Moravian College

MATH 125A – Mathematics for Elementary Teaching

Syllabus for Spring 2013

Class Meetings: PPHAC 116

MWF   2:35 to 3:45pm

Office Hours : Adjunct Office PPHAC, MWF 2:00 to 2:30

Instructor: Chris Wetzel- Ulrich

e-mail: wetzel-ulrichc@moravian.edu

Required Materials
Textbook: *Mathematics for Elementary Teachers, A Contemporary Approach*
            By Musser, Burger, and Peterson, Ninth Edition
Calculator: You may use any scientific calculator or the basic calculator on your cell phone or iphone for class. However you may not use your cell phone or any other electronic device for exams.

Goals of this course:

1. The student will be able to use the mathematics content to model and solve realistic problems.
2. The student will be able to use mathematical reasoning to find patterns, make and test conjectures, create simple proofs, or find counterexamples to show a conjecture is not true.
3. The student will communicate mathematically using the appropriate notation, words, graphs, or tables.
4. The student will be able to see connections between the mathematics learned and other disciplines and areas of his/her life and apply the mathematics learned to other areas.
5. The student will use technology as a tool to solve problems.
6. The student will use manipulatives to make mathematical concepts more concrete.

 Topics included in the course: problem solving, sets, whole numbers, properties of numbers, fractions, decimals, ratio, proportion, percent, integers statistics, geometry and measurement. The course is based on state and national mathematics standards .

How to Determine Your Grade:

Your grades will be weighted according to the percentages below. Note these percentages are a general guide and may be adjusted based on the judgement of the professor.

Exams (3)	30%
Classwork (Activities, quizzes, reflections)	20%
Project (Webquest)	10%
Homework Submission	20%
Final Exam	20 %

The following grading system will be used on all tests, quizzes and assignments:

93 - 100 A	87- 89 B^+	77 - 79 C^+	0 - 59 F
90 - 92 A^-	83 -86 B	70 - 76 C	
	80 -82 B^-	60 – 69 D	

Exams and Final Exam

Written exams will be in class on Wednesday, February 6th; Wednesday, March 13th; and Wednesday, April 10th. *Final Examination* on Wednesday, May 1st at 8:30am. All exams will be closed-book. The content of the exams will be discussed in class.

You may use a basic calculator for the tests and final exam. The calculator cannot be a graphing calculator or any cell phone, iphone or electronic device.

Classwork

From the first day of class you will be involved in solving problems. The best way to teach problem solving is to practice problem solving. Some of these problems will be group projects. The team will work on the problem together in class and agree on a solution. Since these projects can only be done in class, it is essential that you attend every class. You will find that you are more successful as part of a group. This will also prepare you for working with students in your classrooms or colleagues in your field.

Working together in groups will also help you to meet the goal of communicating mathematically. As the semester progresses, you will learn many strategies for solving problems. Discovering a pattern is a problem-solving technique that you may be able to pass along to your students. Many problems will guide you to discover a pattern, ask you to make a conjecture from your discovery, test your conjecture and then justify a conclusion from the investigation. This will emphasize that mathematics is a lab science; mathematics is created in this way. Mathematics is not a static body of knowledge. New mathematics is constantly being created.

Although active learning will be emphasized in this course, lectures will still be used to either introduce a concept or to expand on the knowledge gained from an investigation. One way to be successful is to read the text, complete the homework, and participate in discussions.

Most class meeting some form of assessment will be collected. It may be a group activity, quiz, or reflection on the class material. If you miss the class regardless of the reason you cannot receive credit for the missed assignments.

Project

A webquest will be due on Friday, March 29th. This is a project that you will be creating for your own classroom expanding on a mathematics topic that is part of our course. A webquest is one rich problem or scenario that includes an open-ended problem for your students to solve. You provide the students with websites that will help the students to solve the problem. More in-depth details will be provided during the course.

Homework

Computational: You will submit the computational problems with the work to support your answers. I will not be giving you a grade for the computational problems. In addition to the problems you will submit at least a one-half page reflection about these problems. The reflection should include how you think you did on these problems and any difficulties that you had while working on the problems. The reflection will provide me with feedback on the problem sets. The reflection should be your own personal response and not something that is collaborated on with other classmates.

Conceptual: These questions will ask you to explain, discuss, or analyze the concepts. Each question will be graded on a two-point scale: 2= completely correct, 1= partially correct, 0= no meaningful response.

Note: When you submit your homework, remember this is a college-level course and as such your best work; neat, organized, and legible should be submitted.

Class Attendance

You are expected to arrive on-time and prepared to every class meeting. Class attendance and engagement in the learning process are critical factors in determining student's success in their courses. In general, I do not consider absences as being "excused".

- If you miss a class for any reason, you will not be able to make up the class work for that day.

- You are responsible for all material presented during class. If you know that you are going to be absent, please communicate that to me so that we can make arrangements for you to get the information you need. It is also helpful to get the notes from a classmate.

- If you know that you will be missing an exam, be sure to let me know as soon as possible so that we can make alternate arrangements. Note that family vacations and personal travel plans do not constitute a valid reason to reschedule an exam.

- If you miss four classes during the semester – for any reason- your final course grade will be lowered by 5%. Each additional absence, regardless of reason, will accrue an additional 5% penalty to your final course grade.

Late Work

You will be given sufficient time to complete homework or other assignments. Please turn these in on time as I will not accept late work. Remember if you are going to be absent you can always submit your homework via e-mail so that it is on time.

We will have plenty of different assessments during the semester. Please just do what is required. I do not give extra credit assignments, so please do not ask.

Academic Honesty

Students are expected to adhere to the Academic Honesty policy as described in the Student Handbook (http://www.moravian.edu//studentLife/handbook/academic/academic2.html). Any violations of this policy will result in severe penalties on the assignment, a report to the Dean, and the very real possibility of failing the course.

Classroom Management

Consideration of Others – Please be respectful of your classmates. When you come to class please put away your cell phone or any other electronic device.

If you have to leave class early please let me know ahead of time and sit close to the door so that you are not disturbing the class when you leave. The same is true if you are late to class, sit close to the entrance. Side conversations are disruptive to the classroom environment and not acceptable. It is important that we treat each other with respect and courtesy so that we can have an optimal environment to learn and work together.

Learning Disability Accommodations

Students who wish to request accommodations in this class for a disability should contact the assistant director of learning services for academic and disability support in the Academic Support Center, Monocacy Hall. Accommodations cannot be provided until authorization is received from the Academic Support Center.

If you need course adaptations or accommodations because of a documented disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please let me know at your earliest convenience.

Contact and Other Details

- If you need help outside of class, I will be available in the adjunct office of PPHAC from 2:00 to 2:30 before our class meets.   If these office hours do not meet your needs, please feel free to make an appointment.

- You may also leave a message for me on NCC campus at **610-861-4164.** To reach me using e-mail **wetzel-ulrichc@moravian.edu**. (that is a dash between the names).
  Please make sure that you include your ***name and class in the subject line*** so that I will be sure to open your message. Also please include your name in the body of the message so that I will be sure to respond to you.

- I will do my best to meet your needs during this course. Please let me know if the pace is too fast, too slow, or if you do not understand a concept. I will try to accommodate you. I hope that you enjoy the course!

- Determining the grade of an assignment as well as determining the final course grade is subject to my discretion as the instructor of this course.
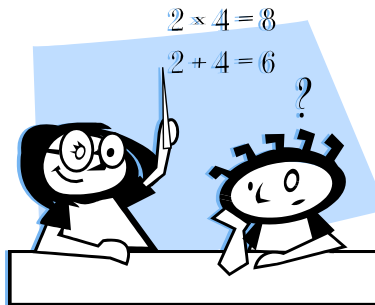
Spring 2013 – MATH 125A - Schedule

Week 1	1/14 to 1/18	Chapter One
Week 2	1/21 to 1/25	Chapter Two
	1/21	no class- Martin Luther King Day
Week 3	1/28 to 2/1	Chapter Three
Week 4	2/4 to 2/8	Chapter Four; *Exam #1*
Week 5	2/11 to 2/15	Chapter Five & Six
Week 6	2/18 to 2/22	Chapter Six & Seven
Week 7	2/25 to 3/1	Chapter Seven & Eight
Week 8	3 /4 to 3/8	Spring Recess
Week 9	3/11 to 3/15	Chapter Eight & Nine; *Exam #2*
Week 10	3/18 to 3/22	Chapter Nine & Ten
Week 11	3/25 to 3/29	Chapter Ten
	3/29 to 4/1	Easter Recess
	3/29	Webquest Project Due
Week 12	4/1 to 4/5	Chapter Twelve
	4/4	Last Day for Withdrawal with W
Week 13	4/8 to 4/12	Chapter Twelve*; Exam #3*
Week 14	4/15 to 4/19	Chapter Thirteen
Week 15	4/22 to 4/26	Chapter Fourteen
	4/27	Classes End
	5/1	*Final Examination (8:30am)*

Note: This syllabus is a guideline and may be subject to change. If any updates are needed I will provide you with an updated syllabus.