Minor in Astrobiology

Why study physics and astronomy?

Our goal is to understand the physical universe. The questions addressed by our department's research and education missions range from the applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space, how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billionths of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. While about half of our majors move on to graduate studies in STEM, many find employment in the private sector in diverse situations ranging from financial analysts to physicians. Graduates of all our degree programs can be found in key positions regionally, nationally, and internationally. In this way, our department is at the forefront of telling the academic story of the University of Kansas to people around the state and around the world.

Undergraduate programs in astronomy

Astronomy degrees are offered through the Department of Physics and Astronomy. The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

Courses for Nonmajors

ASTR 191 surveys a wide range of contemporary astronomy topics while ASTR 293 discusses a shorter list of astrophysically extreme objects in greater detail; both courses require eligibility for MATH 101. ASTR 394 is open to students with previous coursework in astronomy, biology, or geology; ASTR 391 offers an introduction to physical astronomy at a calculus-based level.

Requirements for the Minor in Astrobiology

Astrobiology Minor Course Requirements

Students selecting this minor must complete courses as specified in each of the following areas:

Code	Title	Hours
Minor Requirements		
Principles of Molecular and Cellular Biology		
Satisfied by the following:		
BIOL 150	Principles of Molecular and Cellular Biology	3
Geology		
Satisfied by one of the following:		3
GEOL 101	The Way The Earth Works	
GEOL 105	History of the Earth	
GEOL 121	Life Through Time: DNA to Dinosaurs	
Physical Astronomy, Honors		
Satisfied by the following:		
ASTR 391	Physical Astronomy, Honors	3
Astrobiology Core		
Satisfied by one of the following:		3-4
ASTR 394	The Quest for Extraterrestrial Life	
ASTR 503	Undergraduate Research	
Astrobiology Required Electives		
Student selecting this minor must complete 6 credit hours of course work in astronomy, biology, chemistry, geology, or physics at the 300-level or higher and cannot include courses explicitly required for student's major(s).		6

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

Minor Hours
Satisfied by a minimum of 18 hours of minor coursework.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in courses in the minor. GPA calculations include all courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (https://sis.ku.edu/gpa-calculator/).