

MA 101 Summer 2009

Instructor: John LaMaster

Web Sites: John's Home Page: <http://www.ipfw.edu/math/lamaster>
This section's Home Page: <http://users.ipfw.edu/lamaster/ma101/summer09ma101.htm>

Class Meetings: Monday -Thursday: 10:00-11:45 p.m. KT 123

Office: Kettler 264

Office Hours: Monday and Wednesday: 8:15 a.m. – 9:50 a.m.
Tuesday and Thursday: 9:15 a.m. - 9:50 a.m.
Also by appointment or chance.

Reachable: 481-5430 (office/voice mail)
481-6821 (Math Dept)
481-6880 (FAX)
email: lamaster@ipfw.edu

Prerequisites: MA 109 with C or higher or placement at or above the MA 113 level and one year of high school geometry.

Objectives: This course provides a teacher's perspective of the mathematics of the elementary school curriculum, in particular, mathematical problem solving, sets, numeration, operations on the whole numbers and integers, and elementary number theory.

This class is **not** about learning to do mathematics—and it is **not** about methods for teaching mathematics---although we may at times address both of those issues. It **is** about learning to understand mathematics—and to understand others' understandings of mathematics—particularly the developing understanding of the children that you will eventually teach.

This means that you need to understand mathematics in a connected, meaningful way rather than as a set of rules to be followed without understanding the reasons for the procedure. Part of our goal this semester is your mathematical growth. We anticipate this means a careful look at the nature of mathematics, at what it means to do mathematics, and at your own attitudes toward and beliefs about mathematics

This course is intended to provide opportunities to develop your understanding of mathematics -- by seeing, doing, and learning mathematics with a new set of eyes, and from new perspectives. It will always be about solving problems, reasoning, looking for patterns and relationships, using or creating representations, and making connections. It will also be about deepening our own understanding of the mathematics that we have learned in school, but more than that it will be about thinking deeply about how we have constructed that understanding and about sharing that understanding with others and about listening to others' ways of thinking.

Important Dates

Memorial Day: **Monday, May 25**

Test 1 (tentatively): **Tuesday, June 2**

Last Day to Withdraw Without a Letter Grade: **Friday, June 12**

Test 2 (tentatively): **Friday, June 18**

Final Exam (Comprehensive): **Thursday, June 25, 2009**

Required: *Mathematics for Elementary Teachers via Problem Solving* by Masingila, Lester, & Raymond

Mathematics for Elementary Teachers via Problem Solving: StudentResource Handbook by Masingila, Lester, & Raymond

Tool kit: basic four-function calculator, scissors, 12-inch ruler (preferably with metric), at least 10 different colored pencils, and stapler. You may also want various color markers or highlighters.

Note: You can still rent a TI-83 Plus Graphing Calculator for \$10 at Walb Student Union 225 (481-6586). The Graphing Calculators Web Page (<http://www.ipfw.edu/math/resources/calculators.shtml>) can help you obtain and use a graphing calculator.

Content: Most of Chapters 1 through 4 of the text.

Attendance/ Participation: Since much of the learning in this course occurs interactively during class time, attendance is vital and is part of the course grade (roughly 8%). It is absolutely necessary that you be in class every day. It is impossible to duplicate out side of class the activities and communication that happens within the class. Not only is it important for you as an individual to keep up with the class work, but your group will need your thoughts and voice in their endeavors to solve the problems that we will be doing during each class period. **Three absences FOR ANY REASON will lower your grade by one letter grade.** There is no such thing as an “excused” absence. **If you must be absent for any reason, (athletics, family commitments, or illness) be sure to e-mail me prior to the absence if possible, but definitely before the next class.** If you have significant health problems or other issues, please talk with me to consider possibilities and University policy.

You cannot earn your attendance credit if you are not here for the **entire** class meeting, which means that you are in your seat at 10:30 and staying until class ends at 11:45. You are expected to not only attend all class meetings, but **participate** in your group and contribute to the learning environment of the class as a whole. If you are blatantly not participating in class (such as doing homework for other classes, reading the newspaper, texting, leaving in the middle of class without permission), you may be physically here, but this is *worse* than being absent and counts as such.

Your group sinks or swims together. It is important that all members of the group participate and learn the material. If all members of your team score 90% or above on a chapter test, each will receive 5 bonus points.

E-mail: When sending e-mail to me (lamaster@ipfw.edu) include in the subject line your full name and MA 101.

Assignments: Homework will be regularly assigned. Some writing assignments will be collected for credit and graded. Late assignments will not be accepted. If you have trouble with an assignment, contact me for help. You can also use the tutoring center “The Spot” in KT G21, with hours M to Th 8:00 a.m. - 5:00 p.m. and Friday 8:00 a.m. - 4:00 p.m.

Quizzes: Occasional quizzes will be given, usually announced a day in advance. There will be no make-up quizzes **for any reason.**

Exams: There will be two exams plus a comprehensive final. Unexcused absences from exams shall result in a score of zero. If an absence is unavoidable and deemed legitimate, you must contact me within 24 hours of the exam (if possible, in advance) in order to schedule a make-up.

Grading:

Attendance/Participation	50 pts.
Writing Assignments.....	100 pts.
Quizzes	100 pts.
Tests (2 tests at 100 points each)	200 pts.
<u>Comprehensive Final Exam.....</u>	<u>150 pts.</u>
Total Points Possible.....	600 pts.

90% -100% (540 pts. or more)	A
80% - 89% (480 to 539 pts.)	B
70% -79% (420 to 479 pts.)	C
60% - 69% (360 to 419 pts.)	D
<60% (Below 360 pts.)	F

If you have a disability and need assistance, special arrangements can be made to accommodate most needs. Contact the Director of Services for Students with Disabilities (SSD). They are located at Walb Student Union, Room 113, telephone 481-6658, as soon as possible to work out the details. Once the Director has provided you with a letter attesting to your needs for modification, bring the letter to me. For more information, please visit <http://www.ipfw.edu/ssd/>, the Web Site for SSD.