COLLEGE OF SOUTHERN MARYLAND
MTH 1000 - 80894 Traditional with My Math Lab
Fundamentals of Algebra Summer 2010

COURSE DESCRIPTION AND REQUIREMENTS

Instructor – Elizabeth “Liz” Rourke
Email Address – elizabethr@csmd.edu
Phone Number – 301-934-7802 (Office in La Plata)
Office Location – ST 184 La Plata
Meeting Time – Tuesdays and Thursdays 6:00-9:15 pm C302
Credit Hours - 3 credits

Additional Material -   TI-83/84 or TI-83 Plus Graphing Calculator (Required)
Notebook (Required- Preferably a 3-ring binder)
Graph Paper (Optional)

My Math Lab System Requirements

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<thead>
<tr>
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<th>Operating Systems</th>
<th>Browsers*</th>
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<tbody>
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<td>Safari 2.0</td>
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<td></td>
<td>Macintosh OS 10.5</td>
<td>Safari 3.1</td>
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Prerequisite -   MTH 0900 or Math Placement Test

Important Dates – May 29-31,2010: College closed for Memorial Day
June 16, 2010: Last day to withdraw or change to an audit.
June 30, 2010: Classes end for the semester
ALL FRIDAYS: CSM campuses close at 1:30

Catalog Description
Students whose algebra background is weak or not current learn: elementary algebraic concepts and applications, solutions and graphs of linear equations, systems of linear equations, exponents and factoring. These credits may not be applied to an associate degree.
General Education Requirements
Elementary Algebra (MTH1000) is NOT considered to be a “general education” course (as described in the College Catalog on Pages 55 – 58) as well as the Mathematics Academic Skills (listed on Page 59 of the Catalog), but is a prerequisite to other math courses. Please contact your instructor or advisor if you have any questions.

Course Description
The objective of the course is to give the students a bridge between Arithmetic and Algebra in such a manner as to alleviate mathematical anxiety. At the completion of the course, a student should be able to manipulate signed numbers and exponents, translate and simplify algebraic expressions; translate and solve algebraic equations and inequalities; graph equations in two variables, find the slopes and equations of a line; and add, subtract, multiply, divide, and factor polynomials. Technology is explored extensively throughout the course with the use of the graphing calculator, in particular the TI-83 plus/TI-84.

My Math Lab
My Math Lab, also referred to as Course Compass, is a powerful online, homework, tutorial and assessment system that accompanies your textbook. Instructors can create, edit, and add online homework and quizzes using algorithmically-generated exercises correlated to the objectives in the textbook. Student work is tracked in an online grade book. In many cases, students can also access video clips from selected exercises.

Course Attendance
Attendance in class is checked and recorded. Regular attendance plays a major role in your success in this class. Should you miss a class, it will be up to you to follow the course outline and keep pace with the class. A CD Lecture Series is available in the Learning Resource Center. Arriving late or leaving a class early should be discussed with the instructor. A habit of always arriving late or leaving early is disruptive and disrespectful to classmates and instructor.

Attendance & Grading
Please note that because this is a community college, I understand that a student may be absent due to sickness, funerals, car trouble, oversleeping, work scheduling problems, childcare problems and etc. Because of these life situations, I do not give excused or unexcused absences. However, as an incentive to the student who is on time, does not leave early, and is present for all class meetings, one percentage point will be added to their final grade.

Grading Policy
- Grades will be determined by the following percentages.
  Three Exams 80%
  Homework 20%

- Grade Scale
  Grading scale is as follows:
  A: 90 – 100
  B: 80 – 89
  C: 70 – 79
  D: 60 – 69
• **Exams** - For the 3 Exams, you may use a 5 x 8-inch note card (front and back) with handwritten formulas and notes. The three exams are worth 80% of your grade. **Any exam that is missed will be made up at the end of the semester with an essay exam.** Only one essay exam may be taken.

• **Online Homework.** Throughout the semester homework assignments will be done online by using My Math Lab. These are due by the date indicated in the syllabus. **If you are unhappy with your score after the first attempt, you may go back and repeat these exercises until you get a perfect score. This can be done as many times as necessary until the due date of the assignment.**

My Math Lab is **NOT** a program operated by CSM!! If you are experiencing technical difficulties using the program, then you should call the My Math Lab support number given below. **DO NOT CALL THE CSM HELP DESK!!**

Toll Free: 1 800 677 6337  
Hours: Monday-Thursday, 9AM-10PM  
Friday, 9AM-5PM  
Sunday, 5PM-10PM

Suggestions for Success

• **Practice, Practice, Practice…**

In order for you to be successful in this course, it is important that you take immediate ownership for the course and assume an **active** role in the learning process right from the start. My lectures will utilize a major portion of the class period, but they will be designed to supplement and not replace your activities that form the learning process. **Students are expected to carefully read the text and work through the examples in each section.** This is your indispensable first step in learning the material. **The next step is to work the homework problems.** It is my opinion that this is the most important aspect of any math course. This is the stage when most of the understanding of the mathematical concepts will occur. A considerable portion of the beginning of each class will be devoted to the discussion of these homework problems. It is imperative that you be willing to ask questions on those problems that gave you difficulty. **Seek help as soon as you experience any difficulty with the subject matter.**

• **Tutoring/Help**

An integral part of any math course is receiving individual help when needed from the instructor during office hours or from a mathematics tutor. This may be as important to some individual students as regular class attendance. All students are encouraged to visit or call my office for extra help. My office hours are listed on the first page of this syllabus. The college also offers free tutoring for math courses. A schedule will be posted after the first 3 weeks of classes at [http://www.csm.edu/StudentSuccess/Tutoring/](http://www.csm.edu/StudentSuccess/Tutoring/). **Seek help as soon as you experience any difficulty with the subject matter.**
• **Reading the Textbook**
  One purpose and objective of this course includes obtaining skill in the algebraic topics listed in this document. However, bear in mind this course is not the required math course that fulfills the math requirements for any CSM program. It serves as a prerequisite for courses that will meet that requirements and thus additional math courses need to be taken. Therefore, it is also a primary goal of this course to improve a student’s study skills in mathematics. One skill that most students need to develop is the proper and effective use of a college mathematics textbook. A requirement of this course will be that you read ahead the section that will be covered in your next class. (Refer to your syllabus on a daily basis.)

• **Study Groups**
  A very good way of studying is by the use of study groups. A group of two or three people working on homework problems is beneficial to all in attendance. Being able to ask questions and discuss problems may help you to understand your homework better than if you were doing it by yourself.

**College Policies**

• **Students with Disabilities Act**
  Students needing special accommodations such as seating, larger print, etc. to help meet your needs as described in the Americans with Disabilities Act, please see me immediately with the proper CSM accommodation form so that I may assist you.

• **Academic Honesty**
  Any student caught cheating, or is guilty of any other form of academic dishonesty, will be dealt with by following the established policy published in the Student Handbook. As a minimum penalty it is my practice to give a grade of zero on the entire document involved. On serious cases, I would not hesitate to seek more severe penalties. It is now a requirement for any case of Academic Dishonesty to be sent to the Dean’s office and await a hearing.

• **Disruptive Behavior**
  Any student displaying mildly disruptive behavior that interferes with the conduct of the class may be asked to leave the classroom, please do so in a polite manner in order that we may deal with the issues in the privacy of my office.

• **Classroom Guests**
  The College is emphasizing a policy prohibiting students from bringing guests (children) to class. This policy will be strictly followed because of insurance and liability issues.

• **Audit**
  Students requesting and applying for an audit will have an individualized contract written for them at the time of the request. If a student changes to audit and does not attend classes or complete assignments and tests per our written agreement, he/she will have their audit (AU) changed to a Withdrawal (WD).

• **Drug and Alcohol Policy**
  The College is a Drug-Free Zone. No trafficking or use of drugs or alcohol will be tolerated. Provisions of the Student Code of Conduct in the Student Handbook will be followed.
In order for you to be successful in your mathematics courses, the faculty of the mathematics department has developed the following common expectations of all students in mathematics courses.

1. As a student, you need to take responsibility for your own learning. This includes, but is not limited to:
   - Arriving on time for each class
   - Staying for the entire class and not leaving class early
   - Actively participating in class and not sleeping or putting your head down
   - Not engaging in other activities that detract from the classroom learning experience
   - Bringing the required materials to class. These might include textbooks, notebooks, binders, pencils, pens, and calculators.
   - Taking care of all business (phone calls, bathroom breaks, getting food, drinks, things from cars, etc.) before class starts.

2. You are expected to be an active learner in the classroom as well as out: to participate in group discussion, ask and answer questions, and work problems at the board.

3. You are expected to study your textbook, not merely work problems from it. The best way to do this is to read the section to be covered before the lecture is given, listen to the lecture and take notes, and then study the text again before tackling the practice problems. If this seems like a lot of work, remember that you need to allot **2 hours outside of class** for each hour in class. This time commitment increases for online, web-hybrid, and computer-assisted classes.

4. There is no substitute for continued and ongoing studying and doing homework problems. The best way to learn mathematics is to do mathematics.

5. It is your responsibility to keep your homework up-to-date. If you are having difficulty with the course material, then you need to take action right away – do not wait until you have lost all hope! There are several options to get assistance:
   - Talk to your instructor during office hours.
   - Visit the student success center on campus. Tutors and hours are available at [www.csmd.edu/StudentSuccess/Tutoring/](http://www.csmd.edu/StudentSuccess/Tutoring/)
   - Use online tutoring available at [www.smarthinking.com](http://www.smarthinking.com)

6. Realize that college level mathematics can be hard and is not always fun.

7. You are given the means to keep track of your grade and are expected to take responsibility for knowing your grade status throughout the semester.

8. Learning mathematics is different from learning other subjects. In a mathematics course, you must be able to do four things:
   a. *Understand* the material.
b. Process the material.
c. Apply what you have learned to solve a problem correctly, and
d. Remember what you have learned in order to learn new material.

9. Another reason that learning mathematics is different from learning other subjects is that it follows a sequential learning pattern, which simply means that the material learned on one day is used the next day and the next day, and so forth. This building block approach to learning mathematics is the reason it is difficult to catch up when you fall behind.

10. Mathematics is a speed subject. College mathematics courses cover twice the material in the same time frame as do high school mathematics courses. Faculty has a certain amount of material to be covered each semester. They have to finish certain chapters because the next course is based on the information taught in this course. Improve your study skills so you can keep up!

11. Another way mathematics is a speed subject is that most of the exams and quizzes are timed and many students think that they will run out of time. Students not only must understand how to do the mathematics problems but also must learn the mathematics well enough to complete the problems with enough speed to finish the test.

12. During the first few days of class, do not take the attitude that “I already know this material” and start to slack off by not taking notes or not completing homework assignments. Good study habits start from the first day of class. Start practicing good study habits now while the material is familiar to you. In that way, those habits will already be a part of your routine when the material becomes more challenging.

13. Take pride in your work and never let yourself fall into the trap of believing that you cannot do mathematics. Virtually everybody can, if he or she is willing to work hard enough. Be persistent and determined in your work.

**MTH 1000 Course Schedule and Assignments**


<table>
<thead>
<tr>
<th>Session</th>
<th>Sections</th>
<th>My Math Lab Homework</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td><strong>Session 1</strong></td>
<td>Intro to course, MML 1.2 - Fractions, Decimals, and Percents 1.3 - Number Systems &amp; the Real Number Line 1.4 - Add, Subtract, Multiply, &amp; Divide Integers 1.5 - Add, Subtract, Multiply, &amp; Divide Rational Numbers Expressed as Fractions &amp; Decimals 1.6 - Properties of Real Numbers 1.7 - Exponents and the Order of Operations 1.8 - Simplifying Algebraic Expressions</td>
<td>Section 1.2 Section 1.3 Section 1.4 Section 1.5 Section 1.6 Section 1.7 Section 1.8</td>
<td>Get your 3 ring binder and TI-83/84 calculator.</td>
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<tr>
<td><strong>Session 2</strong></td>
<td>2.1 - Linear Equations: The Addition and Multiplication Properties of Equality 2.2 - Linear Equations: Using the Properties Together 2.3 - Solving Linear Equations Involving Fractions &amp; Decimals; Classifying Equations 2.4 - Evaluating Formulas and Solving Formulas for a Variable (Ex: 7 &amp; 8)</td>
<td>Section 2.1 Section 2.2 Section 2.3 Section 2.4</td>
<td>Make sure you are working on your formula card.</td>
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| Session 3 | 2.5 - Introduction to Problem Solving: Direct Translation Problems (skip Ex. 6)  
2.6 - Problem Solving: Direct Translation Problems Involving Percent  
2.7 - Problem Solving: Geometry & Uniform Motion  
2.8 - Solving Linear Inequalities in One Variable Review for Exam | Section 2.5  
Section 2.6  
Section 2.7  
Section 2.8 |
|---|---|
| Session 4 | **Exam Unit 1**  
3.1 - The Rectangular Coordinate System & Equations in Two Variables  
3.2 - Graphing Equations in 2 Variables | Section 3.1  
Section 3.2 |
| | Do graphs by hand and then check them on the calculator. |
| Session 5 | 3.3 - Slope  
3.4 - Slope-Intercept Form of a Line  
3.5 - Point-Slope Form of a Line  
3.6 - Parallel and Perpendicular Lines  
3.8 - Linear Inequalities in Two Variables (Independent Study) | Section 3.2  
Section 3.3  
Section 3.4  
Section 3.5  
Section 3.6  
Section 3.8 |
| Session 6 | 4.1 - Solving Systems of Linear Equations by Graphing  
4.2 - Solving Systems of Linear Equations Using Substitution  
4.3 - Solving Systems of Linear Equations Using Elimination | Section 4.1  
Section 4.2  
Section 4.3 |
| | Make sure you are working on your formula card. |
| Session 7 | 4.4 - Solving Direct Translation, Geometry, & Uniform Motion Problems Using Systems of Linear Equations (Skip Ex. 3)  
4.5 - Solving Mixture Problems Using Systems of Linear Equations  
4.6 - Systems of Linear Inequalities Review for Exam | Section 4.4  
Section 4.5  
Section 4.6 |
| Session 8 | **Exam Unit 2**  
5.1 - Adding and Subtracting Polynomials  
5.2 - Multiplying Monomials: The Product & Power Rules | Section 5.1  
Section 5.2 |
| Session 9 | 5.3 - Multiplying Polynomials  
5.4 - Dividing Monomials: The Quotient Rule & Integer Exponents  
5.5 - Dividing Polynomials(Ex:1-3)  
5.6 - Applying Exponent Rules: Scientific Notation (Independent Study) | Section 5.3  
Section 5.4  
Section 5.4  
Section 5.5  
Section 5.6 |
| Session 10 | 6.1 - Greatest Common Factor and Factoring by Grouping  
6.2 - Factoring Trinomials of the Form $x^2 + bx + c$  
6.3 - Factoring Trinomials of the Form $ax^2 + bx + c$ | Section 6.1  
Section 6.2  
Section 6.3 |
<p>| | Make sure you are working on your formula card. |</p>
<table>
<thead>
<tr>
<th>Session 11</th>
<th>6.4 - Factoring Special Products (Ex: 5-10)</th>
<th>Section 6.4</th>
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<tr>
<td></td>
<td>6.5 - Summary of Factoring Techniques</td>
<td>Section 6.5</td>
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<td>6.6 - Solving Polynomial Equations by Factoring</td>
<td>Section 6.6</td>
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<td>6.7 - Modeling &amp; Solving Problems with Quadratic Equations</td>
<td>Section 6.7</td>
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<tr>
<td></td>
<td>Review for Exam</td>
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| Session 12 | **Exam Unit 3**                          |             |

Schedule is subject to change at your Professor’s discretion.