

University of Wisconsin – Stevens Point
Department of Physics and Astronomy
Seminar: Introduction to Physics– PHYS 111
Fall 2023

Course Information

- **Course title:** Seminar: Introduction to Physics
- **Course number:** PHYS 111
- **Instructor:** Adriana Durbala
- **Contact:** B203-Science Building, adurbala@uwsp.edu
- **Class time:** Wednesday 10:00 – 10:50 AM (SCI- A113)
- **Office Hours:**

Monday: 10 – 11 AM | Tuesday: 2 – 3 PM | Wednesday: 12 – 2 PM | Thursday: 2:15 – 3:15 PM

If your schedule conflicts with all listed time intervals, I am also available by appointment; you would have to send me an email and we can decide accordingly.

Course Description

This is a one credit, pass/fail course which is designed for students (usually freshmen and sophomores) interested in a physics major/minor or an astronomy minor. Topics include introduction to career paths with a physics degree, overview of different physics subfields along with reading and discussion of some non-technical physics articles and presentations by faculty in areas of their current research.

Course Objectives

1. Become familiar with different sub-fields of physics and astronomy and learn about different skills you will learn as a physics student at UWSP.
2. Learn about careers in physics and astronomy, how to find and apply for jobs, how to write an effective resume, and how to find information on graduate schools.
3. Learn about different areas of research currently practiced by the Physics and Astronomy department's faculty members.

Class Activities

There will be three different in-class activities in this class:

- a. **An overview of different sub-fields of physics and astronomy**, along with reading and discussion of relevant, non-technical articles on chosen topics. The goal is to introduce you to some of the sub-fields of physics and astronomy and recent discoveries in those fields. After distribution of the articles, you will have one week to read them and come to the next class prepared to discuss and ask questions about the article or relevant topics.
- b. **Presentations by Physics and Astronomy faculty members**, mostly to introduce you to their research activities and give you a broad idea of the types of research opportunities at the department. **You will write a few sentences or a short paragraph during or after each talk on what you find interesting about the presentation and submit it at the end of the class.**
- c. **Presentation by a career specialist from the Academic and Career Advising Center** on topics that could include: career exploration/'what can I do with a major in physics', finding jobs/internships, how to effectively use summers in college to get your dream job, information about applying to graduate school, college success (study skills, staying organized, how to make your advising meetings most effective/how to be a good advisee), resumes & cover letters, etc.

At the end of the semester, each student will give a **five-minute presentation on a physics/astronomy topic** that they find interesting (pre-approved by the instructor). Presentation days will be the last two regular Wednesdays (Dec. 6, Dec. 13) and our final exam period (**Wednesday, December 20, 12:30 – 2:30 PM**). More information will be given as we advance through the semester.

Absences due to Military Service:

You will not be penalized for class absence due to unavoidable or legitimate required military obligations, or medical appointments at a VA facility, not to exceed two (2) weeks unless special permission is granted by the instructor. You are responsible for notifying faculty members of such circumstances as far in advance as possible and for providing documentation to the Office of the Dean of Students to verify the reason for the absence. The faculty member is responsible to provide reasonable accommodations or opportunities to make up exams or other course assignments that have an impact on the course grade. For absences due to being deployed for active duty, please refer to the <https://www.uwsp.edu/finaid/veteran-services/Pages/default.aspx>

Equal Access for Students with Disabilities:

Students with special needs should contact the Disability Resource Center as soon as possible (<https://www.uwsp.edu/disability-resource-center/>) in order to request suitable accommodation. If special accommodations are needed, *please inform the instructor, and contact the Disability Resource Center, Phone: 346-3365, Room 108 in the Collins Classroom Center (CCC).*

Religious Beliefs Accommodation

It is UW System policy to reasonably accommodate your sincerely held religious beliefs with respect to all examinations and other academic requirements.

You will be permitted to make up an exam or other academic requirement at another time or by an alternative method, without any prejudicial effect, if:

- There is a scheduling conflict between your sincerely held religious beliefs and taking the exam or meeting the academic requirements; and
- You have notified your instructor within the first three weeks of the beginning of classes (first week of summer or interim courses) of the specific days or dates that you will request relief from an examination or academic requirement.

In case of emergency:

In the event of a medical emergency call 9-1-1 or use Red Emergency Phone. Offer assistance if trained and willing to do so. Guide emergency responders to victim.

In the event of a tornado warning, proceed to the lowest level interior room without window exposure. See www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx for floor plans showing severe weather shelters on campus. Avoid wide-span structures (gyms, pools or large classrooms).

In the event of a fire alarm, evacuate the building in a calm manner. Meet at DUC. Notify instructor or emergency command personnel of any missing individuals.

Active Shooter/Code React – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Call 9-1-1 when it is safe to do so. Follow instructions of emergency responders.

See UW-Stevens Point Emergency Procedures at <https://www3.uwsp.edu/emergency/Pages/emergency-procedures.aspx> for details on all emergency response at UW-Stevens Point.

Academic Honesty: Students are expected to maintain the highest standards of academic integrity. More information on your rights and responsibilities are available at: http://docs.legis.wisconsin.gov/code/admin_code/uws/14.pdf

UWSP 14.01 Statement of principles

The board of regents, administrators, faculty, academic staff and students of the University of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the University of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors.

UWSP 14.03 Academic misconduct subject to disciplinary action.

Academic misconduct is an act in which a student:

- (a) Seeks to claim credit for the work or efforts of another without authorization or citation;
- (b) Uses unauthorized materials or fabricated data in any academic exercise;
- (c) Forges or falsifies academic documents or records;
- (d) Intentionally impedes or damages the academic work of others;
- (e) Engages in conduct aimed at making false representation of a student's academic performance; or
- (f) Assists other students in any of these acts.

- **I do not assign work for extra credit. There are *no* bonus points that you can earn.**
- After our final meeting, there is nothing more you can do to change your pass/fail status.

Grading and Evaluation:

This course is graded on a Pass/Fail basis. To pass the class, you must

- **attend at least 14 out of 15 class periods.** If you must miss a class because of a legitimate excuse (illness, quarantine, death in family, etc.), please let me know ahead of time. More than one absence without a legitimate excuse will translate to an automatic failure in the course.
- **write a very short summary of each faculty talk**, indicating what you have learned from the talk and what you have found interesting.
- **give a short (approximately 5 minute) presentation** on a topic of your choice in physics/astronomy during the last couple of weeks of classes or during the week of finals (Dec. 6, 13, 20).

Further information about the presentations and the grading rubric will be provided later in the semester.