# MATH 71 – SPRING 2006 INTERMEDIATE ALGEBRA

Instructor: Alina Birca

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Office: Building 40 – Room 145 Office hours: MW 9:00 – 9:30 am;

TTh 3:00 - 3:30 pm & 6:00 - 7:00 pm

Text: Intermediate Algebra (4<sup>th</sup> edition) by Blitzer

**Student Access Kit** Required It is available bundled with your textbook or as a standalone item.

See more details on last page of the syllabus.

Section #086075 TTH 12:30 – 3:00 pm 40 – 129 Section #086089 TTH 3:30 – 6:00 pm 40 – 126

# **Course Objectives**

Intermediate Algebra is a second semester study of basic methods in algebra with an emphasis on modeling and problem solving. A common thread through this course is the idea that any problem in basic algebra can be addressed through the use of: (1) relations between expressions using operations on numbers and variables; (2) tabulated data; (3) visual displays (graphs). Some of the course objectives are:

- the ability to model problems or phenomena by algebraic expressions and equations;
- the ability to consider a problem using algebraic, numerical, graphical, and verbal methods;
- the ability to write an algebraic expression from a verbal description, to recognize trends in a table of data, and to extract and interpret information from the graph of a function.
- the ability to apply mathematical techniques to study and understand new situations;
- a thorough understanding of functions (linear, quadratic, polynomial, rational, exponential, and logarithmic).
- a thorough understanding of sequences and the binomial theorem.
- the ability to recognize the behavior and characteristic properties of parabolas, circles, ellipses, and hyperbolas.
- the ability to apply studied principles and skills to new situations in addition to situations that mirror those on the homework and those shown in class.

#### **Methods of Instruction**

This course will combine lecture, teamwork, and class discussion. Students will be required to do homework, group problems, quizzes and examinations.

## **Attendance and Participation**

Understanding math requires more than just reading a textbook. Listening and participating in the class activities are as important as solving problems. College policy requires that you attend every class meeting. Any absence will adversely affect your class participation grade plus you will miss the material from that day and that day's quiz. Do not be late to class. Excessive tardiness will also affect your participation grade. You may also miss the quiz if you are late. NOTE: You the student are responsible for dropping the course should you decide not to continue in it. If you stop attending and doing the work and you fail to drop, you will receive a failing grade in this course.

You may be dropped from this class if you miss class during the first 2 weeks of instruction. Your seat will be given to a student who has been attending each day.

## **Pre requisites**

There is an official prerequisite for this course (Math 51 – Beginning Algebra), and I expect that you demonstrate beginning algebra skills (properties of real numbers, polynomials, exponents, absolute value, factoring, evaluating algebraic expressions, linear and quadratic equations).

## Study time & Extra help

You are expected to study two hours outside class for every hour in class. If you have trouble completing assignments or understanding the mathematics, get help as soon as you need it. My office hours are listed above. Free tutorial services are available in MARC (40 - ).

## **Late Work**

Be prepared with all assignments on the day they are due. As a rule, I do not accept late written work nor are there any make up tests or quizzes.

## **Academic Honesty**

Plagiarism or cheating will not be tolerated. There will be a zero on the assignment and risk failing the course.

#### Calculators

A graphing calculator is NOT REQUIRED for this class! All of the problems I will assign this semester will be done using paper, pencil, ruler and a <u>scientific calculator</u>.

If you have a phone or pager, please turn it to vibrate and sit close to the door in case you need to use it in an emergency. Thank you.

# **Organization, Grading and Requirements**

You will need a 3-hole binder with 3 separators, labeled as follows:

## **LECTURES**

## **HOMEWORK**

## **TESTS & QUIZZES**

- **LECTURES** Pay attention in class to what I say and do, and make careful notes. In particular, note the problems I work on the board, and copy the complete solutions as well as the theory presented in each section. Work as neatly as you can. Write your symbols clearly, and make sure the exercises are clearly separated from each other. Do not hesitate to ask questions in class. It is not a sign of weakness, but of strength. There are always other students with the same question who are too shy to ask.
- **HOMEWORK** Before you start on homework assignments, rework the problems I worked in class as well as all examples from the textbook and MyMathLab. This will reinforce what you have learned. Make sure you check your previous work against the solution sections posted on my website. Print out the solutions from my website for your reference.
- Keep all quizzes and tests that are returned to you in your binder. Use them when you study for future tests and for the final exam.

Assignments in the course are divided into five areas and are worth a total of 1000 points. Those earning 900 points or more will be awarded an A, 800 to 899 points a B, 700 to 799 points a C, 600 to 699 points a D and less than 599 points an F.

# **Class Participation 35 points**

Your class participation grade includes completion of class exercises and contribution to solving exercises as well as attendance and audience behavior. Everyone starts with 35 points but may lose some of the points as the semester goes on. Students who are absent will be automatically forfeit a percentage of their class participation grade equal to the percentage of classes absent.

#### MyMathLab Homework 100 points

Homework will be assigned every class session. See due dates on the Tentative Class Schedule. Homework will be done using MyMathLab software program. Each student needs a student access kit to enroll in a Course Compass course. If you don't have a computer at home, you can use one in the MARC center (math tutors available) or Student's Learning Center. See details about registering for MyMathLab on the last page of the syllabus. Each homework is worth 10 points. The lowest homework score will be dropped.

## **Ouizzes 135 points**

Ten quizzes will be given (see Tentative Class Schedule). They may be given at the beginning of class or at the end of the class! These quizzes will be given from <u>exercises and examples done in class</u> as well as homework <u>problems</u> assigned from the topics covered up to that point. For an exercise to be complete there needs to be a detailed solution to the problem. Do not just write down an answer. **No proof, no credit given!**Each quiz is worth 15 points. The lowest quiz score will be dropped.

## Tests 480 points

Four tests will be given over the major areas addressed in the course. Each test is worth 120 points. For an exercise to be complete there needs to be a detailed solution to the problem. Do not just write down an answer. **No proof, no credit given!** 

# Comprehensive final 250 points

The final is a  $2\frac{1}{2}$  hour exam and it is held on **Thursday, May 18** from 10:30am -1:00 pm or 1:00 - 3:30 pm (see below). The final is a cumulative exam. You may use the final exam percent score to replace your lowest test score. You must take the final to pass this class.