

Astronomy 201: The search for life in the Universe

Section A01, Fall 2023

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Lecture notes and assignments are available on brightspace.

Lectures: Elliot 060, Tuesday, Wednesday, Friday 9.30-10.20am.

Office hours: By appointment.

Course text: Life in the Universe by Bennett and Shostak (4th Ed.)

Course outline: A general science course designed to be accessible to students not majoring in science. An overview of modern scientific thought on the possibility of life beyond Earth and the current research being done to find it; the likeliest locations of life in our Solar System; the hunt for planets around other stars; the search for extraterrestrial intelligence (SETI). Laboratories on alternate weeks; practical work includes observations with campus telescopes.

Course content:

Lecture 1: Introduction	Lecture 2: The universal context of life
Lecture 3: The solar system	Lecture 4: The habitability of Earth
Lecture 5: The nature of life on Earth	Lecture 6: The origin and evolution of life on Earth
Lecture 7: A biological tour of the solar system	Lecture 8: Mars
Lecture 9: Life on Jovian moons	Lecture 10: Life on extra-solar planets
Lecture 11: The search for extraterrestrial intelligence	Lecture 12: The challenges of interstellar travel
Lecture 13: The implications of the search for life	

Course assessment: Assignments: 10%, Lab: 25%, Mid-term: 25%, Final: 40%.

A minimum grade of 50% in the laboratory component is required to pass the course.

Approximately six assignments will be issued through the semester. Assignments will typically be due one week after the issue date. Late assignments will not be accepted.