Professional Education Unit
Department of Early Childhood, Elementary, and Special Education

Elementary Math Methods (face to face)
EDEE 321 Section 092
Fall 2010

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Course Description: This course will explore the scope and sequence of understandings, attitudes, and skills taught in elementary mathematics programs; and will examine various methodologies used in the elementary grades (P-5)

Required Field Experience Hours: 10, Level III Field Experience

"Community Engagement: A Light to and from the Mountains"

The Professional Education Unit at Morehead State University delivers rigorous, high quality programs that prepare professionals informed by best national and international scholarship, plus research, literature, and experiences specific to Appalachia- preparing professionals to improve the schools, quality of life, and the communities in which they live and serve. This statement is not only the strategic mission for the College, but it also incorporates the conceptual framework that guides all our activities.

Conceptual Framework Outcomes (CFO's):

The Unit and the faculty within individual programs assess the degree to which its graduates:

1) Master the content knowledge, professional and the twenty – first century skills need to make an optimal contribution to "whole" student learning in education settings.

2) Are competent in the collection and use of data to inform decision – making and to demonstrate accountability for student learning.

3) Demonstrate professional dispositions

4) Are culturally competent and understand the regions from which they have come utilizing knowledge and experiences to effectively "bridge the gaps" (economic, achievement, and geographic) ensuring optimal learning for all students.

5) Engage in authentic field experiences in collaboration with committed school – based partners and are empowered to improve the quality of education throughout this region and beyond.

Student Learning Outcomes (SLO's): By the end of this course, the candidate will be able to:

1. Articulate major trends and current issues affecting elementary mathematics education in our country today
2. Identify and explain the impact of student diversity on the teaching of elementary mathematics
3. Employ numerous math teaching strategies which accommodate learners of all ability levels and interest levels
4. Ascertain developmentally appropriate teaching strategies for a diverse group of elementary students including the use of inquiry
5. Evaluate and reflect upon the effectiveness of assessment procedures on student learning
6. Integrate technology for effective mathematics instruction and student learning
7. Integrate best practice literacy strategies for effective elementary mathematics instruction and student learning
8. Align unit and daily lesson plans to local, state, and national mathematics standards in order to close achievement gap in math
9. Demonstrate conceptual understanding of mathematical skills and knowledge
10. Demonstrate resourcefulness in the acquisition of mathematical content for informed and competent teaching

NCATE/ EPSB Accreditation Alignment of CFO's and SLO's:

Program:	**Elementary P-5**		**Math for Elementary Teachers**		
Aligned with▶ **Assessment▼ (point values)**	**Kentucky Teacher Standards (KYS)**	**Kentucky Education Reform Act (KERA)**	**Education Professional Standards Board (EPSB)**	**National Council for the Teachers of Math (NCTM)**	**NCATE**
Tickets Out the Door, 75 pts CFO: 1,2,4 SLO: 1,3,4,7,9,10	1,2,3,4,8	Learning Goals 1,2	Diversity, literacy	A-K	1,4
Midterm, 50 pts CFO: 1,2,4 SLO: 1,3,4,7,9,10	1,2,3,4,8	Learning Goals 1,2	Diversity, literacy	A-K	1,4
Lesson Presentation, 50 pts CFO: 1,2,4 SLO: 1,2,3,4,5,6,7,8,9,10	1,2,3,4,5,6,7,8	Learning Goals 1,2,6	Diversity, assessment, literacy, closing achievement gap	A-K	1,4
Final Exam, 50 pts CFO: 1,2,4	1,2,3,4	Learning Goals 1,2,	Diversity, literacy	A-K	1,4

SLO: 1,2,7					
Blackboard Assignments, 100 pts CFO: 1,2,4 SLO: 1,2,3,4,5,6,7,8,9,10	1,3,5,6,8,9,10	Learning Goals 1,2,3,6	Diversity, literacy, assessment	A,F,G,I,J	1,4
Field Experience Packet, 100 pts CFO: 1,2,3,4,5 SLO: 1,2,3,4,5,6,7,8,9,10	1,2,3,4,5,6,7,8,9,10	Learning Goals 1,2,3,4,5,6	Diversity, literacy, assessment	A-K	1,4
Math/Science Circus, 50 pts CFO: 1,2,3,4,5 SLO: 1,2,3,4,5,6,7,8,9,10	1,2,3,4,5,6,7,8,9	Learning Goals 1,2,3,4,5	Diversity, literacy, assessment, closing achievement gap	A-K	1,3,4
Attendance, 40 pts CFO: 3 SLO: n/a	7,8,9,10	n/a	Diversity, literacy, assessment, closing achievement gap	n/a	1

<u>Assignment Descriptions</u>:

Program: Elementary P-5 Math for Elementary Teachers	
Assessment (point value)	**Description**
Blackboard Assignments, 100 pts	There will be 5 Blackboard assignments due during the course of the semester. The assignments are already on Blackboard and may be submitted anytime prior to the due date.
Lesson Presentations, 50 pts	Two lessons will be presented during the semester. Lessons must be written in KTIP format. Points will be given for the written lesson as well as the presentation.
Tickets out the door, 75 pts	Students will be required to submit a ticket to exit the classroom that answers a question or contains information asked for by the instructor.
Midterm Exam, 50 pts	Students are required to complete a midterm examination. More details will be provided at a later date.
Final Exam, 50 pts	Students are required to complete a final examination. More details will be provided at a later date.
Math/Science Circus, 50 pts	Students will be required to design 5 learning centers that integrate math and science. These are to be centers that only require about 5-10 minutes to complete. Of the 5, you must include a multicultural connection, a literacy integration, and a technology integration. You should use one or more of these centers in your field experience.
Field Experience Packet, 100 pts	The students are required to complete 10 hours in the field. More information will be given regarding this placement. Included will be the math/science circus, a textbook check, a math kit check, and a teacher interview. Students will receive an I if the hours are not complete and entered in TK-20.
Attendance, 40 pts	Attendance is mandatory. One day will be excused. The next will result in a 20 point

	loss, and then the next will result in the loss of the attendance points.

Grading Scale:

90%-100% A

80%-89% B

70-79% C

60-69% D

0-59% E

Required Textbooks:

Hatfield, et al. (2008). Mathematics Methods: For Elementary and Middle School Teachers, 6th edition. Hoboken, NJ: Wiley & Sons.

Course Evaluation:

The evaluation of the teacher candidate will be based on a point system for this course. Each assessment is listed on the previous tables and will have additional information provided in class. These assessments are to be completed both in and out of class and will be graded accordingly by the instructor. The instructor expects all assignments to be submitted or posted on Blackboard on time, typed if necessary, and free from grammatical errors.

Attendance Policy:

Attendance for the class meetings and field experience is a professional disposition for the teacher candidate and a requirement for the course. The candidate will be excused from only 1 class meeting/field experiences without penalty. After the second absence 20 points will be deducted from the 40 point total. After three absences the other 20 points will be deducted. Missed field experiences must be made up in conjunction with the supervising teacher.

TK-20

All students are required to be enrolled in TK-20 and are required to enter the field experience in TK-20 during the appropriate times. If the hours are not entered in TK-20 by the deadline or if the field experience is not completed, the student will receive an I for the course.

Academic Honesty

Cheating, fabrication, plagiarism or helping others to commit these acts will not be tolerated. Academic dishonesty will result in severe disciplinary action including, but not limited to, failure of the student assessment item or course, and/ or dismissal from MSU. If you are not sure what constitutes academic dishonesty, read the Eagle: Student Handbook or ask your instructor. An example of plagiarism is copying information from the internet when appropriate credit is not given. The policy is located at
http://morehead-st.edu/units/studentlife/handbook/academicdishonesty.html

Americans with Disabilities Act (ADA)

In compliance with the ADA, all students with a documented disability are entitled to reasonable accommodations and services to support their academic success and safety. Though a request for services may be made at any time, services are best applied when they are requested at or before the start of the semester. To receive accommodations and services the student should immediately contact the Disability Services Coordinator in the Office of Academic and Career Services, 223 Allie Young Hall, 606-783-5188, www.moreheadstate.edu/acs/

Campus Safety Statement

Emergency response information will be discussed in class. Students should familiarize themselves with the nearest exit routes in the event evacuation becomes necessary. You should notify your instructor at the beginning of the semester if you have special needs or will require assistance during an emergency evacuation. Students should familiarize themselves with emergency response protocols at http://www.moreheadstate.edu/emergency

Course Calendar:

EDEE 321, section 092

Fall 2010 Tentative Daily Schedule

Date	Topic	Readings	Assignments Due
Aug 25	Introduction, Strategies/Techniques	Chapters 1,2,3	None
Sept 1	Standards, Multicultural Conn	Chapter 3	None
Sept 8	Problem Solving, Measuring	Chapters 5,13	BB #1: Math Autobiography
Sept 15	Number Readiness, Graphing	Chapters 6,15	None
Sept 22	Lesson Presentations	None	Lesson Presentations
Sept 29	Lesson Presentations	None	Lesson Presentations, BB #2: Research Article
Oct 6	Operations	Chapters 7,9	None
Oct 13	MIDTERM	None	Midterm Exam
Oct 20	Numbers	Chapter 8	BB#3: Math Webquest
Oct 27	Fractions, decimals	Chapter 10	None
Nov 3	Percents, ratios	Chapter 11	None
Nov 10	Lesson Presentations	None	Lesson Presentations
Nov 17	Lesson Presentations	None	Lesson Presentations, BB#4: Research Article discussion
Nov 24	NO CLASS	NO CLASS	Work on field experience packet
Dec 1	Geometry, Algebra	Chapters 12,14	None
Dec 8	Field Experience Discussion/Circus Presentations	None	Field Experience Packet, BB#5: Community Integration
Dec 14	FINAL	None	Final Exam

*denote Field Experience Day --- Report to school.
^denote No Class --- Independent Readings / Assignments in Blackboard.

A variety of in-class activities will be done such as strategy practices, discussions, group work, and anything assigned by the instructor.