

Mayville State University

PHYS 110 Introduction to Astronomy On-Campus

Spring 2025
Credit Hours: 3

Course and Instructor Information

Instructor Name: Jeff Hovde

Contact Information:

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Hours of Availability: By appointment

Instruction Mode: Face to Face

Time: MWF 11:00 a.m. All times indicated throughout this syllabus reflect Central Time (CT).

Course Materials and Technologies

Required

Palen, S., Kay, L., & Blumenthal, G. (2018). *Understanding Our Universe*. Norton.

Computer: Bring your computer to class.

Course Description

A general education lab science course designed for the non-science major. This survey course is designed to explore the world around us, and encourage the appreciation for and understanding of the natural sciences. Content of the course includes: astronomy, geology, meteorology, and biology/life science. The corresponding lab is recommended.

Prerequisite: None.

Course Objectives

The content covered in this course is the following:

- Basic concepts of astronomy
- Evolution of stars from creation to death
- Composition and evolution of our largest star (the sun)
- Atomic structure and light production

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- Structure and function of telescopes
- Gravity's role in astronomy

Students who have completed this course should be aligned to Composite Science Education Program Approval Standards through North Dakota's Education Standards and Practices Board ([ND ESPB](#)):

- Understand the Earth's location in the universe.
- Identify planets and stars based on characteristics and describe the conditions necessary to form them.
- Be able to explain our solar system and the associated stars and planets
- Understand the connection between matter, space, and energy.
- Identify and correctly use astronomical terminology.
- Acquire an appreciation for the timescale in which astronomical events occur.

Standards Alignment (Composite Science Education Program Approval Standards-ND ESPB):

- 13047.1 Composite Science Major/General Science The composite/general science program requires that environmental science be incorporated within other courses or as a separate course. The composite/general science program requires: 1. Coursework in biology, chemistry, physics, and earth science, including: a. Minimum of twenty four semester hours in one area, b. Minimum of twelve semester hours in two other areas, c. Minimum of four semester hours in the fourth area, d. Courses must be from those that the institution allows toward graduation in the science major. 2. Study of mathematics through the pre-calculus level (college algebra and above) and statistics
- 13047.2 Nature of Science The program requires study of the history and philosophy of science as well as the interrelationships among the sciences.
- 13047.4 Context of Science The program requires the study of the effect of social and technological context on the study of science and on the application and valuing of scientific knowledge. The program prepares candidates to relate science to the daily lives and interests of students and to a larger framework of human endeavor and understanding. The program provides the candidate with an understanding of the relationship of science to industry, business, government, and multicultural aspects of a variety of communities.

Course Expectations

Submit all assignments in Blackboard on designated due dates.

There will be NO make-up homework or tests unless I have been contacted prior to the day of the test with a valid excuse. There are very few valid excuses so do not assume that your excuse is sufficient.

Instructor/Student Communication

Students are accountable for all academic communications sent to their Mayville State University email address.

Do not email me to inform me of the grade that you need for the course.

I will reply to all student emails within 48 hours. Email is the best way to contact me.

Assignments and Assessments

All assignments are to be completed by, and only by, the person who is registered for the course.

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Evaluation and Grading

Grading Policies

I will grade all work within 1 week.

Attendance/Participation Policies

Attendance will not be graded.

Grading Scale

90 – 100%	A
80 – 89.9%	B
70 – 79.9%	C
60 – 69.9%	D

Breakdown of Grades

Quizzes 178 points

Exams 250 points

Total Points 428 points

Enrollment Verification

On-Campus Course Statement

The U.S. Department of Education requires instructors to conduct an activity which will validate student enrollment in this course. Class attendance will be used to verify enrollment in on-campus courses. If you do not attend, your enrollment in this course will be at risk.

Important Student Information

In the Announcements section of the Blackboard Institution Page, you can view and download the Important Student Information document for the current academic year. It includes information about:

- ✓ Land Acknowledgement Statement
- ✓ Academic Grievance Concerns and Instructor English Proficiency
- ✓ NetTutor - Online Tutoring Program
- ✓ Starfish - Student Success System
- ✓ Students with Documented Disabilities
- ✓ Student Learning Outcomes / Essential Learning Outcomes
- ✓ Academic Honesty
- ✓ Emergency Notification
- ✓ Continuity of Academic Instruction for a Pandemic or Emergency

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- ✓ Family Educational Rights and Privacy Act of 1974 (FERPA)
- ✓ Diversity Statement (Title IX)

Course Timeline/Schedule

Final Exam: Monday May 12th 10:00 a.m.

The above schedule and procedures in this course are subject to change with prior notice given to students in the event of extenuating circumstances.

Essential Studies

As part of Mayville State University's Essential Studies curriculum, this course seeks to prepare students for twenty-first century challenges by gaining: 1) Knowledge of human cultures; 2) Intellectual and practical skills; 3) Personal and social responsibility; 4) Integrative and applied learning.