

**MATH 112: College Algebra**  
**Spring Semester 2012**

**Lecture Information**

Instructor: Diane Rivard (<http://www.math.wisc.edu/~rivard>)

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Location and Time: Helen C. White Library, room 3250, TR 1:00-2:15

**Lab Hours:**

Day	Time
Monday	2:30-4:30
Tuesday	2:15-3:45, 4:00-5:00
Wednesday	12:00-1:00, 2:30-4:30
Thursday	2:15-3:45
Friday	2:30-3:30

All lab hours are held in Helen C. White Library, room 3250.

**Required Student Material:**

1. We will be using MYMathLab software in this class. You will need an access code to the software. It is available at the University bookstore bundled with a guided notebook. The ISBN number is 0321788141. You will be required to bring the notebook to class.
2. Headphones: Headphones are needed to listen to the video lectures at the computers.
3. Non-graphing calculator: You will need a calculator to work on some problems from the assignments, quizzes and exams. A non-graphing calculator is allowed during the computer portion of exams. You should use a scientific calculator that is capable of computing an exponential or a logarithm. (Look for a calculator with a “LOG” or an “LN” button.)

## Grading:

Your grade for this class will be based on your performance in the following activities, weighted as follows:

**Attendance:** 10%. Please read the attendance policy very carefully.

**Homework:** 10%. There will be weekly homework, assigned on MyMathLab.

**Quizzes:** 15%. There will be a quiz, to be done through MyMathLab, every week that we do not have an exam. We will also have optional written quizzes.

**Four Exams:** 7.5%, 12.5%, 12.5% and 7.5%. The dates are below.

**Final Exam:** 25%.

**Note: You need at least an average of 50 % on exams to pass this course.**

## Time and Class Organization:

See handout.

## Attendance Policy:

To be considered present in a given class period, you must arrive on time, and stay until the class period is over. In addition to this, **you must spend the entire class period working on your mathematics material as directed by your instructor.** You are not allowed to text-message, check your email, connect to Facebook, etc. After one warning you will be counted as absent.

Each student will be allowed 3 unexcused absences during the semester. After 3 unexcused absences, each unexcused absence will reduce your attendance grade by 1%.

Absences will be excused **only** for the following reasons:

1. Athletic commitments (a letter from the Athletics Department is required)
2. ROTC or military active duty (with appropriate approvals)
3. Illness, with a doctor's note

If you find yourself in any of the above circumstances, bring the appropriate documentation in a timely manner to your instructor. He or she will take it to the coordinator of the program for approval.

Every time you have an unexcused absence, you will receive an email from your instructor notifying you of the impact your absence has had on your grade in the course.

Finally, if you earn an A on an exam, you will be excused from attending the class, *for as long as you get A's on the weekly quizzes*, until the next exam. If you get a grade lower than an A on

a quiz, you will be required to attend class again. If you are eligible for this dispensation, you will receive an email excusing you from attending computer sessions. When you lose this privilege, you will likewise be notified by email.

If you are uncertain whether you are excused from attending class, *ask your instructor*. Thinking that you are excused from attending will not earn you an excused absence.

### Assignment/Exam Extensions:

Extension of deadlines and make-up exams will only be granted for the following reasons:

1. Athletic commitments (a letter from the Athletics Department is required)
2. ROTC or military active duty (with appropriate approvals)
3. Illness, with a doctor's note

Again, if you find yourself in any of the above circumstances, bring the appropriate documentation in a timely manner to your instructor. He or she will take it to the coordinator of the program for approval. Please note that the Exam dates are below, and it is your responsibility to verify *right now* that you will be able to attend class on Exam days.

### McBurney Students:

If you have a McBurney visa please talk to your instructor right away.

### Academic Misconduct:

Cheating and plagiarism will not be tolerated. If you are unsure whether a particular action is considered cheating or not, do not hesitate to contact your instructor to discuss it.

Cheating and academic dishonesty will result a grade of zero on that specific assignment and University policies will be followed.

### Course Components:

1. **Homework:** There will be about 13 homework assignments this semester. Your lowest score will be dropped. There will be a homework assignment every week due Tuesday at 11:59PM. You will be able to take each homework an unlimited number of times.
2. **Quizzes:** There will be about 10 quizzes this semester. Your lowest score will be dropped. There will be a quiz every non-exam week that will be due on Wednesday at 11:59pm. You will be able to take each quiz 10 times; only your highest score will be recorded. Please note that you **must** earn at least 80% on the corresponding homework assignment to make the quiz available.

3. **Exams:** There will be four in-class exams. Each exam will have a computer portion and a written portion except for the last one.

- Exam 1: Thursday, February 16 in class (computer part), Thursday, February 16 5:30-6:30, room TBA (written part)
- Exam 2: Thursday, March 15 in class (computer part), Thursday, March 15 5:30-6:30, room TBA (written part)
- Exam 3: Thursday, April 12 in class (computer part), Thursday, April 12 5:30-6:30, room TBA (written part)
- Exam 4: Tuesday, May 8 in class (computer part only)

4. **Final Exam:**

There will be a cumulative final exam on **Monday May 14, 7:45am to 9:45am**. The final exam has been scheduled by the University. You should not make travel arrangements until after this date, as no early final exam will be given. If you have a conflict (as defined by the University) let your instructor know in writing within the first three weeks of classes.

**Course Content:**

- Equations and inequalities
- Functions; composition of functions; inverse functions
- Maximum and minimum problems
- Exponential and logarithmic functions
- Compound interest, including continuous compounding
- Graphs of polynomials, rational functions, logarithms and exponentials
- Complex numbers
- Division of polynomials
- Remainder Theorem and Factor Theorem
- Arithmetic sequences and series
- Geometric sequences and series
- Systems of linear equations
- Gaussian elimination
- Introduction to matrices
- Nonlinear systems of equations