# Math 110 Section 02 – College Algebra - Spring 2009

MWRF 10:00 - 10:50 MRC 416

**Instructor:**

Diane Overturf, M.S.
Office: MRC 571 Telephone: 796-3654 Email: Droverturf@viterbo.edu
Office Hours: MWRF 9:00-9:50. Other times can be arranged by appointment.

**Additional help**: Individual help is also available in the Learning Center located in MRC 332.
You may sign up for individual tutoring or drop in for homework help.
**Drop-In Math Homework Help** hours for Spring 2008:
Mondays – Fridays 11 – 11:50 a.m.
Mondays – Wednesdays 2 – 2:50 p.m.

**Text:**

Required: Fundamentals of College Algebra, Eleventh Edition by Swokowski & Cole
Optional: Student's Solutions Manual for the text listed above. Although this is not required, I strongly recommend purchasing it.

**Course Catalog Description:**

Review of basic algebra, second-degree equations and inequalities, roots of polynomials, exponential and logarithmic functions, and systems of equations. Not applicable toward mathematics major or minor sequence. Prerequisite: acceptable score on placement exam, grade of B-minus or better in one year of high school algebra, or grade of C or higher in Math 001.

**Core Skill Objectives:**

1. Communication Skills
   - Writes competently within the major and for a variety of purposes and audiences.
   - Reads with comprehension and the ability to analyze and evaluate.
   - Speaks effectively, both formally and informally.
   - Listens with an open mind and responds with respect.
   - Accesses information and communicates using current technology.
2. Thinking Skills
   - Uses reasoned standards in solving problems and presenting arguments.
3. Life Values
   - Analyzes, evaluates and responds to ethical issues from an informed personal value system.
4. Aesthetic Skills
   - Develops an aesthetic sensitivity.
5. Cultural Skills
   - Participates in activities that broaden the student's customary way of thinking.

**Course Objectives:**

1. Communication Skills
   - Produces both written and oral communication throughout course; particular attention is paid to the accurate and appropriate use of the language of algebra.
   - Uses technology to solve problems and to be able to communicate solutions and explore options.
2. Thinking Skills
   - Study briefly the basic ideas of a first algebra course.
   - Learn to solve quadratic equations by factoring, completing the square, and by use of the quadratic formula
   - Improve one's ability to read and solve application problems by means of constructing appropriate algebraic models and applying algebraic techniques to find a solution.
   - Explore exponential and logarithmic functions, including application problem and the efficient and appropriate use of logarithms and their properties.
   - Learn the techniques of solving systems of equations and appropria`tely applying these processes to work problems.
3. Life Values
   - Adheres to the Academic Honesty Policy.

4. Aesthetic Skills
   - Develops an appreciation for symmetry.
5. Cultural Skills
   - Understand how knowledge is developed and verified in mathematics.

**Course Outline:**
Ch 1: Fundamental Concepts of Algebra
Ch 2: Equations and Inequalities
Ch 3: Functions and Graphs
Ch 4: Polynomial and Rational Functions
Ch 5: Inverse, Exponential, and Logarithmic Functions
Ch 6: Systems of Equations and Inequalities

**Attendance and Academic Honesty:**
Attendance is essential. You are adults and mature enough to realize that in order to succeed in this class it is vital that you be here. If you cannot make it to class and have any questions, contact someone in the class or myself. To make up a missed quiz or exam you must contact me before the start of class.

Tardiness is a disruptive influence on the class and will affect your grade as follows. After 4 times of being tardy, one point will be deducted from your quiz total points for each additional day you are tardy.

You are responsible for all information given during class. Missed quizzes and exams may be made up if and only if you contact me before the quiz or exam and have a legitimate excuse.

Cheating will not be tolerated. First offense will be a zero for the particular work; a second offense will result in an F for the course.

**Responsibility:**
My responsibility is to help you learn the material in this class through presenting new concepts, modeling the process of solving problems, and challenging you do your best. I will do this to the best of my ability.

Your responsibility is to be actively engaged in the process of learning through attending class, reading the text, listening attentively, taking notes, practicing the concepts through doing daily assigned homework, asking questions when you need clarification, and seeking outside help when you need it. You will not succeed in this class if you are unwilling to put time into practicing the concepts outside of class. I encourage you to study with others and to seek a tutor if you find the material very difficult.

**You are responsible for all information and assignments given during class, even if absent.**

You are expected to be respectful and considerate. Harassment, swearing, or sexual innuendo will not be tolerated. Do not talk while others are talking. Anyone who cannot control their behavior will be asked to leave the room.

**Americans with Disabilities Act:**
If you have a diagnosed disability and require services or accommodations for this class, please inform me and Jane Eddy, the disabilities (ADA) coordinator (MRC 332; 796-3194) within 10 days to discuss your needs.

*May your life be like arithmetic*
*Friends added, enemies subtracted*
*Joys multiplied and errors divided*

## Assessment:

Grading scale: A: 91%-100%, AB: 88%-90%, B: 81%-87%, BC 78%-80%, C: 71%-77%, CD: 68%-70%, D: 61%-67%, F: 60% and below.

Your grade will be based on the following weighted components:

**Chapter Exams:** (30%)

**Assignments:** (30%)

Individual and group assignments, for grade, will be given throughout the semester. Group assignments are to be completed as a group. Every member of the group will receive the same grade. If a member of your group is not pulling his/her weight contact me. Any student who does not actively participate in completing group assignments may be asked to complete them alone. Writing Assignments: I will assign a number of related writing projects during the semester. Writing Assignments will be graded on accuracy, completeness, thought put into your responses, and writing skills.

**Quizzes:** (10%)

Quizzes will be given at least once a week, with the possible exception of exam weeks. You will have a quiz the last day of every week (usually Friday). A pop quiz can occur at any time.

**Final Exam:** (30%)

Your final exam grade will consist of a take home group, open book exam and a comprehensive individual, closed book exam given on Thursday May 7 from 9:50 to 11:50 AM. The two will be combined to form one final exam grade as follows: group exam (1/3), individual exam (2/3).

**Late Assignments** will be accepted up to three days late. For each day late your grade will be deducted 10 percentage points (one grade level). After three days, a zero will be given for that assignment. Tuesday counts even though class does not meet. Assignments can be placed in the slot on my door. Any extra credit assignments will not be accepted late.

**Extra Credit** assignments may be offered during the semester. Extra credit assignments are not accepted late. Extra Credit is graded on a point for each problem correctly done and the points are added to your quiz scores. Extra Credit will not raise your grade more than one half grade level. I.e. it can raise your grade from a BC to a B but not from a C to a B.

**Missed Quizzes and Exams:** Missed quizzes and exams may be made up if and only if you contact me before the quiz or exam and have a legitimate excuse.

**Schedule:**

You are responsible for knowing these dates. Graded assignment due dates will be announced as they are assigned. This schedule may change as we progress through the course. You will be notified of any changes.

| | |
|---|---|
| Jan 12 – Jan 26 | Ch 1.1- 2.2 |
| **Jan 28** | **Exam ch 1.1- 2.2** |
| Jan 29 - Feb 9 | Ch 2.3-7 |
| **Feb 11** | **Exam ch 2.3-7** |
| Feb 12 – Mar 11 | Ch 3 |
| **Mar 9** | **Writing Assignments collected** |
| **Mar 12** | **Exam ch 3** |
| Mar 13 – 27 | Ch 4 |
| **Mar 30** | **Exam ch 4** |
| Apr 1 – Apr 16 | Ch 5 |
| **Apr 17** | **Exam ch 5** |
| Apr 20 – Apr 29 | Ch 6 |
| **Apr 29** | **Writing Assignments collected** |
| **Apr 30** | **Exam ch 6** |
| May 1 | Group Final Exam in-class work day |
| **May 7** | **Take Home Group Final Exam collected** |
| **May 7 9:50 – 11:50** | **Final Exam** |