

Astronomy and Astrophysics (ASTR) 205

Universe - The Ultimate Frontier (Revision 8)

Status:	Replaced with new revision, see the course listing ☑ for the current revision ②
Delivery mode:	Individualized study online with Video component (Overseas students, please contact the University Library before registering in a course that has an audio/visual component)
Credits:	3
Area of study:	Science
Prerequisites:	None
Precluded:	None
Challenge:	ASTR 205 has a challenge for credit option.
Faculty:	Faculty of Science and Technology ☑

Overview

ASTR 205 is a three-credit, introductory-level course designed to

- describe the Universe as we now understand it.
- explain how our current understanding came about.
- show how the scientific method forms the basis for both the tools and the theories of astronomy.

Outline

Part 1

The Sky—This unit describes the cosmos and traces the history of our attempts to understand it, including the tools developed to help us do so.

Part 2

The Stars—This unit describes light and how it carries information to us. It discusses what we have learned about the structure of stars and how they form, age, and die.

Part 3

The Universe of Galaxies—This unit describes how stars group together into galaxies, how galaxies are themselves distributed, and how we think this entire cosmic structure began and may end.

Part 4

The Solar System—This unit describes the characteristics and origins of the planets and other bodies in our solar system.

Part 5

Life—This unit discusses the possibility of life elsewhere.

Evaluation

Activity	Weight
Assignment 1	10%
Assignment 2	10%
Multiple-choice Quiz 1	10%
Multiple-choice Quiz 2	10%
Short-answer Quizzes (4 x 5%)	20%
Final Exam	40%
Total	100%

The **final examination** for this course must be requested in advance and written under the supervision of an AU-approved exam invigilator. Invigilators include either ProctorU or an approved in-person invigilation centre that can accommodate online exams. Students are responsible for payment of any invigilation fees. Information on exam request deadlines, invigilators, and other exam-related questions, can be found at the **Exams and grades** \Box section of the Calendar.

To learn more about assignments and examinations, please refer to Athabasca University's **online Calendar** \square .

Materials

Digital course materials

Links to the following course materials will be made available in the course:

Seeds, Michael A. and Backman, Dana E. *Horizons: Exploring the Universe*, 13th ed. Boston, MA: Brooks/Cole Cengage Learning, 2014

Physical course materials

The following course materials are included in a course package that will be shipped to your home prior to your course's start date:

Cusano, Denise, Levine, Joel M., and Sibbernsen, Kendra. *Course Student Guide for Astronomy: Observations & Theories*, 5th ed. Boston, MA: Brooks/Cole Cengage Learning, 2014.

Other materials

The course materials also include a spectrum viewer. Supplementary video lessons are available as streaming videos through the course website. Alternatively, the videos can be borrowed as DVDs from the **Athabasca University Library**.

Challenge for credit

Overview

The challenge for credit process allows you to demonstrate that you have acquired a command of the general subject matter, knowledge, intellectual and/or other skills that would normally be found in a university-level course.

Full information about **challenge for credit** 🗷 can be found in the Undergraduate Calendar.

Evaluation

To **receive credit** for the ASTR 205 challenge registration, you must achieve a grade of at least **C- (60 percent)** on the examination.

Online Exam (3 hours)

Challenge for credit course registration form

Important links

- > Academic advising 🗹
- > Program planning 🖸
- > Request assistance 🗹

> Support services at AU 🖸

Athabasca University reserves the right to amend course outlines occasionally and without notice. Courses offered by other delivery methods may vary from their individualized study counterparts.

Opened in Revision 8, December 4, 2017

Updated June 6, 2025

View **previous revision** ✓