

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

# IS-1317-0CW Integrated Science COURSE SYLLABUS: Spring 2023

## **INSTRUCTOR INFORMATION**

Instructor: Kelly Brown, MS | Adjunct Professor Office Location: Online Office Hours: Email or Telephone or Virtual by Appointment Office Phone: N/A University Email Address: Kelly.Brown@tamuc.edu Preferred Form of Communication: E-mail Communication Response Time: Check e-mail every 24-48 hours.

### **COURSE INFORMATION**

This is a 100% online 7-week course that starts Tuesday, January 17<sup>th</sup>, 2022 and ends Friday, March 3<sup>rd</sup>, 2022.

## Textbook(s) Required

Great news: your textbook for this class is available for free online! If you prefer, you can also get a print version at a very low cost.

Your book is available in web view and PDF for free. You can also choose to purchase on iBooks or get a print version via OpenStax on Amazon.com.

You can use whichever format you prefer. Web view is recommended – the responsive design works seamlessly on any device. If you buy on Amazon, make sure you use the link on your book page on openstax.org ("Order a print copy") so you get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.

Competency 1: <u>https://openstax.org/details/books/biology-2e</u> Print ISBN 1938168097, Digital ISBN 1947172026

Competency 2: <u>https://openstax.org/details/books/astronomy</u> Print ISBN 1938168283, Digital ISBN 1947172247 Competency 3: <u>https://www.oercommons.org/courses/earth-science-4/view</u> No ISBN Available

#### **Supplemental Materials**

Links and files will be provided in the document sharing tab within the course.

## ORGANIZATION LEADERSHIP PROGRAM DESCRIPTION

The Bachelor of Applied Arts and Sciences in Organizational Leadership (ORGL) degree is a competencybased program that prepares innovative leaders for employment in an increasingly technological and global society. This program provides opportunities for students to receive credit for what they know and can do already, allows them to accelerate completion of their degree, and — because it is fully online — students are able to plan their study schedule around the rest of their day to complete the coursework.

## **COURSE DESCRIPTION**

Integrated Science is a General Education, Life and Physical Science requirement of the Organizational Leadership Degree Program. Scientific principles developed in the course include Biology, Astronomy, and the Earth Sciences. Students will explore the integration of these science disciplines, learn about the fundamental basics of astronomy and our place in the Universe, and how Earth Science serves as the basis for the Earth's existence. Students will also be introduced to concepts like cellular respiration, evolution, meteorology, and oceanography.

## STUDENT LEARNING OUTCOMES

Competency 1 (Biology):

- 1. Students should be able to identify major molecules and learn about the interactions amongst them.
- 2. Students will be introduced to the Cell and its structures and the specific functions of all the various organelles within a cell. Students will also be introduced to the basics of cellular division.
- 3. Students will understand the purpose and process of cellular respiration (aerobic versus anaerobic) and photosynthesis.
- 4. Students will be introduced to genetics: mutations, gene flow, natural selection and the role of evolution.

Competency 2 (Astronomy/Cosmology):

- 1. Students will be introduced to the Universe.
- 2. Students will demonstrate basic knowledge of our Solar System, stars and moons.
- 3. Students will demonstrate knowledge of planet Earth and understand our place in the Solar System.

Competency 3 (Earth Science):

- 1. Students will be able to differentiate between rocks and minerals and their classifications and compositions.
- 2. Students will be introduced to plate tectonics and the concept of Earth's surface constantly evolving and moving.
- 3. Students will be introduced to geomorphology and ever evolving landscape of Earth's surface.
- 4. Students will receive a basic introduction to meteorology.
- 5. Finally, students will be introduced to oceanography and the Science of Earth's most fluent landscape.

## **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.

Email your instructor as soon as you complete your pre-test so the instructor can access and grade your work.

**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

Students must achieve 80% or higher for the both the posttest and culminating project (Galaxy Paper) to demonstrate competency and pass the course.

Competency	<u>Reading</u>	<u>Pre-test</u>	Post-test	<u>Paper</u>
Biology	Recommended	Required	Required*	N/A
Astronomy	Recommended	Required	Required*	Required
Earth Science	Recommended	Required	Required*	N/A

# \*included in student's final grade

The student's final grade will be comprised of 3 post test scores from each of the 3 competencies and a paper, listed in your menu bar beneath the 3 Competencies. Students should submit their papers by 5:00 pm on the Friday of the 7<sup>th</sup> week of the course.

#### **Course Pre-test**

The purpose of the pre-test is to provide a baseline understanding of your knowledge in this competency. The pre-test is required before you begin studying course materials. If you do not make at least 80% on the pre-test, students will be expected to complete assignments, quizzes, and other course content to prepare for the post-test and culminating project.

Content	Description	Value	Notes
Pre-test	This is the initial assessment in the course to provide a baseline understanding of a student's knowledge of the course content and competencies. Pretests are taken once and should be completed upon the first couple of days of a CBE academic term or entry into a course if a student is an accelerator.	100 points	Required before completing any other work in the course. The grade on the pre-test does <b>not</b> count in the final grade for this course.

### **Course Post-test**

The end-of-course comprehensive exam that assesses student knowledge and understanding of major concepts, theories, processes, etc., in the course. A **score of 80% or higher is required** to demonstrate competency.

Content	Description	Value	Notes
Post-test	Measures your competency of learning outcomes through essay, short answer, and multiple-choice questions.	100 points	Required and you must score 80% or higher. You have up to three attempts. DUE: Last day of week 7, Friday by 11:59 PM CST

If you score less than 80% on the post-test, you will have an opportunity to review the material and retake the post-test two additional times. If the posttest score is less than 80% within three attempts, students will receive a grade of "F" in the course and will be required to retake the course in the new term. Students who fail the posttest should review feedback from the instructor before reattempting the posttest.

## **Culminating Project**

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The project assesses your knowledge of terms and the application of concepts presented in this course. A score of 80% or higher is required to demonstrate competency.

Content	Description	Value	Notes	
Galaxy Paper	Measures your competency of learning outcomes the completion of a competency- based project.	100 points	Required and you must score 80% or higher. You have up to three attempts. DUE DATE if you want feedback for revisions: End of week 6. HARD DUE DATE: Last day of week 7, Friday by 11:59 PM CST	
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If students score less than 80% on the culminating project, they will have an opportunity to review the material and resubmit the project up to two additional times. If the culminating project is less than 80% within three attempts, students will receive a grade of "F" in the course and will be required to retake the course in the new term.

#### GRADING

A score of 80% or higher on both the Culminating Project and Posttest is 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
Posttest	75%
Culminating Project Attempt	25%
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.

The syllabus/schedule are subject to change.

## 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 <u>helpdesk@tamuc.edu</u>.

**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 1-877-325-7778. Other support options can be found on the <u>Brightspace Support Webpage</u>.

#### 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 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 <u>Student Guidebook</u>.

Students should also consult the <u>Rules of Netiquette Webpage</u> 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 <u>Attendance Webpage</u> and the <u>Class</u> <u>Attendance Policy</u>

## 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

The syllabus/schedule are subject to change.

#### 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 for 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: <u>studentdisabilityservices@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u>

#### **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 <u>Carrying Concealed Handguns On Campus</u> 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 <u>http://www.tamuc.edu/counsel</u>.

Learning Objectives and Competencies	Assignments
Week 1-2 LO1: Objective	Suggested:
<ul> <li>Students should be able to identify major</li> </ul>	Read the material for the Competency 1 (Biology).
molecules and learn about the interactions amongst them.	Complete the Pre-Test 1 (and other Pre-tests).

# **COURSE OUTLINE / CALENDAR**

Learning Objectives and Competencies	Assignments
<ul> <li>Students will be introduced to the Cell and its structures and the specific functions of all the various organelles within a cell. Students will also be introduced to the basics of cellular division.</li> <li>Students will understand the purpose and process of cellular respiration (aerobic versus anaerobic) and photosynthesis.</li> <li>Students will be introduced to genetics: mutations, gene flow, natural selection and the role of evolution.</li> </ul>	Goal: Complete and Master (at least 80%) Post-Test 1 by the end of Week 2.
<ul> <li>Week 3-4</li> <li>LO2: Objective <ul> <li>Students will be introduced to the Universe.</li> </ul> </li> <li>Students will demonstrate basic knowledge of our Solar System, stars and moons.</li> <li>Students will demonstrate knowledge of planet Earth and understand our place in the Solar System.</li> </ul>	Read the material for Competency 2 (Astronomy/Cosmology). Complete Pre-Test 2 (if not already completed). Goal: Complete and Master (at least 80%) Post-test 2 by the end of Week 4. Start to research Galaxies.
Week 5-6 LO3: Objective • Students will be able to differentiate between rocks and minerals and	Read the material for Competency 3 (Earth Science). Complete the Pre-test 1 (if not already completed). Goal: Complete and Master (at

Learning Objectives and Competencies	Assignments
<ul> <li>their classifications and compositions.</li> <li>Students will be introduced to plate tectonics and the concept of Earth's surface constantly evolving and moving.</li> <li>Students will be introduced to geomorphology and ever evolving landscape of Earth's surface.</li> <li>Students will receive a basic introduction to meteorology.</li> <li>Finally, students will be introduced to oceanography and the Science of Earth's most fluent landscape.</li> </ul>	least 80%) Post-test 3 by the end of Week 6. Have a rough draft of your Galaxy Paper. Send your rough draft to your instructor if you want feedback for revising your Galaxy Paper prior to submitting your final paper.
Week 7	Complete the all Pre-tests, Post- tests, and submit final draft of your Galaxy Paper by Friday ( <b>March 3rd)</b> by 5 pm.