



UNITED TRIBES®
TECHNICAL COLLEGE

EDU 365 Science in the Elementary Classroom

Brenda Rhone

UNITED TRIBES TECHNICAL COLLEGE

COURSE INFORMATION

This course prepares elementary education teacher candidates to teach science integrated with technology. This course has four components: earth science, space science, physical science, and life science. The focus of this course is on increasing content knowledge and on planning and implementing developmentally appropriate, integrated science units. This course includes inquiry-based and computer laboratory experiences. Field experience is required.

Credits: 2

CLASS INFORMATION

Section Number: A

Term: Spring Year: 2021 Start Date: 1/11/2021 End Date: 5/7/2021

Meeting Times: Thursday

Meeting Location: 10:00-11:50

Delivery Mode: Face to Face

INSTRUCTOR

Kelly Rexine

Email: krexine@uttc.edu

Office Phone: 701.226.9342

Office Location: Online

Office Hours: By Appointment

TEXTBOOKS

INSTITUTIONAL LEARNER OUTCOMES

Critical Thinking: Employ critical thinking skills in the processes used to identify and solve problems.

Quantitative & Scientific Reasoning: Develop solutions to mathematical and scientific problems.

PROGRAM OUTCOMES

Demonstrate understanding of central concepts to connect with and advance student learning.

Utilize a variety of instructional strategies to support rigorous goals.

COURSE OBJECTIVES

1. Participate in and develop inquiry-based lessons that develop an understanding of broad topics in science (earth, space, life, and physical).

2. Develop science activities that are aligned to the ND Elementary Science standards, use an interdisciplinary approach, and use multiple methods of instruction.
3. Develop science activities that use inquiry in teaching science and that focus on science process skills, using commonly available science materials.
4. Develop relevant and authentic applications of science that interest a diverse population.
5. Understand safety and liability issues related to science teaching in the elementary school.
6. Understand how technology can be used as a tool in the science classroom.
7. Demonstrate understanding of the connection of state and national science standards and inquiry processes to the entire elementary school curriculum.

INSTRUCTOR GRADING INFORMATION

In this course, you will complete daily readings and quizzes worth a total of 1,700 points. You must meet at least the minimum number of points stated in the standard on each scoring guide to pass the course. Attendance and reflection papers will be assessed as part of your performance worth a total of 1,600 points. In addition to readings, quizzes, attendance, and reflection papers you will design a final science lesson based on your unit of choice. Your science unit lesson will be worth a total of 500 points.

A. GRADING SCALE

Grade	Percentage
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Below 60%

LEARNING AND ASSESSMENT ACTIVITIES

- Daily chapter readings, quizzes, and video reflections
- Daily attendance
- Daily technology assignment reflections
- Science unit plan and one lesson completed lesson plan from unit of choice

B. COMMUNICATION

All students are required to regularly check their MyUTTC account to obtain information on course assignments, detailed instructions, and announcements. Students are expected to check their student account regularly for any updates or coursework changes. It is important to provide the instructor and/or academic advisor with your current email address, phone numbers and alternate contact information. Class cancellations, emergency information, or other announcements can be conveyed in a timely manner if we have your current contact information.

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that we can help you find a solution.

C. ATTENDANCE POLICY

Class attendance is very important for academic success of all students enrolled at UTTC. Instructors are required to report student attendance into UTTC's Jenzabar data management system on a daily basis during census period (the first two weeks of fall and spring semesters, and the first week of summer semester) and throughout the academic semester. Students can track and monitor their own attendance, per class, on the Learning Management System (LMS) found at my.uttc.edu.

UTTC recognizes particular circumstances may arise that affect the student's ability to attend class; therefore, it is important students communicate with their instructors regarding any emergencies that cause them to miss class (i.e. medical, family emergency). Regardless of the circumstances, the student is responsible for obtaining any information, such as assignments, handouts, and any course changes or announcements that he or she may have missed because of the absence. The student may refer to the course assignments in my.uttc.edu, contact another student enrolled in the course, or set up a meeting with the course instructor to get the missing information.

Attendance, completion of assigned readings and assignments, and engagement is the equivalent of participation since the student's engagement with classmates contribute to everyone's understanding and achievement. Student grades will be impacted by the frequency and quality of participation in class.

Faculty members are required to report student non-attendance during the Census period at the start of each academic term in compliance with federal regulations pertaining to financial aid.

Instructors will initiate an academic attendance "Early Alert" using the Jenzabar retention tool using the Attendance Policy & Withdrawal guidelines found in the Academic Affairs section of the College Catalog.

D. POLICY FOR LATE ASSIGNMENT SUBMISSION

UTTC supports and fosters the student's responsibility for completing and submitting assignments on or before scheduled due dates and times. If an assignment is due, the student should make every effort to submit the assignment on time. Occasionally, a student may experience an unexpected life event that results in the submission of late work. Communication is the key. Instructors are more than willing to work with students in the event of an emergency if the student communicates with them before the date and time the assignment is due to make other arrangements.

Late assignment deadlines will vary among departments but will not exceed more than five (5) business days after which the assignment was initially due. Assignment due dates, late assignment deadlines, and late assignment penalties are outlined in course syllabi. Assignments not submitted by the initial deadline date will be reflected in the course gradebook as a zero (0) until the assignment has been submitted. The amount of points deducted for late work is at the discretion of the instructor. Assignments submitted via E-mail will not be accepted under any circumstances and will receive a grade of zero.

E. MISSED TEST, EXAMS AND QUIZZES (FORMAL ASSESSMENTS)

Students may not make up a missed test, exam or quiz without a valid reason for their absence (illness, family emergency). It is the student's responsibility to contact their instructors before the absence, or within 24 hours after missing the formal assessment. The instructor will review the reason the student missed and determine if the circumstance justifies the student being allowed to take the formal assessment.

Approved make-up assessments must be taken outside of the student's regular class schedule and during a time and location agreed upon between the student and instructor. Students are not to miss another class in order to make-up an assessment for another course. If the student fails to show on the date and time of the makeup assessment, the student will not be permitted to reschedule the makeup and the assessment and will earn a 0% grade.

F. EARLY ALERT SYSTEM

UTTC's Early Alert System (EAS) is a proactive, communication driven support system that provides timely identification and interventions to work with individual students to assist in generating plans to overcome challenges to college success. The system assists UTTC students by linking them to faculty and staff who can provide and connect students to available resources and strategies. The early alert serves as an opportunity for students to take ownership of their success and empower them to accomplish academic and personal goals. The system helps faculty and academic advisors connect and communicate with students as issues arise. The additional cross-wide partnerships create a culture of collaboration focused upon the best interest of UTTC students.

Academic related concerns such as attendance, missing assignments, or classroom behavior will result in an early alert being issued by faculty. When an early alert is issued, the student will receive an email requesting them to make arrangement to follow up with the instructor and/or their academic advisor. Students receiving an early alert should make the necessary arrangements to set up and meet with faculty as soon as possible to generate a plan of success.

G. PLAGIARISM AND ACADEMIC INTEGRITY

Plagiarism is the term for taking credit for work that is not your own. This means you cannot take material from articles, books or websites you find in the library and present it as your own work; you cannot let your friends prepare your assignments for you; and you cannot copy an assignment from a student who took the same course in another semester. Plagiarism is taken seriously because this is a place for learning and new ideas; your assignments are evidence of your learning, your original ideas.

Providing work that is not your own, or that is not unique to the assignment, is inappropriate as a form of dishonesty. The consequences of plagiarism are serious: you will be given an F on the specific assignment, or the entire course, at the instructor's discretion. If you need advice on how to appropriately cite the work of others, please ask. As long as you acknowledge an idea is not your own, and provide the original source, it is generally not plagiarism.

Examples of violations of academic integrity are lying about the reason for an absence, or signing someone else's name to a sign-in sheet when they were not present. Please keep in mind that students generally ask their instructors for recommendations, whether for jobs or for scholarships.

H. STUDENTS WITH DISABILITIES

United Tribes Technical College recognizes its responsibility for making reasonable accommodations to ensure there is no discrimination on the basis of a disability. The Disabilities Services Office coordinates reasonable accommodations, support services, and appropriate referrals for the purpose of removing barriers and providing an equitable learning environment. If you have a disability, please contact the Disabilities Services (DS) office at (701) 255-3285, ext. 1516.

I. TITLE IX STATEMENT

Title IX is a federal civil rights law that prohibits discrimination on the basis of sex, including sexual harassment, rape and sexual assault. United Tribes Technical College is committed to upholding the law and standards that promote respect and human dignity in a safe environment. Sexual misconduct and relationship violence in any form violates UTTC's mission, cultural values, Student Code of Conduct, and may also violate federal and state law. Faculty members are considered "mandatory reporters" and are required to report incidents of sexual misconduct and relationship violence to the Title IX office on campus. If you or someone you know has been impacted by sexual assault, dating and domestic violence, stalking or sexual exploitation, you can find the appropriate resources on the UTTC campus and in the community. These resources include:

- UTTC Title IX Office: (701) 221.1591
- UTTC Campus Safety & Security: (701) 221.1700
- UTTC Academic & Personal Counseling: (701) 221. 1764
- UTTC Domestic Violence Advocate: (701) 221. 1764
- Abused Adult Resource Center Crisis Line: (866) 341.7009
- ND Helpline: 211

J. SOCIAL DISTANCING AND FACE MASKS

United Tribes Technical College understands the importance of the health and safety of our campus community. In an effort to serve our students and community members, we are taking continual efforts to reduce risk and increase cleanliness of our campus locations. As part of our effort to protect the campus community, all students, staff, and instructors are required to observe social distancing and wear face masks at all times while in the classrooms. Face masks will be available at the entrances of buildings and hand sanitizer will be available throughout each building. Students who require accommodations should contact the Disability Services Office at dss@uttc.edu, or (701) 221-1516 to submit the appropriate documentation. Should you become sick or be required to quarantine during the semester, notify the instructor immediately using the contact method described in the syllabus. Students who require accommodations should contact the Disability Services Office to implement the appropriate accommodations required to submit course work during an extended absence.

K. TECHNOLOGY REQUIREMENTS

UTTC houses their courses in a learning management system called LMS.

To access this course, you will need access to the Internet and a supported Web browser (Internet Explorer, Chrome, Firefox, Safari). To ensure that you are using the recommended personal computer configurations, please refer to the minimal technology requirements found at https://my.uttc.edu/ics/Online_Support_Center/System_Requirements.jnz <<updated link

If you need technical assistance at any time during the course or to report a problem with the LMS, please go to https://my.uttc.edu/ICS/Online_Support_Center/ to contact IT for Student HelpDesk support.

EXTERNAL STANDARDS

InTASC Standard 5 - Application of Content

NDESPB/CAEP Standards:

50015.2b, Science and Engineering Practices, Cross-Cutting Themes— Candidates demonstrate and apply understandings and integration of the three dimensions of science and engineering practices, cross-cutting concepts, and major disciplinary core ideas, within the major content areas of science.

50015.4a, Candidates use a variety of instructional practices that support the learning of every child.

50015.4c, Candidates explicitly teach concepts, strategies, and skills, as appropriate, to guide learners as they think about and learn academic content.

50015.4e Candidates lead whole class discussions to investigate specific content, strategies, or skills, and ensure the equitable participation of every child in the classroom.

CLASS SCHEDULE

Week	Date	Topic	Assignment	Due Date
1	1/14/21	Introductions, Expectations, Goals, Syllabus, Projects, Assignments, Questions, Google Classroom, Communication, Chapter 1 Textbook work	Chapter 1 readings, quiz & video reflections. Attendance/Participation	1/21/21
2	1/21/21	Cyber.org Curriculum, Cyber.org Sign Up, Group students-each group will become familiar with Elementary grade activity of their choice and teach it to the class during the following weeks. Chapter 2 Textbook work	Chapter 2 readings, quiz & video reflections. Attendance/Participation	1/28/21
3	1/28/21	Scratch, CS First, Scratch Jr. Chapter 3 Textbook work	Chapter 3 readings, quiz & video reflections. Attendance/Participation	2/4/21
4	2/4/21	Micro:bit (Sensors/Music), Makecode Chapter 4 Textbook work	Chapter 4 readings, quiz & video reflections. Attendance/Participation	2/11/21
5	2/11/21	Minecraft, Chapter 5 Textbook work	Chapter 5 readings, quiz & video reflections. Attendance/Participation	2/18/21
6	2/18/21	Most Likely To Succeed, Chapter 6 Textbook work	Chapter 6 readings, quiz & video reflections. Attendance/Participation	2/25/21
7	2/25/21	360 Camera, Augmented Reality, Create own 360 tour, Chapter 7 Textbook work	Chapter 7 readings, quiz & video reflections. Attendance/Participation	3/4/21
8	3/4/21	Sphero, Science+ Lesson Prep, Chapter 8 Textbook work	Chapter 8 readings, quiz & video reflections. Attendance/Participation	3/11/21

9	3/11/21	Code.org, Science+ Lesson Prep, Chapter 9 Textbook work	Chapter 9 readings, quiz & video reflections. Attendance/Participation	3/18/21
10	3/18/21	Spring Break – No Class		3/25/21
11	3/25/21	Ozobots, Chapter 10 Textbook work	Chapter 10 readings, quiz & video reflections. Attendance/Participation	4/1/21
12	4/1/21	BreakoutEDU, Science+ lesson prep Chapter 11 Textbook work	Chapter 11 readings, quiz & video reflections. Attendance/Participation	4/8/21
13	4/8/21	Science+ lesson prep Chapter 12 Textbook work	Chapter 12 readings, quiz & video reflections. Attendance/Participation	4/15/21
14	4/15/21	Science+ lessons, prep Chapter 13 Textbook work	Chapter 13 readings, quiz & video reflections. Attendance/Participation	4/22/21
15	4/22/21	Science+ lessons prep Chapter 14 Textbook work	Chapter 14 readings, quiz & video reflections. Attendance/Participation	4/29/21
16	4/29/21	Science+ lessons	Attendance/Participation	5/6/21
17	5/6/21	Science+ lessons	Attendance/Participation	-----

Google Classroom Link: <https://classroom.google.com/c/MjUwMTkxNTg3MTE2?cjc=celwz7z>

Google Classroom Code: celwz7z