Introduction

MAT 104 is a course designed for students who have successfully completed a first course in elementary algebra, or who have passed MAT 100. We will cover solutions to equations and inequalities, graphs and functions, polynomial equations and inequalities, exponents and radicals, and quadratic equations.

Exams

There will be a midterm exam given in class as well as a final cumulative exam. The exams will test your ability to work through some of the computations, as well as your ability to apply the techniques to certain applications. The midterm exam is scheduled for Friday, March 11 and will count for 25 percent of your final grade. The final exam will be held on Monday, May 9 from 9:00 - 11:30 a.m. for section A, and Tuesday, May 10 from 12:00 - 2:30 p.m. for section B. The final will count for 30 percent of your final grade. There will be NO make-ups for missed exams. Please look over your schedule as soon as possible. If you see a potential conflict, inform me immediately.

Homework

The best way to learn Mathematics is to solve problems. Homework will be assigned at the end of each class period and collected the following class period. I will choose 4 or 5 problems to grade in each assignment. To earn full credit for a problem, a complete solution to the problem must be submitted. Just writing down the answer will not earn full credit. In addition to points for each graded problem, 5 points on each assignment will count for completeness and neatness of the graded assignment. Late assignments will not be graded, but they will be eligible for the 5 completion points. If you are not in class the day an assignment is collected, you may turn in your assignment into my office later that day. However, your assignment will be considered late. The homework is designed to help you identify where you might have difficulties. If you encounter any trouble with an assignment or a concept, seek help! The homework will count for 25% of your final grade.

Quizzes

Every other Friday, starting with January 28th, we will have an in-class quiz. There will be a total of 6 quizzes throughout the semester. You should treat the quizzes as mini-exams, covering material from approximately 6 days worth of course work. The quizzes will consist of 4 or 5 problems similar to problems from your graded homework, and they are to make sure that you are keeping up with the concepts presented in class, and to identify where you are having problems before you take the exams. The quizzes will count for 20% of your final grade.

Attendance

Attendance in MAT 104 is extremely important. Although there is no official attendance policy, note that if you are not in class on a particular day, your homework will not be graded for a score. I will also require that you be in class at 8:30 am (9:30 for section B) and no later. If you are late to class, you may stay to enjoy the wonderful learning experience. But your homework grade will suffer.

Grading

Your grade in this course will be based on three main factors: homework, quizzes and exams. The homework will be worth 25% of your final grade, the quizzes 20%, and the exams 55%. In addition to these factors, minor ethereal factors such attendance, class participation, attitude, and improvement over the course of the semester can also affect your grade. To determine your final grade, 90–100% = A, 80–89% = B, 70–79% = C, 60–69% = D, 59 and below = F, with the top two percents receiving a +
and the bottom two percents receiving a −.

Calculators
The use of calculators will not be allowed on any quizzes or exams. None of the work will require any sophisticated computations. You may use a calculator when working on your homework to check your work. However, since will not be allowed to use it on the exam, I suggest you do as much work without your calculator as possible.

Important Dates
- Tuesday, January 25 – Last Day to Drop/Add
- Friday, March 11 – Midterm Exam
- Monday, March 14 - Friday, March 18 – Spring Break (no class)
- Friday, April 1 – Deadline for WD or P/F
- Tuesday, May 3 – Last Day of Classes
- Wednesday, May 4, Sunday, May 8 – Study Days
- Monday, May 9, 9:00 a.m. - 11:30 a.m. – Final Exam (Section A)
- Tuesday, May 10, 12:00 p.m. - 2:30 p.m. – Final Exam (Section B)

Suggestions
- Come to class with your homework assignment completed every day
- Study for at least 30 minutes each day in addition to completing your homework assignment
- Read the section we will be covering before we cover it in class
- Do not fall behind!
- Come to office hours to discuss homework and concepts. I am here to help!
Syllabus
MAT104 : Intermediate Algebra
Section: A/B
Term : Spring 2005

Week 1  January 19  Course Policies, Syllabus
         January 21  Section 2.1 – Solving Linear Equations
Week 2  January 24  Section 2.2 – Problem Solving and Using Formulas
         January 26  Section 2.3 and 2.4 – Applications of Algebra
         January 28  Section 2.3 and 2.4 – Quiz I
Week 3  January 31  Section 2.5 – Solving Linear Inequalities
         February 2   Section 3.1 – Graphs
         February 4   Section 3.2 – Functions
Week 4  February 7   Section 3.3 – Linear Functions
         February 9   Section 3.4 and 3.5 – Slope-Intercept and Point-Slope Forms of a Line
         February 11  Section 3.5 – Quiz II
Week 5  February 14  Section 3.7 – Graphing Linear Inequalities
         February 16  Section 4.1 – Systems of Linear Equations in Two Variables
         February 18  Section 4.2 – Systems of Linear Equations in Three Variables
Week 6  February 21  Section 4.3 – Applications of Systems of Equations
         February 23  Section 4.4 and 4.6 – Solving Systems Using Matrices and Inequalities
         February 25  Section 4.6 – Quiz III
Week 7  February 28  Section 5.1 – Addition and Subtraction of Polynomials
         March 2     Section 5.2 – Multiplication of Polynomials
         March 4     Section 5.3 – Division of Polynomials
Week 8  March 7     Section 5.4 – Factoring a Monomial from a Polynomial
         March 9     Review
         March 11    Midterm Exam
Week 9  March 15    NO CLASS
         March 17    NO CLASS
         March 19    NO CLASS
Week 10 March 21    Section 5.5 – Factoring Trinomials
         March 23    Section 5.6 – Special Factoring Formulas
         March 25    Section 5.7 – Review of Factoring
Week 11 March 28    Section 5.8 – Polynomial Equations
         March 30    Section 6.1 and 6.2 – Rational Expressions
         April 1     Section 6.2 – Quiz IV
Week 12 April 4     Section 6.3 – Complex Fractions
         April 6     Section 6.4 – Solving Rational Equations
         April 8     Section 7.1 – Roots and Radicals
Week 13 April 11    Section 7.2 – Rational Exponents
         April 13    Section 7.3 and 7.4 – Simplifying Radicals
         April 15    Section 7.4 – Quiz V
Week 14 April 18    Section 7.5 – Dividing Radicals
         April 20    Section 7.6 – Solving Radical Equations
         April 22    Section 7.7 – Complex Numbers
Week 15 April 25    Section 8.1 – Completing the Square
         April 27    Section 8.2 and 8.3 – The Quadratic Formula
         April 29    Section 8.3 – Quiz VI
Week 16 May 2       Review