



EDU 360 Integrated Science & Technology Methods

Spring 2019

Instructors Information

- Kelly Rexine
 - M. Ed.
 - Information Technology Specialist with [EduTech](#).
 - Former 3rd grade teacher.
- Contact
 - Call/Text: 701.226.9342
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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, life science and technology. The focus of this course is on increasing content knowledge and on planning and implementing developmentally appropriate, technology integrated science units. This course includes inquiry-based and computer laboratory experiences. Field experience is required.
- Class Location/Room: Room B02
- Days/Times: Tuesdays: 3:00pm - 6:00pm
- Credit Hours: Three (3)



Spring 2019

Tuesday, January 8th - Introductions, Expectations, Goals, Syllabus, Projects, Assignments, Questions, Google Classroom, Communication

Tuesday, January 15th - NICERC Curriculum, NICERC Sign Up, NICERC Certification, STEAM Fundamental example lesson, Group students-each group will become familiar with 2nd or 3rd grade activity of their choice and teach it to the class during the following weeks. Kelly will demonstrate a NICERC lesson. Flipgrid video reflection

Tuesday, January 22nd - STEAM Fundamental lessons

Tuesday, January 29th - Discover coding STEM EDA, Scratch, Scratch Jr.

Tuesday, February 5th - Code.org, Unplugged activities,

Tuesday, February 12th - Micro:bit (Sensors/Music)

Tuesday, February 19th - Sphero/Drone

Tuesday, February 26th - Arduino, Boe-Bots

Tuesday, March 5th - LittleBits & MakeyMakey

Tuesday, March 12th - BreakoutEDU

Tuesday, March 19th - Google Expeditions, 360 Camera,
Augmented Reality

Tuesday, March 26th - App Smashing

Tuesday, April 9th - Strawbees, Ozobots

Tuesday, April 16th - Makecode

Tuesday, April 23rd - Stop Motion Video with iMovie

Tuesday, April 30th - Final Reflective Presentation

Tuesday, May 7th - Finals Week

Google Classroom Link: <https://classroom.google.com/c/MTczMTQwMDkwNjJa>

Google Classroom Code: [tb06cx](#)

United Tribes Technical College

EDU 360 Integrated Science and Technology Curriculum Syllabus

EDU 360 Integrated Science and Technology

Instructor and Class Information

Instructor Name Kelly Rexine

Email Krexine@gmail.com

Phone 701.226.9342

Start Date 1/8/2019

End Date 5/4/2019

Course Information

Course Number EDU 360

Course Title Integrated Science and Technology Curriculum

Course Description

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.

Total Credits 3

Course Website

<http://bit.ly/uttc360>

External Standards

Title Elementary Education

**Sponsoring
Organization**

NDESP

Target Standards

State: 50015.2b The teacher candidate will study science. Candidates know, understand, and use fundamental concepts in the subject matter of science—including physical, life, and earth and space sciences—as well as concepts in science and technology, science in personal and social perspectives, the history and nature of science, the unifying concepts of science, and the inquiry processes scientists use in discovery of new knowledge to build a base for scientific and technological literacy.

INTASC Standard 8: Instructional Strategies

Program Outcome 3: Technology for Teaching and Learning: to use technology as a means for transforming teaching and learning, infusing it across the curricula.

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 technology that interests a diverse population.**
- 5. Understand how technology can be used as a tool in the science classroom.**
- 6. Demonstrate understanding of the connection of state and national science and technology standards and inquiry processes to the entire elementary school curriculum.**

A.Grading Scale

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

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.

C.Attendance Policy

Attendance and completion of assigned readings is the equivalent of participation since your ideas and your work with classmates contribute to everyone's understanding and achievement. Significant tardiness will be considered an absence. If you arrive late, you may be considered absent for that class period.

Every student is responsible for obtaining the necessary information required in the event of an absence. It is the student's responsibility to contact one of their peers to obtain information concerning assignments, handouts, and any changes or announcements.

Student grades will be impacted by the frequency and quality of participation in class.

D. Policy for Late Submission

Each student is responsible for obtaining the necessary information required in the event of an absence. It is the student's responsibility to contact one of his or her peers to obtain information concerning assignments, handouts, and any changes or announcements.

The assignments and course requirements (homework) must be completed by the due date and are collected at the beginning of the class period. If an assignment is not handed in at the beginning of the class period, it is considered late. Late work will not receive full credit if it is accepted at all. All late work (if prior arrangements have been approved by the instructor) must be personally handed to the instructor. The amount of points deducted for late work is at the discretion of the instructor.

E. Cell Phone

Out of respect for the other students and the instructor, it is advised that cell phones are turned off during class times. If the student is expecting an important phone call (e.g. case worker, Housing, clinic), the instructor must be informed ahead of time and the cell phone set to a silent ring. If such a phone call is received during class time, the student will answer the call by quietly removing him or herself from the classroom. This also includes texting during class; it is not acceptable. Students may not use class time to check social media accounts, voicemail, and/or personal emails.

F. Student Behavior

UTTC students will conduct themselves in a responsible and respectful manner at all times in the classroom, in the hallways, in the Library, the Cafeteria, and any other location on campus. Student behavior that interferes with learning in the classroom will not be tolerated. This behavior includes chronic tardiness, threatening confrontations, intoxication, inappropriate physical contact, lewd or disrespectful language or gestures directed at the instructor or at fellow students, bullying, direct or indirect intimidation, and conversations with other students that are not related to classroom topics.

Faculty are expected to maintain professional management of classroom activities prior to, during and after class times. As such, if a student demonstrates behavior that disrupts or interferes with classroom activities, an instructor reserves the right to ask the student to leave the classroom, to contact campus security, to request mediation by the academic department chair or an academic/personal counselor, or to file a formal complaint subject to a student disciplinary hearing.

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 located in the Education Building Room 123 and speak to the DS Coordinator. The Coordinator can also be reached 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

United Tribes Technical College Teacher Education Conceptual Framework

The Teacher Education unit seeks to improve the quality of education in America by producing reflective professional educators who have demonstrated competency in the knowledge, skills and dispositions necessary for effective teaching through a coherent program of study. Using the INTASC (Interstate New Teacher Assessment and Support Consortium) standards, as well as the philosophy of the department's conceptual framework, Teacher Education has established candidate outcomes that are assessed throughout the Teacher Education program(s)

The Teacher Education program is based on shared core beliefs that incorporate the 4Rs - Relatedness, Relevance, Respect, and Responsibility.

Relatedness is evidenced by believing and behaving as if you are a relative to another person or thing. It is demonstrated and reinforced through collaborations with children and families.

Relevance is meaningful and authentic learning experiences tied directly to state and national standards. Candidates learn and experience reflective practice through hands-on practica in the classroom under mentor and instructor guidance. They are provided the opportunity to study concepts that are meaningful and relevant to one's life and interests.

Respect is an important traditional Native value. Respect is demonstrated through candidate contributions and their respect of others' contributions. The disposition of respect is demonstrated through courtesy, kindness, and acceptance of individuals and their contributions.

Responsibility is a core value of Native cultures as well as the culture of teaching. Candidates are expected to demonstrate accountability for their actions and decisions as they engage in their general education and teacher education curriculum.

