MATH 3161

Mathematics for Early Childhood Teachers I 3.0 Semester Hours (3-0-3)

Department of Mathematics and Computer Science College of Arts and Sciences Valdosta State University

PREREQUISITE:

MATH 2008 with a minimum grade of C (Must have met the prerequisites for MATH 2008, also).

Instructor : Dr. XYZ

Office : Nevins Hall 2XXX
Phone : 229-333-XXXX
Email : XYZ@valdosta.edu

Office Hours : xx:00 - xx:00 TR; others by appointment (example)

Options : Call, e-mail, stop by during office hours, or make an appointment

REQUIRED MATERIALS:

Textbook: O'Daffer, P., Randall, C., Thomas, C., Dossey, J. A. & Schielack, J. (2008). Mathematics for

Elementary School Teachers (4th Ed.), New York, NY: Addison-Wesley.

Other: Three-ring notebook or folder, colored pencils or markers, graphing calculator, ruler (12 inches and

30 cm), scissors, compass, protractor.

COURSE DESCRIPTION

Prerequisite: Grade of "C" or higher in Math 2008 (Must have met the prerequisites for MATH 2008, also). An in-depth study of concepts and processes underlying the P-5 school mathematics curriculum, with special emphasis on numeration, number systems, estimation, and computational algorithms, and the fundamentals of probability and statistics. Problem solving and historical context serve as unifying strands.

GENERAL STUDENT LEARNING OUTCOMES

By the time a student finishes this course, they should be able to do the following:

- 1) solve problems and build new mathematical knowledge through problem solving;
- 2) meaningfully develop and model each of the four basic arithmetic operations on the set of integers and rational numbers:
- 3) model and explain computational algorithms for operations on the set of integers and rational numbers in a meaningful, developmentally appropriate fashion;
- 4) develop and apply a variety of mental computation and estimation techniques for operations on integers and rational numbers;
- 5) model chance situations by constructing a sample space to determine theoretical probabilities and by conducting an experiment to determine experimental probabilities;
- 6) collect, organize, describe, and represent data, as well as read and interpret tables, charts, and graphs;
- 7) apply measures of central tendency and measures of dispersion;
- 8) apply and use concepts of ratio, and proportional variation to solve routine and non-routine problems;
- 9) use algebraic reasoning to solve routine and non-routine problems

Course Overview: Content and processes of mathematics will be treated in an environment that encourages pre-service teachers to view mathematics as a fascinating and stimulating intellectual endeavor which provides skills, insights, and modes of thinking that are essential in the twenty-first century. Students will see the connections between the various aspects of mathematics and between mathematics and other fields.

ASSESSMENT

There will be examinations, Web assignments, homework assignments, in-class participation, and a *mandatory comprehensive final examination* (worth 20% of the available points).

Grading Scale 90% – 100% **A**

80% –

per Valdosta State University Policy found in the VSU Undergraduate Catalog. Please note that there are **no** distinctions made between "excused" and "unexcused" absences. **All absences are counted equally no matter what the reason.** If you are absent, be certain to get class notes, handouts, and assignments from another student in the class. Getting the phone number and e-mail address of two or three classmates during the first week of class will be very helpful. It is **completely your responsibility** to get class materials for a session that you missed.

All cell phones/MP3 players/laptops will be turned off and stowed during class.

Students will receive points for class attendance and participation. Students will lose points for lack of participation (off task, sleeping, and so on), tardiness, and absences. These points **CANNOT** be made up – if you are not present you did not participate and thus cannot receive participation points.

New Limited Withdrawal Policy:

- Please remember that starting fall 2010 undergraduate students are limited to 5 course withdrawals for the lifetime of their undergraduate record.
- o **DO NOT OVER-REGISTER!** Please make sure you are enrolled in courses you intend to complete.
- Please go to http://www.valdosta.edu/academic/WithdrawalPolicy.shtml and read the entire policy and the FAQs.

SOI Statement

At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available through SmartEvals. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators. Instructors will be able to view only a summary of all responses after they have submitted final grades. While instructors will not be able to view individual responses or to access any of the data until after final grade submission, they will be able to see which students have or have not completed their SOIs. These compliance and non-compliance reports will not be available once instructors are able to access the results. Complete information about the SOIs, including how to access the survey, is available on the SOI Procedures webpage.

PROFESSIONALISM

A professional demonstrates the ability to focus on the job at hand. We expect professional basketball players, surgeons, attorneys, etc. to focus on their work when working. Michael Jordan does not read the paper during his game, nor does he go to the game simply to chat. During the semester, you need to exhibit professional behavior by focusing on the job at hand – learning mathematics. If you will come to class with the mindset of putting learning first, then the following aspects of professionalism will naturally fall into place:

- Come to class every time it is scheduled, be on time, and do not leave early.
- Turn in assignments and other materials on time.
- Do not pack up your books early.
- Stay on task learning mathematics.
 - o Turn off/silence cell phones and all other electronic devices
 - No electronic devices are permitted except graphing calculators
 - o Students who use electronic devices during class will lose participation points
- Be prepared.
- Do **NOT** cheat. Procedures for academic dishonesty will be followed if work presented as your own is not actually your own work. If you need help, please get the help BEFORE the examinations.
- Through your actions and words, display that the work you are doing is important.
- Be courteous to and respectful of others. All students have the right to hear in class lectures, so do NOT converse privately during class lectures.

- Clean up after yourself.
- Demonstrate a positive attitude.

Academic Integrity:

"Academic integrity is the responsibility of all VSU faculty and students. Faculty members should promote academic integrity by including clear instruction on the components of academic integrity and clearly defining the penalties for cheating and plagiarism in their course syllabi. Students are responsible for knowing and abiding by the Academic Integrity Policy as set forth in the Student Code of Conduct and the faculty members' syllabi. All students are expected to do their own work and to uphold a high standard of academic ethics." Full information on Academic Honesty at VSU is available at http://www.valdosta.edu/academics/academic-affairs/vp-office/academic-honesty-at-vsu.php

Turnitin, a plagiarism prevention tool, is available to all faculty through BlazeVIEW, VSU's online course management system. All faculty should include the following announcement in their syllabi: "By taking this course, you agree that all required course work may be subject to submission for textual similarity review to Turnitin, a tool within BlazeVIEW. For more information on the use of Turnitin at VSU see Turnitin for Students at http://www.valdosta.edu/academics/academic-affairs/vp-office/turnitin-for-students.php.

Deviation from the stated, implied, or orally given professional standards may result in the notification of your major chair and/or the filing of a Departmental Concern Form.

Access Statement:

Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP) and 229-219-1348 (TTY). For more information, please visit VSU's Access Office or email:0 Td0.5 () Is 004rencinT04rom(i)2.6 (n)10.5 (f (s)-2 o4r)

Example Schedule

5.1		
5.2		
5.1 & 5.2		
Exam Review		
Exam I		
Labor Day - Holiday		
6.1	&	
6.2		
6.3		
6.4		
6.5		
Exam Review		
Exam II		
7.1		
7.2		
7.3		

Exam Review

Thanksgiving Holiday	
Exam Review 8.1-8.4	
Exam V	