To access COVID-19 information, please visit the Stay Healthy Lions Webpage.

IS 1315 – Integrated Science I

COURSE SYLLABUS: Spring I 2023
January 17- March 3, 2023 (Acceleration deadline is February 17, 2023)

INSTRUCTOR INFORMATION

Instructor: Molly Jacobsen, MS
Office Location: Online
Office Hours: Email or Telephone or Virtual by Appointment
Office Phone: 903.468.3318 (Advising Main Office)
University Email Address: Molly.Jacobsen@tamuc.edu
Preferred Form of Communication: E-mail
Communication Response Time: E-mail response within 24 hours

COURSE INFORMATION

Materials

****Please note that all course reading material is embedded in your Modules****

Textbook(s) Recommended: Either of below (3rd or 2nd edition)

1. Conceptual Integrated Science, 3rd Edition, by Hewitt, Lyons, Suchocki, & Yeh.
   ISBN: 13: 978-0135197394

2. Conceptual Integrated Science, 2nd Edition, by Hewitt, Lyons, Suchocki, & Yeh.
   ISBN: 13: 978-0321818508

Software Required: None. Students must have access to a computer with internet connection.

Optional Texts and/or Materials: None

COURSE DESCRIPTION

This is a University Science course. The interdisciplinary application of scientific principles is emphasized. The scientific principles developed in this course primarily include physics, chemistry, Earth science, and other topics typically covered in physical science. Connections and applications of these principles to the other sciences are examined. Science is an interesting and diverse topic; it is the instructor's intent to demonstrate that learning can be enjoyable as well as educational. Science is what allows mankind to function in a productive manner.

STUDENT LEARNING OUTCOMES

Completion of this course provides the student with the knowledge to:

- Students will gain a better understanding of physical science concepts.
- Students will better understand scientific processes and test for further scientific knowledge.
- Students will understand the conceptual differences between facts, theories, and laws.
- Students will be able to compare the separate science disciplines and make integrative connections.

Regular and Substantive Course Interaction

As a general guide, students enrolled in a three-semester hour course should spend one hour engaged in instructional activities and two to three hours on out-of-class work per week in a traditional semester. Students are expected to double this effort of engagement given that this course is being delivered in a seven-week term. Educational activities in this course are designed to ensure regular and substantive interaction between students and faculty to ensure that students are able to demonstrate competency.

COURSE REQUIREMENTS

Minimal Technical Skills Needed: Students will need reliable computer and internet access for this course. Students must be able to effectively use myLeo email, myLeo Online D2L, and Microsoft Office.

Instructional Methods: This course is an online course. To be successful in this course, all content and course modules should be read and reviewed. All assignments and quizzes (both graded and not graded) must be completed. Please contact the instructor by email for any assistance.

Student Responsibilities or Tips for Success in the Course: To be successful in this course, all content and course modules should be read and reviewed. All assignments and quizzes (both graded and not graded) should be completed. Please contact the instructor by email for any assistance.

ASSESSMENT

You will have a total of 7 weeks to complete and successfully pass all competencies with an average score of 80% or better on all assignments. It is strongly recommended that you complete each chapter review, activity, and quiz every 2-3 days in order to allow ample time to complete the short essay, Final Lab project, and/or retake any exams if needed.

GRADING

A score of 80% or higher on all assignments are required to demonstrate competency and receive credit for the course. The following items will be used to calculate the final grade in the course.

Item	Worth
Required Pre-Tests	0%
10 Chapter Post-Tests	70%
Module 2 Short Essay	10%
Final Greenhouse Lab	20%
Total	**100%**

Grading Scale

A = 90%-100%

B = 80%-89%

F = 79% or Below

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are the technical requirements

Learning Management System (LMS) Requirements:
View the Learning Management System Requirements Webpage.

LMS Browser Support:
Learn more on the LMS Browser Support Webpage.

YouSeeU Virtual Classroom Requirements:
Visit the Virtual Classroom Requirements Webpage.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903-468-6000 or helpdesk@tamuc.edu**.**

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 877-325-7778. Other support options can be found on the Brightspace Support Webpage.

Interaction with Instructor Statement

This is an online course; therefore, expect most communication to be online as well. Correspondence will always be through university email (your “myLeo” mail) and announcements in myLeo online (D2L). The instructor will make every effort to respond to emails within 24 hours, provided the correspondence follows the requirements listed below. Students are encouraged to check university email daily.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail online in the Student Guidebook.

Students should also consult the Rules of Netiquette Webpage for more information regarding how to interact with students in an online forum.

TAMUC Attendance

For more information about the attendance policy, please view the Attendance Webpage and the Class Attendance Policy

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty Policy
Undergraduate Student Academic Dishonesty Form

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce
Velma K. Waters Library Rm 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu
Website: Office of Student Disability Resources and Services

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

Counseling Services

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit http://www.tamuc.edu/counsel.

COURSE OUTLINE / CALENDAR

Acceleration Process Deadline: ***The deadline to accelerate is Friday, February 17, 2023 at 5 pm. Please submit assignments to me no later than Wednesday, February 15, 2023 at 5 pm if you are attempting to accelerate so that I have ample time to grade them and provide you with a completion email for acceleration purposes.***

Learning Objectives and Competencies	Material to Review	Assignments/Notes
Syllabus		
Module 1: Pre-Test Required-Overview of Applied Sciences & Introduction to Physics		
Learning Outcome 1	Chapter 1 About Science	Post-Test 1: Students will be able to explain and apply the Scientific Method while also being able to interpret results of scientific investigations and draw reasonable conclusions from data they are presented with.
Learning Outcome 2	Chapter 2 Describing Motion	Post-Test 2: Students will demonstrate the ability to think critically and to use appropriate concepts to analyze both quantitative and qualitative problems which entail fundamental principles of basic physics.
Learning Outcome 3	Chapter 3 Newton's Law of Motion	Post-Test 3: Students will demonstrate knowledge of classical mechanics by learning and applying Newton's Laws of Motions.
Module 2: Pre-Test Required: Classical Physics		
Learning Outcome 4	Chapter 4 Momentum and Energy	Post-Test 4: Students will demonstrate knowledge of momentum, potential and kinetic energy, and work.
Learning Outcome 5	Chapter 5 Gravity	Post-Test 5: Students will learn to comprehend gravity and apply those

		principles accordingly to real life scenarios.
Short Essay: Physics as an Integrated Science in Everyday Life **Module 3: Pre-Test Required- Thermodynamics & Modern Physics**	Review of Chapters 1-5	Short essay consisting of 250-500 words defining the principles of physics in everyday routines. Accounts for 10% of final grade.
Learning Outcome 6	Chapter 6 Heat	Post-Test 6: Students will learn to comprehend heat and thermodynamics, and apply those principles accordingly to real life scenarios.
Learning Outcome 7	Chapter 7 Electricity and Magnetism	Post-Test7: Students will understand basic electricity, magnetism, the nature of electrical charges, and apply it to their daily lives.
Learning Outcome 8	Chapter 8 Waves - Sound and Light	Post-Test 8: Students will review the characteristics of sound and light.
Module 4: Pre-Test Required- Earth Science		
Learning Outcome 9	Chapter 12 The Solar System	Post-Test 9: Students will consider the characteristics that constitute the solar system.
Learning Outcome 10	Chapter 13 The Universe	Post-Test 10: Students will gain an understanding of the dynamics that constitute the Universe.
Final Project		
Greenhouse Lab Simulation	Greenhouse Effect	Lab simulating thermodynamics and the effects on climatology and essay outlining the Scientific Theory-accounts for 20% of Grade