



EDCI 541 Science Instruction for 21st Century Learners

COURSE SYLLABUS: SPRING 2024

INSTRUCTOR INFORMATION

Instructor: Dr. Becky Sinclair

Office Location: Education South #228, Commerce Campus

Office Phone: 903-886-5669

University Email Address: Becky.Sinclair@TAMUC.edu (Answered on a regular basis, M-F 8:00-4:00 plus additional days/times. Best way to contact me. Please allow 48 hrs response time.)

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Dates and Times:

This course is 100% online and requires no face-to-face meetings.

Materials – Textbooks, Readings, Supplementary Readings:

No textbook is required for this course. All reading materials will be provided by the instructor or via free resources on the internet.

Course Description

Course Description: This course will focus on effective elementary and middle grade (K-8) science classroom instructional practices supporting mastery of the Texas Essential Knowledge and Skills and the Next Generation science standards. The course content and activities address the inquiry process in instruction, resources for teaching science, strategies that support student-centered and constructivist-based pedagogical design and technology applications. [Note: 9-12 students may take this course understanding the focus is towards K-8 teaching and science content.]

Student Learning Outcomes: Through your experiences in this class you should be able to:

1. Students will learn effective teaching strategies for elementary science

The syllabus/schedule are subject to change.

classrooms connected to the Texas Essential Knowledge and Skills and the Next Generation Science Standards.

2. Students will demonstrate an understanding of 21st Century skills and their connection to effective science instruction.
3. Students will develop strategies and activities to effectively integrate 21st Century skills into their science classroom.
4. Students will create a plan of action for implementing ideas learned through the course into their classroom(s).

COURSE REQUIREMENTS

Instructional / Methods / Activities Assessments

This course consists of a series of activities and assessments to assist you in achieving the outcomes/objectives for the course and instructional units/modules. During each unit, you will work on various combinations of assignments; worksheets, activities, threaded discussions, readings, literature searches, etc.

1. Class Attendance & Participation. You are expected to “attend” the online course, participate and complete all course assignments and activities during the semester as outlines in the Course Calendar. The rules of the University regarding class attendance will be followed in this course. The university policy on excused absences is explained in the university Catalog and includes: (a) participation in a required or authorized university activity; (b) illness that is verifiable; (c) death in the immediate family; (d) obligation at a legal proceeding in fulfilling responsibility as a citizen; and (e) other reason as determined by individual faculty to be excusable. Assignments submitted late without documentation of an excused university absence will not be accepted.

2. Reflections & Discussions.

You will complete your course reading assignments and activities according to the Course Calendar and participate in online discussions about your learning. Threaded discussions are designed to encourage communication about your learning, share your personal experiences.

Assessment Method: Threaded discussions will be evaluated against a rubric designed to assess both the quantity and quality of your contributions. Your responses will be evaluated using the following rubric: (1) Quantity of your initial response; (2) Quality of your initial response; (3) Quantity of your responses to your team members and (4) Quality of your responses to your team members.

3. Written Assignments/Activities

Several written assignments are required in this course to reinforce your learning. Requirements for each will be provided in the course units.

4. Planned Application Project

A final course project will demonstrate the ability to apply ideas learned from the course in your own classroom by developing an action plan describing how you will use strategies/ideas from each unit. Details for this assignment will be provided in the course shell.

GRADING

The following rubric guidelines will be used for wholistic grading of most assignments for the course.

Category	Full Credit (A)	Partial Credit (B/C)	No Credit (F)
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Supporting information	Information is clearly stated, comprehensive, and includes required supporting information.	Information is stated, but is unclear.	Information presented does not specifically or comprehensively address the topic.
Evidence and Examples	All responses and examples provided are specific and relevant to the topic.	Most of the responses and/or examples are present, specific and relevant to the topic.	Responses and/or examples are not specific or relevant to the topic.
Sentence Structure	All sentences are well-constructed and information well-organized.	Most of the sentences are well-constructed and organized.	Most sentences are not well-constructed and/or organized.
Capitalization, punctuation and grammar usage	There are no errors in capitalization, punctuation, or grammar usage.	There are one or two errors in capitalization, punctuation, or grammar.	There are several (two or more) errors in capitalization, punctuation, or grammar.
Quality of Work (Computer generated or handwritten)	Complete clear, readable responses.	Partially readable clear responses.	Not legible and/or unreadable.

FINAL GRADE IN THE COURSE

Your final grade in this course is based on your performance on all of the requirements and expectations for the class. Some assignments carry more weight than others. Grades on individual assignments are numerical and based on the table below.

Online Gradebook: Since the D2L course shell does not allow letter grades, the following numerical values will be entered into the online gradebook: A=95, B=85, C=75, etc.

Activity	Number	Percentage of Final Average
Discussions & Responses to Classmates	many	40%
Written Assignments/Activities	many	40%
Planned Application Project	1	20%
Total		100%

Students are responsible to alert instructors of any errors seen in the Gradebook.

At the end of the semester, numerical scores are converted to percentage based on the total assignments for the semester. Percentage scores will be used to calculate a final grade on a scale of 91-100% (A), 81-90% (B), 71-80% (C), 61-70% (D), etc.

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 technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

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LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Zoom Video Conferencing Tool

https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

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

Questions about the Course, Assignments, Syllabus, etc.

Contact me via **email** any time 24/7. I check my email Monday through Friday (8:00-4:00) and often on the weekends. If you email me and do not receive a response from me after 24 office hours (not including the weekend), please resend the email. If you do not receive a response after several office days, or have an urgent need to speak with me, call the EDCI Office (903-886-5307) and ask an office manager to contact me.

Office Hours

I am available most days to meet with students either at my office in Commerce, at the MPLX Center or by phone. Email me to schedule an appointment.

Email Correspondence

All emails from me (and the University) will be sent to your University Email account, not your work or home email. Therefore, it is important to check your Leo Mail every day. Always send emails to me at the university email address provided on the first page.

Student Technical Support

Texas A&M University-Commerce provides students technical support. The student help desk may be reached by the following means 24 hours a day, seven days a week. If you encounter a technical issue that prevents you from completing an assignment, copy me the work order from the Tech Department.

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Best Phone Support: Tech support usually available 24/7 by a techie located in Commerce, Texas – call 903-468-6000.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Late Work.

Specific dates and times are established for every assignment. No late work is accepted without extenuating circumstances approved by the instructor. Students who feel they have an extenuating situation must contact the instructor prior to or during the due date about the circumstance. Work cannot be made up and extra work is not allowed to compensate for missing or later work.

Technology Failure is not an automatic approved excuse for submitting late work. If you experience a technology issue you should: 1. Contact the Tech Support Team and send a copy of the “trouble ticket” to the instructor to document your efforts; 2. Email the assignment directly to the instructor before the due date to document your efforts.

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.

University Specific Procedures

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 in the [Student Guidebook](http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx).
<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

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

<https://www.britannica.com/topic/netiquette>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

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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 13.99.99.R0.03 Undergraduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

[Graduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

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: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

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.

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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.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

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.

A&M-Commerce Supports Students' Mental Health

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 www.tamuc.edu/counsel

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