3)	Chapter 11	11/11 (2)	Chapter 22
09/23* (3)	Chapter 12	11/18* (3)	Chapter 23
09/30* (2)	Chapter 12, Relativity	11/25 (1)	Chapter 24
10/07 (3)	Midterm, Relativity	12/02*† (2)	Chapter 24 and Final Exam Review

* = During these weeks, discussion sections will be held at these times/locations in the Bryant Space Sciences Center:

Mondays – 1:55-2:45pm Room 7

Tuesdays – 12:50-1:40pm Room 7

Wednesdays – 3-3:50pm Room 7

Thursdays – 2:15-3:05pm Room 3

† = Since there are no classes on the Thursday of this last week of classes, its discussion on this week will be dropped or moved to earlier in the week.