

PHYS1103: Introduction to Space Science

(ACTS Number: ACTS PHSC1204 Introduction to Astronomy)

Catalog Description: A survey of the basic principles of science with emphasis on physics through their application to study about our place in the cosmos. Lecture three hours. This course will meet the general education requirements for physical science if taken with PHYS 1101. Special course fees may apply.

Prerequisite: MATH1013 Mathematical Applications or Math Score of 16 or higher

Corequisite: PHYS1103 Introduction to Space Science

Course Type: Lecture

Instructor Name:

Office:

Office Phone:

Email:

Office Hours:

Department Information

Course Department:

Academic Department:

Academic Coordinator:

Email:

Associate Dean:

Associate Dean Contact Number:

Email:

Materials: Required and Optional

Required Text: *Astronomy: A Beginner's Guide to the Universe, 8th Ed.*, by Chaisson and McMillan. Pearson/Prentice Hall, ISBN# 9780134087702. If you have or wish to use a previous edition of the textbook, contact me so we can go over what differences (if any) exist between editions.

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, and Adobe Acrobat Reader; a scientific calculator (nothing fancy; something in the \$10 to \$20 range will work just fine); a digital camera or scanner for uploading handwritten work done on assignments; access to a printer.

Optional Materials: N/A

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 Disability Services (870-512-7838 or disabilityservices@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

Disability Services: http://www.asun.edu/disability_services

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 - 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.

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.

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.	- homeworks - quizzes - test #1 - final
Students will demonstrate their understanding of the history and techniques of astronomy, articulating when, where, and how to apply the laws and principles and applying their knowledge to evaluate and solve problems involving topics such as celestial motions, Kepler’s laws, Newton’s laws, and light and optics.	- homeworks - quizzes - test #1 - final
Students will demonstrate their understanding of the properties of the solar system and its members, articulating the characteristics of the planets, the dwarf planets, the moons, and the minor members, such as asteroids, comets, and meteoroids, and applying their knowledge of astronomical concepts and techniques to evaluate and solve problems involving these objects.	- homeworks - quizzes - test #2 - final
Students will demonstrate their understanding of the properties and evolution of the Sun and other stars, articulating the characteristics of the different stages of stellar life and death, and applying their knowledge of astronomical concepts and techniques to evaluate and solve problems involving stars.	- homeworks - quizzes - test #3 - final
Students will demonstrate their understanding of the properties and evolution of galaxies, articulating the characteristics of the different types of galaxies, and applying their knowledge of astronomical concepts and techniques to evaluate and solve problems involving galaxies.	- homeworks - quizzes - test #4 - final
Students will demonstrate their understanding of cosmology and the universe, articulating the characteristics of the beginning and possible end to the universe, and applying their knowledge of astronomical concepts and techniques to evaluate and solve problems involving cosmology.	- homeworks - quizzes - test #4 - final

MASTERY SUMMATIVE ASSESTMENT (MSA): FINAL

Course Policies and Procedures

Academic Calendar

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.