ELED 436.713 Mathematics in the Field-Based Setting
COURSE SYLLABUS: Fall, 2012

Instructor: Linda S Sadler – Adjunct Professor
Office Location: Room to be assigned
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COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings:

PREPARING TO TEACH TEXAS CONTENT AREAS 2ND EDITION – NATH, RAMSEY

This course will lead the intern toward identifying techniques and strategies that will assist in teaching mathematics in an elementary setting. The intern will become familiar with essential knowledge and skills in appropriate mathematics competencies. Interns are expected to actively participate in seminar discussions and course assignments in ways that will demonstrate their development as professional educators.

The following standards are extracted from Mathematics Standards for EC-6 at the State Board of Educator Certification (SBEC) website:
http://www.sbec.state.tx.us/SBECOnline/standtest/standards/ec6gen.asp
You should review the standards for EC-6 teachers that define *Teacher Knowledge: What Teachers Know* as well as *Application: What Teachers Can Do.*

MATHEMATICS GENERALIST EC–6 STANDARDS

Standard I. *Number Concepts:* The mathematics teacher understands and uses numbers, number systems and their structure, operations and algorithms, quantitative reasoning, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.
Standard II. *Patterns and Algebra:* The mathematics teacher understands and uses patterns, relations, functions, algebraic reasoning, analysis, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.
Standard III. *Geometry and Measurement:* The mathematics teacher understands and uses geometry, spatial reasoning, measurement concepts and principles, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.
Standard IV. *Probability and Statistics:* The mathematics teacher understands and uses probability and statistics, their applications, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.
Standard V. *Mathematical Processes:* The mathematics teacher understands and uses mathematical processes to reason mathematically, to solve mathematical problems, to make mathematical connections within and outside of mathematics, and to communicate mathematically.
Standard VI. *Mathematical Perspectives:* The mathematics teacher understands the historical development of mathematical ideas, the interrelationship between society and mathematics, the structure of mathematics, and the evolving nature of mathematics and mathematical knowledge.

Standard VII. *Mathematical Learning and Instruction:* The mathematics teacher understands how children learn and develop mathematical skills, procedures, and concepts, knows typical errors students make, and uses this knowledge to plan, organize, and implement instruction; to meet curriculum goals; and to teach all students to understand and use mathematics.
Standard VIII. *Mathematical Assessment:* The mathematics teacher understands assessment and uses a variety of formal and informal assessment techniques appropriate to the learner on an ongoing basis to monitor and guide instruction and to evaluate and report student progress.
Standard IX. *Professional Development:* The mathematics teacher understands mathematics teaching as a profession, knows the value and rewards of being a reflective practitioner, and realizes the importance of making a lifelong commitment to professional growth and development.

TExES Preparation Manual-Generalist EC-6 found at:
http://texes.ets.org/assets/pdf/testprep_manuals/191_generalist_ec_6.pdf
http://www.texes.ets.org/assets/pdf/testprep_manuals/194_pedagogy_and_professional_responsibilities_ec_6.pdf
TEKS **http://www.tea.state.tx.us/rules/tac/chapter111/index.html**
http://www.tea.state.tx.us/index2.aspx?id=2147499971
NCTM Standards ***www.nctm.org***

COURSE REQUIREMENTS

Instructional / Methods / Activities Assessments

This course is designed to help you teach math in a classroom setting. We will be focusing on developing lessons through the use of literature, games, and technology. Child development, integrating other subject matter and basic math skills through 6th grade will be covered. You will be comparing NCTM Standards, SBEC State Standards and TEKS. Student observations, projects, and presentations will be assigned.

Grading

Grading will be based on a 100-point system. Each requirement is given a set number of points.

Attendance & Assignements 35 points
Observation 15 points
Project and Presentation 25 points
Final Exam 25 points

ATTTENDANCE

Additional points will be deducted from your final grade for each class that you miss without justification. Points will be deducted for late arrivals and for leaving early without justification. The instructor shall make the determination as to whether extenuating circumstances should be considered. An unexcused absence on the night of your assigned presentation or the final exam will result in a 10-point deduction from your grade. It is the prerogative of the instructor to drop students from courses in which they have accrued excessive absences (two or more). However, a student wishing to drop the course should do so. Failure to do so may result in a failing grade.

ALL HOMEWORK ASSIGNEMENTS ARE DUE WHEN STATED AND WILL NOT BE ACCEPTED LATER THAN OUR LAST CLASS MEETING.

Students are expected to complete all class assignments by our last class meeting. Grades of "incomplete" are recorded only when extenuating circumstances justify extending the time for completion of assignments. A grade of incomplete (X) is rarely given and requires an agreed upon proposal for completing the course between the student and the instructor. This proposal is submitted to the Director of the Navarro Partnership who will forward it to the appropriate department head and dean for approval. Upon approval, the student has one long semester to complete all requirements. Failure to do so results in a grade of "F."

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement:

Since I am an Adjunct Professor I do not have an office located on campus. You may contact me through email or phone. I will be happy to set up an appointment to meet with you on Mondays before or after class.

You are preparing to enter a profession in which independent responsibility and professional behavior are expected at all times. Therefore, I expect the same high standards of responsibility, behavior, and performance from you in the class as I would expect from you as a teacher in your own classroom.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

University Specific Procedures:

Academic Honesty Policy

Texas A&M University-Commerce does not tolerate **plagiarism** and other forms of academic **dishonesty**. Conduct that violates generally accepted standards of academic honesty is defined as academic dishonesty. "Academic dishonesty" includes, but is not limited to, plagiarism (the appropriation or stealing of the ideas or words of another and passing them off as one's own), cheating on exams or other course assignments, collusion (the unauthorized collaboration with others in preparing course assignments), and abuse (destruction, defacing, or removal) of resource material.

Disciplinary action for these offenses may include any combination of the following:

1. Point deduction on an assignment.
2. Failure for an assignment.
3. A grade of zero for an assignment.
4. Failure for the course.
5. Referral to the Academic Integrity Committee or department head for further action.
6. Referral to the Dean of the College of Education and Human Services, Business and Technology, Arts and Sciences, or Graduate School as appropriate.
7. Referral to the University Discipline Committee.
8. Communication of student's behavior to the Teacher Certification Office and/or Dean of the College of Education as constituting a reason to bar student from entering into or continuing in a teacher certification program. Procedures, A 13.04, 13.12, 13.31, and 13.32

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
Gee Library 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu
Student Disability Resources & Services

Disclaimer:

The instructor reserves the right to make changes to the schedule of the class. Any alterations will be announced by the instructor in class or via email. Students who do not attend class or check their email assume full responsibility for missing changes to the course.

COURSE OUTLINE / CALENDAR

1st Class	Introductions Review of Syllabus and Assignments Websites Overview of Math, Introduce Math Standards, TEK assignments
2nd Class	**SIGN UP FOR PRESENTATIONS** **Look at TEKS K-6** TExES Competency 015 Mathematical Process (Standards I, II, V, VI) TExES Competency 012 Mathematics Instruction (Standards VII, VIII) Computation
3rd Class	TExES Competency 013 Number Concepts, Patterns, and Algebra (Standards III, IV) **Presentations (Numbers, Operations, & Quanitative Reasoning)** Computation
4th Class	**Math Class Observation Due** TExES Competency 013 Number Concepts, Patterns, and Algebra (Standards III, IV) **Presentations (Patterns, Relationships, & Algebraic Thinking)** Computation
5th Class	TExES Competency 014 Geometry (Standards III, IV) **Presentations (Geometry & Spatial Reasoning)** Computation
6th Class	TExES Competency 014 Measurement, Probability and Statistics (Standards III, IV) **Presentations (Measurement and Probability and Statistics)** Computation Summary and review
7th Class	**Final** – Course content and computation