Fundamentals of Mathematics I  
MATH. 1350.63430 & 93402  
SPRING 2015  
01/20/15-03/13/15

Professor: T. Slider  
Email: tslider@dcccd.edu  
Office Phone Number: 214-860-3650  
Office Number: W211  
Office Hours: TR 10:00AM – 11:00AM and TR 2:00PM – 3:30PM  
Meeting Days & Time: ONLINE  
Credit Hours: 3 Semester Hours

Division: Business, Computer Science and Mathematics  
Office Hours: M – R 7:30 am – 6:00 pm, F- 7:30 am – 5:00 pm  
Office Phone: 214-860-8645  
Office Number: W210

Course Description: Concepts of sets, functions, numeration systems, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek elementary and/or middle grade teacher certification.

Course Pre-requisites: MATH 1314 or the equivalent.

Course Materials/Supplies Needed  
A PROBLEM SOLVING APPROACH TO MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS, BUNDLED WITH MYMATHLAB ACCESS CODE ( COURSECOMPASS) by Billstein, Libeskind, & Lott, 11th edition (ISBN#9780321828026)  
CALCULATOR

Student Learning Outcomes  
After successful completion of this course the student should be able to:  
1. Understand the foundations for learning mathematics and its relationship to the NCTM Standards.  
2. Understand the fundamental relationship between mathematics and problem solving.  
3. Understand the concepts from set theory that occur in grades 4-8 with emphasis on Venn Diagrams.  
4. Develop the skills necessary to teach function concepts.  
5. Represent functions graphically, numerically and verbally.  
6. Develop the skills necessary to teach addition, subtraction, multiplication and division including estimation and rounding.  
7. Understand the concepts of number theory, and teach the concepts of greatest common divisor and least common multiple.  
8. Develop the skills necessary to teach integer operations.
9. Understand and teach operations with fractions, decimals, exponents and real numbers.
10. Use a variety of manipulatives and other strategies to teach mathematical concepts in grades 4-8.

Course Outline:
Chapter 1  Foundations for Learning Mathematics
Chapter 2  Numeration Systems and Sets
Chapter 3  Whole Numbers and Their Operations
Chapter 4  Algebraic Thinking
Chapter 5  Integers and Number Theory
Chapter 6  Rational Numbers as Fractions

Evaluation Procedures:
Final grades will be computed as follows:
Tests                          50%
Quizzes                       10%
Teaching Assignments       30%
MML Homework            10%
TOTAL                        100%

Your grade is based on MML homework, review quizzes, tests, and teaching assignments. The MML homework, review quizzes, and tests will be completed in MyMathLab. The teaching assignments will be completed in eCampus. The course ID is slider97104 and the school zip code is 75211.

When you enroll in MyMathLab, you are required to use the first and last name that the MVC/DTC Registrar has on file for you. If your name on the MyMathLab course roster is not the same as on the MVC/DTC course roster, then the posting of your grade will be delayed until the matter is resolved.

If you have enrolled in MyMathLab with temporary access, you are to pay on that account. Do not open a new account when you purchase MyMathLab. Follow the instructions in the reminder emails that MyMathLab/ Pearson has sent to you. Your grades will not transfer automatically or be transferred by me from one account to another.

Readings, Videos, and PowerPoint Lectures – You are to read in the Multimedia Textbook, watch video presentations, and view PowerPoint lectures for the assigned sections. These may be accessed in MyMathLab under the button entitled “eBOOK”.

Review Quizzes – There is a review quiz before each chapter test to help you prepare. Every quiz has to be taken in the lockdown browser and they are not timed. You get two chances to take each quiz and the MyMathLab system will automatically include your highest quiz score when calculating your course grade.

Tests – All tests will be taken online in MyMathLab. The tests can be accessed under the button entitled “TESTS & FINAL EXAM”. Each test will be timed and you will be given approximately 80 minutes to complete each test. The system is set so that if you attempt to open another assignment, etc. your test session will end. Do not open any other assignment, etc. when you are testing. Access will not be given if your test closes because you opened another assignment. Test questions will be taken from the readings, video presentations, and PowerPoint lectures. Each test has to be taken in the lockdown browser which you will download from MyMathLab. Please access the following link for more information.
http://help.pearsoncmg.com/xl/student/sa/student_help_Left.htm#CSHID=take_locked_down_tests.htm|StartTopic=Content%2Ftake_locked_down_tests.htm|SkinName=stu-frameset
MyMathLab Homework – Under the “HOMEWORK” button in MyMathLab will be the assignments in which you will practice the mathematics concepts introduced in each chapter. The due dates for these assignments are listed beside each assignment. The due dates are also listed in eCampus under the “ASSIGNMENTS” button.

Teaching Assignments – Under the “ASSIGNMENTS” button in eCampus, the Teaching Assignments will be posted. The teaching assignments will be an opportunity for you to practice teaching mathematics. You have been assigned a math problem to teach. Write what you would say to elementary or middle school students as you are teaching them how to solve the problem. The problem-solving steps should be a part of your teaching. You may think of these assignments as scripts or process essays. Include in your teaching a visual, such as a table, chart, diagram, concept map, or drawing, which would help students to understand the concept you are teaching. If the problem asks the students to find how many pigs are in the barn, then do not include pictures of pigs to count for your visual. The purpose of the visual is to help students understand how to do the math calculations or find a pattern in the numbers to arrive upon a solution. As a teacher, your goal is to explain a concept so your students will understand, retain, and master it. Include in your teaching write-up everything you feel is necessary to achieve that goal. The write-up must be free of spelling, punctuation, and structural errors. This teaching assignment will be submitted in eCampus and must be typed, double-spaced, Arial font, size 12, 1-inch margins, and needs to be at least 2 pages in length. Please refer to the grading rubric below for more information. Each teaching assignment is worth 24 points.

Include header of your first and last name. Include a footer of the page numbers.

Save the file as a Word document with the title being your first initial, last name, MATH 1350, Teaching Assignment #1. For example: TSlider,Math 1350,TeachingAssignment#1

Teaching Assignment Rubric

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4 points</th>
<th>3 points</th>
<th>2 points</th>
<th>1 point</th>
<th>0 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation</td>
<td>Explanation is detailed and clear.</td>
<td>Explanation is clear.</td>
<td>Explanation is a little difficult to understand, but includes critical components.</td>
<td>Explanation is difficult to understand and is missing several components.</td>
<td>Explanation is not included.</td>
</tr>
<tr>
<td>Strategy/Procedures</td>
<td>Typically, uses an efficient and effective strategy to solve the problem(s).</td>
<td>Typically, uses an effective strategy to solve the problem(s).</td>
<td>Sometimes uses an effective strategy to solve problems, but does not do it consistently.</td>
<td>Rarely uses an effective strategy to solve problems.</td>
<td>Strategy used was not evident.</td>
</tr>
<tr>
<td>Mathematical Errors</td>
<td>100% of the steps and solutions have no mathematical errors.</td>
<td>Almost all (80-89%) of the steps and solutions have no mathematical errors.</td>
<td>Most (70-79%) of the steps and solutions have no mathematical errors.</td>
<td>60 – 69% of the steps and solutions have no mathematical errors.</td>
<td>50% or less of the steps and solutions have no mathematical errors.</td>
</tr>
<tr>
<td>Neatness and Organization</td>
<td>The work is presented in a neat, clear, organized fashion that is easy to read.</td>
<td>The work is presented in a neat and organized fashion that is usually easy to read.</td>
<td>The work is presented in an organized fashion but may be hard to read at times.</td>
<td>The work appears sloppy and unorganized. It is hard to know what information goes together.</td>
<td>The work cannot be understood.</td>
</tr>
<tr>
<td>---------------------------</td>
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<tr>
<td>Visual</td>
<td>Diagrams, tables, charts, and/or sketches are clear and greatly add to the reader's understanding of the procedure(s).</td>
<td>Diagrams, tables, charts, and/or sketches are clear and easy to understand.</td>
<td>Diagrams, tables, charts, and/or sketches are somewhat difficult to understand.</td>
<td>Diagrams, tables, charts, and/or sketches are difficult to understand.</td>
<td>Diagrams, tables, charts, and/or sketches are not used.</td>
</tr>
<tr>
<td>Grammar and Mechanics</td>
<td>There are no errors.</td>
<td>There are 1 – 2 errors.</td>
<td>There are 3 – 4 errors.</td>
<td>There are 5 or more errors.</td>
<td></td>
</tr>
</tbody>
</table>

**Gradebook** - Please go to the MyMathLab Gradebook for your average in the course.

**Netiquette** – Please refer to the information under the “Netiquette” button in eCampus to learn the rules of etiquette for this course.

**Time Zone**
The course will be facilitate in Central Standard Time.

**Responsibility of Online Learner:**
As a student in an online course, it is your responsibility to locate a computer with reliable internet access. Computer and internet issues/problems not associated with the eCampus and/or My Lab and Mastering (MyMathLab) websites’ technical issues or downtime will not be considered exceptions to the late work and makeup exam policies. It is also your responsibility to have the necessary course materials to complete the assignments. You will not receive extensions on assignments or tests due to financial issues, not receiving MyMathLab by the start of class, or personal computer issues. Please plan ahead and do not wait until the last minute to complete assignments or tests.

**Instructor Attendance Policy:**
Students are expected to log in to the course regularly. For an online course, regularly is defined as at least three times per week. You must be a highly motivated student who can be disciplined to devote time to a distance learning program of study.

**To be certified as attending this online course, you must complete the Introduction Discussion Board assignment in eCampus by the deadline posted.**

*Students must begin attendance in all classes of enrollment. No exceptions. Financial Aid will not be granted to students who have been certified as not attending, by the certification date. For this lecture course, your physical participation in class, on or before the certification date, will allow you to receive credit for FA purposes. For certification dates, check with the division or FAO for further information. Students, who are not certified as beginning class, are responsible for any payments due as a result of non-certification, to include the dropping of courses.*
**Grading Scale:**

- 100% - 90%  A
- 89% - 80%  B
- 79% - 70%  C
- 69% - 60%  D
- 59% - below  F

**Late Work Policy:**
Late work is not allowed. You are more than welcome to submit an assignment early. You are not allowed to submit an assignment late. Extensions will not be granted.

**Makeup Exam Policy:**
Makeup exams are not allowed. You are more than welcome to do an exam early. You are not allowed to do an exam late. Extensions will not be granted.

**Certification Procedures:**
To be certified as attending this online course, you must complete the Introduction Discussion Board assignment in eCampus by the deadline posted.

**The withdraw date for this class is** **FEBRUARY 28, 2015.**

**Academic Dishonesty:**
Students that caught plagiarizing an assignment will be subject to an “F” in the course and possible expulsion from the college.

*Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog. More information is available at [https://www1.dcccd.edu/catalog/ss/code.cfm](https://www1.dcccd.edu/catalog/ss/code.cfm).*

**Institution Policies:** Please visit [http://www.mountainviewcollege.edu/Academics/Documents/Institutional%20Policies.pdf](http://www.mountainviewcollege.edu/Academics/Documents/Institutional%20Policies.pdf) for a complete list of institutional policies (Stop Before You Drop; Withdrawal Policy; Repeating a Course; Financial Aid; Academic Dishonesty; Americans with Disabilities Act Statement; Religious Holidays; and Campus Emergency Operation Plan and Contingency Plan.).