ECE 535: Math, Science & Social Studies Curriculum
COURSE SYLLABUS: **SUMMER I 2024 ONLINE**
(16 weeks packed into 4 physical weeks: June 3-July 3)

> This course is adapted for working with prek-5th grade but we will make content & assignments applicable to you as much as possible if you teach older students. - Dr. Corp

INSTRUCTOR INFORMATION

Instructor: Amy Corp, EdD C&I with mathematics cognate
Office Location: Online (Mesquite by appt)
Office Hours: by appointment
Office Phone: use virtual office
University Email Address**:** amy.corp@tamuc.edu
Preferred Form of Communication**:** email
Communication Response Time: usually the same day (24hrs)

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Course readings and OERs are supplied in D2L learning or through the TAMUC library. Must have Adobe Reader.

Textbooks
MATHEMATICS: * We will focus your curriculum with a concentration on strategies for conceptual understanding, procedural fluency, and mathematical reasoning.

SCIENCE: *We will focus your curriculum with a concentration on inquiry-based learning and integrated STEM/STEAM.

SOCIAL STUDIES: * We will focus on your curriculum with a concentration on using source materials, students' funds of knowledge and assets as strategies for implementation.

The *syllabus/schedule are subject to change.*

Course Description

Math, Science and Social Studies Curriculum, three semester hours. This is a study of the content, methods, and theory appropriate for extending learning in math, science and social studies. Emphasis is placed upon formulating ideas **which extend and integrate the learning experiences** of young children. Pre- Kindergarten, Kindergarten, Grades 1-3.

Student Learning Outcomes *(Should be measurable; observable; use action verbs)*

1. Research your curriculum (or one for your student's age) for content, skills and concepts that apply to math, science, social studies and can be applied across the curriculum. (Aligns to Early Childhood Teacher Competency: 15-18)
2. Read the minimum number of resources for mathematics, science, and social studies instructional methods to promote cognitive development in each area (what students think and do). (Aligns to Early Childhood Teacher Competency: 15-18)
3. Reflect on current or future teaching to implement learning with various materials (including technology and outdoor education) to design changes or new ways of teaching (evidence in a product: lesson plan, activity, scope/sequence, planning charts) (Aligns to Early Childhood Teacher Competency 21 & 25)
4. Review and research literature and tech apps that could integrate concepts and promote cognitive development (product: lit and app review) (Aligns to Early Childhood Teacher Competency 21 & 25)

Based on the Early Childhood Teacher Competency:

Competency 15 Interdisciplinary connections/instruction. The early childhood teacher understands interrelationships among the content areas, recognizes skills and concept that may be applied across the curriculum, and can use this knowledge to enhance children's thinking and their ability to understand the world.

Competency 16 Mathematical understanding/concepts. The early childhood teacher understands how the development of mathematical concepts promotes young children's thinking skills and knows how instructional methods involving the use of various types of thinking (e.g., exploration, discovery learning, problem-solving) can enhance children's mathematical understanding.

Competency 17 Social studies concepts and principles. The early childhood teacher knows how to promote children's cognitive development and their understanding of their world through active exploration of social studies concepts and principles.

Competency 18 Science concepts and processes. The early childhood teacher knows how to promote children's cognitive development and their understanding of their world through active, hands-on exploration of science concepts and processes.

Competency 21 Assessment. The early childhood teacher understands how to use a variety of assessment strategies to monitor young children's progress in achieving outcomes and to plan learning activities in all domains.

Competency 25 Materials and resources. The early childhood teacher understands how various types of materials and resources, including current technology, can be used in early childhood classrooms to support learning in all domains for all children.

The *syllabus/schedule are subject to change.*

COURSE REQUIREMENTS

Minimal Technical Skills Needed

The following technology is required for success in this course.
*   - Internet access/connection – high speed recommended*
*   - Word Processor (Word, Google Docs, Adobe)* **save all files as doc, or pdf. files**

Additionally, the following hardware and software are necessary to use D2L learning:
Our campus is optimized to work in a Microsoft Windows environment. This means our courses work best if you are using a Windows operating system (XP or newer) and a recent version of Microsoft Internet Explorer (6.x, 7.x, or 8.x).
Your courses will also work with Macintosh OS X along with a recent version of Safari 2.0 or better. Along with Internet Explorer and Safari, D2L learning also supports the Firefox browser (3.x) on both Windows and Mac operating systems. **Be sure any files you send are doc or pdf.**

It is strongly recommended that you perform a "Browser Test" prior to the start of your course. To launch a browser test, login in to D2L learning, click on the 'myCourses' tab, and then select the "Browser Test" link under Support Services.

Follow the operating system guidelines published here https://secure.D2L learning.com/tamuc/index.learn?action=technical.

Instructional Methods

Aligns with competencies15-18

Mathematics, Science & Social Studies
Assignments:
CONTENT:
1. Learn your curriculum for math, science, and SS. Look for patterns, scope and sequence, topics that cut across the curriculum. Describe your work (audio, video or written).
2. Direct connection to your curriculum in the evidence for each content area.

Aligns with competencies 16-18
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Pedagogy (teaching)
    3. Improving DAP (developmentally appropriate practice) in our teaching.

>   **Mathematics:** understand the skills in each mathematical strand in your curriculum, and develop strategies for conceptual learning, procedural fluency, and mathematical reasoning. Research how to integrate books and technology with math, how to lead discourse, how to design learning tasks.

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SCIENCE: understand inquiry-based (3 types) and design inquiries for each area of science in your curriculum (looks at the TEKS or EC standards). Learn how to integrate books and technology with science.

  * You could utilize Makerspace pedagogy to integrate Mathematics and language arts into your inquiries.

Social Studies: Record at least one integration strategy for area in your curriculum. Include ways to practice and model social skills, and citizenship throughout daily routines.

Aligns with competencies: 15- 18, 25
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Integration*
4. Survey of Children's Literature representing non-dominant cultures and connect to mathematics (2), science (2) and social studies to story (1) and apps:
> Annotate (5 NEW to you) children's books. They must have connections to our content areas: science should connect to your inquiries, math to your strands, and SS to citizenship or social skills.
> Research and annotate 3 (NEW to you) apps in each (ma, sc, ss). These should be for assisting in virtual teaching or assist in promoting thinking alongside an in-class lesson. Do NOT choose apps that are rote practice, they must be conceptual, interactive and if possible include listening/reading.
5. Create a plan for a *Makerspace unit (integrating science/ math and either ELAR/SS) or a STEM/STEAM integrated unit.

Aligns with competencies: 15-18, 25

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Student Responsibilities or Tips for Success in the Course

PLAN to work on this course 3 hours a day Mon-Thur.
HOW:
Check Leo eMail frequently and **D2L** for announcements.
- **Read every day (Mon-Thur)** : this will be the biggest part of your time.
- **Think and Reflect:** What did I just learn? How can I do that with my students? Is this meeting their needs? Is it appropriate?
- **Evidence of learning:** Write or talk it out: how you grew in understanding for each content area. Give tangible evidence: create or refine a product.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%

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B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

    (NO rounding).

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

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

If you have any questions or are having difficulties with the course material, please contact your Instructor.

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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 here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

Please send polite emails with any questions or concerns. I will do my best to answer emails within 24hrs. I do answer texts during the week for critical matters- be sure to state your name and class.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific 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.

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

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.

Campus Concealed Carry Statement

The syllabus/schedule are subject to change.

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**

Department or Accrediting Agency Required Content

COURSE OUTLINE / CALENDAR
Provide in email before the first class. This class is from June 3- July 3, 2024.

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