Teaching Science EC-6 EDEE 3330.601

Instructor Information

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COURSE PREREQUISITES

Admission to the teacher education program, which includes participation in a field-based program, EDEE 3320, 3380; all courses in the reading/English/language arts part of the academic major (visual art, music, and theatre arts); and required core and academic major science courses and DFST classes.

CATALOGUE DESCRIPTION

EDEE 3330: 3 hours. Science Grades EC-6

Subject matter background and material organization for an integrated science program in the primary/elementary school. Students experience firsthand the scope and sequence of science education in an elementary school setting.

COURSE GOALS

 Upon successful completion of the course activities students will be able to:

1. Demonstrate professional skills, knowledge, and attitudes as outlined in the Texas Teachers Proficiencies Identify science materials and lessons to address the appropriate science content contained in the Texas Essential Knowledge and Skills.

2. Plan, develop, and implement inquiry-learning activities that follow accepted practice of inquiry-based science in the 5E format.

3. Select (and adapt if necessary) activities and lessons from various resources to an appropriate style and sequence based on science education research.

4. Organize and manage a safe hands-on approach to science instruction.

5. Demonstrate an understanding of the true nature of serving underrepresented and marginalized populations through lesson planning and creating equal opportunities.

Pedagogy and Professional Responsibility Standards (PPR)

- Knows and understands the importance of the state content and performance standards as outlined in the TEKS.
- Uses the TEKS to plan instruction.
- Knows and understands the importance of designing instruction that reflects the TEKS through Grade 6.
- Plans instructional activities that progress sequentially and support stated instructional goals based on the TEKS through Grade 6.
- Knows the connection between the statewide Texas assessment program, the TEKS through Grade 6, and instruction.
- Standard I: Domain I: Competency 001-004 Domain III: Competency 007-010: The teacher designs instruction appropriate for all students that reflects an understanding of relevant content and is based on continuous and appropriate assessment.
- Standard II: Domain II: Competency 005-006: The teacher creates a classroom environment of respect and rapport that fosters a positive climate for learning, equity and excellence.
- Standard III: Domain III: Competency 007-010: The teacher promotes student learning by providing responsive instruction that makes use of effective communication techniques, instructional strategies that actively engage students in the learning process and timely and high-quality feedback.
- Standard IV: Domain IV: Competency 011-013: The teacher fulfills professional roles and responsibilities and adheres to legal and ethical requirements of the profession.
- Technology Applications Standard I: Domain III: Competency 007-010: All teachers use technology-related terms, concepts, data input strategies and ethical practices to make informed decisions about current technologies and their applications.
- Technology Applications Standards II: Domain III: Competency 007-010: All teachers identify task requirements, apply search strategies and use current technology to efficiently acquire, analyze and evaluate a variety of electronic information.
- Technology Applications Standard III: Domain III: Competency 007-010: All teachers use task-appropriate tools to synthesize knowledge, create and modify solutions and evaluate results in a way that supports the work of individuals and groups in problem-solving situations.
- Technology Applications Standard IV: Domain III: Competency 007-010: All teachers communicate information in different formats and for diverse audiences.
- Technology Applications Standard V: Domain III: Competency 007-010: All teachers know how to plan, organize, deliver and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills.

Curriculum Topics

- Code of Ethics per Chapter 247: Domain II, IV
- TEKS organization, structure, and skills: Domain I, III
- State assessment of students (STARR Responsibilities): Domain I, II, IV
- Curriculum development and lesson planning: Domain I, II, III
- Classroom assessment for instruction/diagnosing learning needs: Domain I, III
- Instructional technology: Domain I,III
- Pedagogy/Instructional strategies: Domain I, III, IV
- Differentiated instruction: Domain I, II, III, IV
- Classroom Management: Domain II, IV

Lab Safety

While working in laboratory sessions, students enrolled in EDEE 3330.601 are required to follow proper safety procedures and guidelines in all activities requiring lifting, climbing, walking on slippery surfaces, using equipment and tools, handling chemical solutions and hot and cold products. Students should be aware that UNT is not liable for injuries incurred while students are participating in class activities. All students are encouraged to secure adequate insurance coverage in the event of accidental injury. Students who do not have insurance coverage should consider obtaining Student Health Insurance. Brochures for student insurance are available in the UNT Student Health and Wellness Center. Students who are injured during class activities may seek medical attention at the Student Health and Wellness Center at rates that are reduced compared to other medical facilities. If students have an insurance plan other than Student Health Insurance at UNT, they should be sure that the plan covers treatment at this facility. If students choose not to go to the UNT Student Health and Wellness Center, they may be transported to an emergency room at a local hospital. Students are responsible for expenses incurred there.

ADA accommodation statement:

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website (http://www.unt.edu/oda). You may also contact ODA by phone at (940) 565-4323.

Communication Practices

*Connect with me through **email** and/or by attending office hours. During busy times, my inbox becomes rather full, so if you contact me and do not receive a response within 24 hours, please send a follow up email. A gentle nudge is always appreciated.*

Academic Success Resources

UNT strives to offer you a high-quality education and a supportive environment, so you learn and grow. As a faculty member, I am committed to helping you be successful as a student. To learn more about campus resources and information on how you can be successful at UNT, go to unt.edu/success and explore unt.edu/wellness. To get all your enrollment and student financial-related questions answered, go to scrappysays.unt.edu.

Supporting Your Success and Creating an Inclusive Learning Environment

I value the many perspectives students bring to our campus. Please work with me to create a classroom culture of open communication, mutual respect, and belonging. All discussions should be respectful and civil. Although disagreements and debates are encouraged, personal attacks are unacceptable. Together, we can ensure a safe and welcoming classroom for all. If you ever feel like this is not the case, please stop by my office and let me know. We are all learning together. I also encourage you to review UNT's student code of conduct so that we can all start with the same baseline civility understanding (Code of Student Conduct) (https://policy.unt.edu/policy/07-012).

Required/Recommended Materials

- There are no textbooks for this course. All course readings are available online/Canvas or otherwise provided in class.
- This course has digital components. To fully participate in this class, students will need internet access to reference content on the Canvas Learning Management System. If circumstances change, you will be informed of other technical needs to access course content. Information on how to be successful in a digital learning environment can be found at Learn Anywhere (https://online.unt.edu/learn).

Course Requirements/Schedule

- Please refer to the course summary in the Canvas course for specific assignments and due dates.
- Students will be notified by Eagle Alert if there is a campus closing that will impact a class.
- Emergency Notifications and Procedures Policy (https://policy.unt.edu/policy/06-049).

Assessing Your Work

Class attendance: Participation		10%
Daily Activates		20%
Science Notebooks		10%
Weekly Reading Quizzes		15%
Major Assignments		45%
	Total	100%

A numeric example of a grading scale might be:

A = 100 - 90

B = 89 - 80

C = 79 - 70

D = 69 - 60

F = < 60

In addition to standards for success in courses, there are UNT policies and procedures that you may list or link to in your syllabus. You can access these policies on the Student Support Services & Policies page (https://clear.unt.edu/student-support-services-policies). To encourage students to read and absorb these important processes, you can use a syllabus quiz to check for understanding. A 10-question quiz about current institutional policies and resources is available in Canvas Commons. To access and upload the quiz to your

course, follow the Syllabus Quiz Access directions
(https://acrobat.adobe.com/link/track?uri=urn:aaid:scds:US:58ff8b2b-e3e5-47c1-a6a7-d3d35bdb82a9).

Grades are based on mastery of the content. As a rule, I do not grade on a "curve" because that is a comparison of your outcomes to others. I do, however, encourage you to find opportunities to learn with and through others. Explore Navigate's Study Buddy (https://navigate.unt.edu) tool to join study groups. Maximize your learning with our coaching staff at the Learning Center. Focus on areas where you are struggling in this course by attending scheduled study group sessions with me the week before each exam. Forward together!

Attendance and Participation

Research has shown that students who attend class are more likely to be successful. You should attend every class unless you have a university excused absence such as active military service, a religious holy day, or an official university function as stated in the Student Attendance and Authorized Absences Policy (PDF) (https://policy.unt.edu/policy/06-039). If you cannot attend a class due to an emergency, please let me know. Your safety and well-being are important to me.