

Astronomy 2037: Life in the Universe

Lecture Location: Florida Gym (FLG) 0260

Lecture Times: Tuesdays 10:40AM – 11:30AM (4), Thursdays
10:40AM – 11:30AM (4), 11:45AM – 12:35PM (5)

Instructor: Dr. Paul Sell
Office: Bryant Space Sciences Center, Room 318 (temporary)
Office Hours: Mondays / Wednesdays 3 – 4PM, Tuesdays 11:45AM – 12:45PM,
Thursdays 12:45 – 1:45PM, and by appointment
Contact Information: psell@ufl.edu

Teaching Assistant: Benjamin Kimock
Office: Bryant Space Sciences Center, Room 319
Office Hours: No office hours or discussion/recitation sessions; grader only
Contact Information: kimockb@ufl.edu

Course Website: Canvas/E-Learning

Textbook: You must purchase the required e-text with access to Mastering Astronomy: *Life in the Universe*, 4th edition, by Bennet, Shostak (ISBN 9781323772744). Instructions for doing this is available through the course's E-learning website.

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

Brief Description: The origin of life on Earth and the possibility of life elsewhere. A multidisciplinary approach is followed. Conditions for life to form and the likelihood that such conditions may exist elsewhere in the universe are discussed. Also considered are schemes proposed for the search for extraterrestrial intelligence (SETI).

Detailed Description of the Graded Course Structure

In-Class Work: Quizzes or group work will occasionally be given in class without prior announcement with the primary purposes of giving you an opportunity to review the material, giving the instructor the opportunity to check your comprehension of the material, and taking attendance. The number and frequency of these assignments is at the discretion of the instructor, but will be approximately 15 in total. The lowest 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 to make up this in-class work 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: One homework per chapter will be assigned throughout the semester through Mastering Astronomy. The assignment with the lowest grade will be dropped. Late homework will be penalized 10% per day.

Exams: There will be two exams given over the course of the semester: one midterm exam and a final exam. The midterm exam will cover material up to the date of that exam and the final exam will primarily cover material after the midterm exam; both will include material from lecture and the book. The Final Exam is scheduled for 04/30/2020 @ 7:30 AM – 9:30 AM. Bring a working non-internet-capable scientific calculator, at least two pencils (with erasers), and your ID with you to both exams.

Project: Since this is a course about Life in the Universe, there will be a design-your-own-alien project. A handout and discussion to explain the project fully will be provided early in the semester. All guidelines including due dates will be provided in the handout.

Extra Credit: A handout and discussion to explain the extra credit options will be provided early in the semester. All guidelines including due dates will be provided in the handout.

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

- Project: 20%
- Homework: 25%
- Participation/In-Class Work: 15%
- Midterm Exam: 20%
- Final Exam: 20%

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

| <u>Score</u> | <u>Grade</u> | <u>Score</u> | <u>Grade</u> | <u>Score</u> | <u>Grade</u> |
|--------------|--------------|--------------|--------------|--------------|--------------|
| 90% – 100% | A | 77% – 79% | B– | 64% – 66% | D+ |
| 87% – 89% | A– | 74% – 76% | C+ | 60% – 63% | D |
| 84% – 86% | B+ | 70% – 73% | C | 57% – 59% | D– |
| 80% – 83% | B | 67% – 69% | C– | Less than | E |

Class/University Policies:

- Please put your phones and, unless you are taking notes, your laptops away during class: no Facebook, Twitter, texting, etc.

- Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting disability.ufl.edu/students/get-started. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. Classroom accommodations can only be provided after appropriate verification.
- 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 (40 total hours; 13 chapters; 3 hr/chapter + 1):

| <u>Week Starting (hr)</u> | <u>Topics Covered</u> | <u>Week Starting (hr)</u> | <u>Topics Covered</u> |
|---------------------------|---------------------------------------|---------------------------|-----------------------|
| 01/06 (3) | Introduction to the Course, Chapter 1 | 03/09 (3) | Chapter 8 |
| 01/13 (3) | Chapter 2 | 03/16 (3) | Chapter 9 |
| 01/20 (3) | Chapter 3 | 03/23 (3) | Chapter 10 |
| 02/03 (3) | Chapter 4 | 03/30 (3) | Chapter 11 |
| 02/10 (3) | Chapter 5 | 04/06 (3) | Chapter 12 |
| 02/17 (3) | Chapter 6 | 04/13 (3) | Chapter 13 |
| 02/24 (3) | Chapter 7 / Midterm | 04/20 (1) | Catch Up Week |
| 03/02 | Spring Break | 04/30 | Final Exam |