

*Arkansas State University-Newport's mission is to provide an accessible, affordable, quality education that transforms the lives of our students, enriches our communities, and strengthens the regional economy.*

## **PHYS 2133: Survey of Physics for the Health Professions**

ACTS Equivalency: N/A

**Catalog Description:** A survey for introductory mechanics, waves, electricity, magnetism, optics, and modern physics with applications for students of the health professions.

**Prerequisite:** MATH1023 College Algebra

**Course Type:** Lecture

**Credit Hours:** 3

**Instructor Name:**

**Office:**

**Office Phone:**

**Email:**

**Office Hours:**

### **Department Information**

Course Department:

Academic Department:

Academic Coordinator:

Associate Dean/Director:

Associate Dean/Director Contact Number:

Email:

Associate Dean/Director Email:

### **Materials: Required and Optional**

**Required Text:** *College Physics, 1st Ed.*, by Openstax College. Openstax, ISBN# 9781938168000. Physical copies of the textbook are available online and from the ASU-Newport Bookstore (<https://bookstore.asun.edu/>) – if you are not in/near Newport, the bookstore can ship the textbook to you! Call the ASU-Newport bookstore at 870-512-7806 for more information. In addition, you can download low- to no-cost digital copies of the text from the Openstax College Physics website (<https://openstaxcollege.org/textbooks/collegephysics/get>). If you go the digital route, I highly suggest making the suggested donation of \$10.

Optional Texts: N/A

**Required Material:** ASUN campus email and Canvas username and password (these are the same for both email and Canvas); access to a computer with reliable internet access and equipped with Microsoft Word, Microsoft Powerpoint, Microsoft Excel, Adobe Acrobat Reader, and a browser that runs Adobe Flash; a scientific calculator that can do trigonometric functions; a digital camera or scanner for uploading handwritten work done on assignments; access to a printer.

Optional Materials: N/A

Last name of Faculty, Semester

Revision Date: 10/23/2019

## INSTITUTIONAL POLICIES

### Institutional Learning Outcomes

Upon graduating from ASU-Newport with any Associate Degree, a student will be proficient in the following:

**ILO1: Communication**

*Goal: Students will express ideas, knowledge, and concepts in a clear and concise manner.*

- a) Written
- b) Verbal
- c) Interpersonal

**ILO2: Reasoning**

*Goal: Students will apply reasoning skills in a variety of environments, which demonstrate problem-solving and applied knowledge.*

- a) Explore
- b) Locate
- c) Interpret
- d) Evaluate
- e) Apply

**ILO3: Responsibility**

*Goal: Students will participate in service activities that instill in them a sense of social responsibility.*

- a) Civic
- b) Academic
- c) Financial

### Institutional Grading Scale

Grading Scale:

- A: 90-100
- B: 80-89
- C: 70-79
- D: 60-69
- F: 0-59
- S: Satisfactory
- U: Unsatisfactory

### Americans with Disabilities Act Compliance

In order to obtain appropriate disability related accommodations and services to which they are entitled, students with documented disabilities should voluntarily and confidentially provide the Office of Educational Access (870-512-7838 or [CEA@asun.edu](mailto:CEA@asun.edu)) with appropriate medical documentation regarding the nature and extent of their disability, make their needs known to this Office and follow established procedures for acquiring needed services and accommodations in the classroom or online.

### Information Technology Services

If you experience any problems or issues with Canvas, MyCampus, or other equipment, please contact ITS at 870-512-7783 or <http://its.asun.edu>. Canvas also has a 24/7 live chat. This is a valuable resource for those late-night tests or assignments that just do not seem to work properly.

ASU-Newport provides a number of different services to assist students in areas that directly impact their academic success. The following direct websites will help you get in touch with those services that may be needed during your time as an ASUN student:

Academic Support Center: <http://academicsupport.asun.edu>

Financial Aid: <http://financialaid.asun.edu>

Career Pathways: <http://pathways.asun.edu>

University Police: <http://cpd.asun.edu>

Information Technology Services: 512-7783 or [its@asun.edu](mailto:its@asun.edu)

Center for Educational Access: <https://www.asun.edu/cea>

Admissions: <http://admissions.asun.edu>

### Academic Dishonesty (as stated in the Student Handbook)

ASU-Newport enthusiastically promotes academic integrity and professional ethics among all members of the ASU-Newport academic community. Violations of this policy are considered serious misconduct and may result in disciplinary action and severe penalties. Cheating in any form-including plagiarism, turning in assignments prepared by others, unauthorized possession of exams -

Last name of Faculty, Semester

may result in the student being dropped from the class with an “F” and/or being suspended from the College. Students who feel they have been unfairly accused of cheating may appeal to the Associate Dean of General Education.

**Printing**

\*Each student is allowed 200 sheets of copy paper per semester for printing. Additional printing requires a \$5.00 printing fee which covers an additional ream of copy paper. The fee can be paid by either visiting or calling the Business Office.

**Campus Safety Information**

What to know and do to be prepared for emergencies at ASUN:

- Opt-in to receive ASUN’s School Messenger notifications regarding weather closings, emergencies, and other important notifications. All currently enrolled students will receive an email within the first two weeks of the semester prompting them to Opt-in to the messaging system.
- Know the safe evacuation route from each of your classrooms. Emergency evacuation routes are posted in on-campus classrooms.
- Listen for and follow instructions from your instructor or other designated authorities.
- For additional emergency information see the ASUN Emergency Response Guide in the Portal under “More” then select “Department of Safety”.
- Know the emergency phone number for ASUN Campus Police or dial 911.
- Report suspicious activities and objects found on campus.
- Keep your permanent address and emergency contact information current in My Campus.

**Inclement Weather**

In the event of inclement weather, class cancelation is left to the discretion of the Chancellor. You will be notified of class cancelation on the university website, through news media, and through our school messaging system.

**Children in the Classroom:**

ASUN classroom policy requires that the learning environment should be free of distraction in order to provide the highest learning opportunity for all students. In this light, students should not bring children to the classroom. If you must bring a child on campus, please have your child properly supervised in the public gathering areas.

**NOTE TO STUDENTS:**

All course activity open and due dates are articulated in Central Standard Time (CST) regardless of the student’s residential location. If you reside in a time zone other than CST, please ensure you utilize the appropriate conversion for all course activities.

**COURSE POLICIES**

**Course Learning Outcomes:**

Upon successful completion of this course, students will be able to:

Course Learning Outcomes	Assessment
Students will demonstrate their understanding of the scientific method, evaluating data from measurements and identifying errors while applying their knowledge to solve real world problems utilizing its principles.	
Students will demonstrate their understanding of the fundamental concepts of mechanics, articulating when, where, and how to apply the laws and principles and applying their knowledge to evaluate and solve real world problems involving topics such as kinematics and dynamics in one or two dimensions, energy, and heat.	
Students will demonstrate their understanding of the fundamental concepts of electricity and magnetism, articulating when, where, and how to apply the laws and principles and applying their knowledge to evaluate and solve real world problems involving topics such as electric and magnetic forces and fields, electric potential, and current.	
Students will demonstrate their understanding of the fundamental concepts of periodic motion, articulating when, where, and how to apply the laws and principles and	

applying their knowledge to evaluate and solve real world problems involving topics such as waves and sound.	
Students will demonstrate their understanding of the fundamental concepts of light and optics, articulating when, where, and how to apply the laws and principles and applying their knowledge to evaluate and solve real world problems involving topics such as geometric optics.	
Students will demonstrate their understanding concepts of modern physics, articulating when, where, and how to apply the laws and principles and applying their knowledge to evaluate and solve real world problems involving topics such as the atom and radioactive decay.	

**\*The MSA for this course will specifically measure/assess ILO 2**

**Academic Calendar**

<http://www.asun.edu/catalogs>

**Finals Schedule**

<http://www.asun.edu/catalogs>

**Disclaimer**

This syllabus and all documents associated with the syllabus are considered a contract between the student and the instructor. Students are expected to carefully read and review the syllabus and all associated documents in order to be familiar with course expectations and policies. This syllabus is subject to change at the discretion of the instructor, who will inform students of any changes. Students are responsible for keeping up with any changes.