# MATH 51 - SUMMER 2009 BEGINNING ALGEBRA 

| Instructor: | Alina Birca |
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| Office: | Building 61 - Room 1658 |
| Text: | Beginning Algebra (10 edition) by Lial, Hornsby, and McGinnis |
| Section: | MWR \# 10602: 11:20 am - 3:00 pm; \# 10604: 3:10 - 6:50 pm Bldg 61 Room 2414 |

## Course Objectives

This course provides experience with algebraic manipulations, allowing students to understand the real number system and the use of variable expressions and equations in problem solving, to formulate simple linear, fractional, and quadratic algebraic models and find their solutions. Experience with exponents, polynomials, and radicals is provided. Students will understand the Cartesian coordinate system and learn the connection between the solution of an equation with two variables and the graph of the equation. Students are expected to improve their ability to read and write in the language of mathematics. The above topics are necessary for success in the next course (Intermediate Algebra), and may apply to courses in chemistry, economics and other disciplines.

## Methods of Instruction

This course will combine lecture, teamwork, and class discussion. Students will be required to do homework and examinations. They may also be asked to participate in in-class demonstrations and pass quizzes.

## 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. Moreover, I do notice when you do not show up. If your grade is on a borderline, those with regular attendance are more likely to be on the higher side of the line. In addition, you miss the material from that day and that day's quiz. Do not be late to class. The homework is due at the beginning of the class. 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 $\mathbf{2}$ weeks of instruction. Your seat will be given to a student who has been attending each day.

## Pre requisites

There is a prerequisite for this course (Math 50 - Pre-Algebra), and I expect that you demonstrate college arithmetic and pre-algebra skills. Students are expected to be proficient with the arithmetic of integers, fractions, decimals and percentages upon entering Math 51.

## 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. Free tutorial services are available in the MARC (Bldg 61).

## 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.

## Academic Honesty

Plagiarism or cheating will not be tolerated. There will be a zero on the assignment and risk failing the course.
NO CALCULATOR is allowed in this class (with a few exceptions which will be announced)
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.

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

- 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 cle arly, 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. 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 homework, 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 four 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.

## Homework 120 points

Homework and reading will be assigned each week. See due dates on the Tentative Class Schedule. I might collect and grade the homework or I might give you a 5 or 10-minute homework quiz. You may use your homework during the quiz. Staple each section separately, as I might collect and grade only some of the assigned sections. Homework is due at the beginning of the class. Read carefully all the directions from the homework handout. Late homework will not be accepted for any reason. The homework-quiz might be given at any time: at the beginning of the class, during the class, or at the end of the class. There is no make-up homework quiz. The lowest homework score will be dropped. You are encouraged to discuss assignments with your classmates; however, you are required to write up your work independently. Copied homework will not be tolerated and identical, or nearly identical, assignments will share a single homework score. I will make every effort to address homework questions in class as time permits. Please feel free to contact me by email if you need additional help.

## Quizzes 255 points

Three 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 exercises and examples done in class as well as homework problems 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 80 points.

## Tests 340 points

Two tests will be given over the major areas addressed in the course. Each test is worth 170 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 285 points

 The final is a $21 / 2$ hour exam hour exam and it is held on Thursday, July $\mathbf{3 0}$. The final is a cumulative exam. You may use the final exam percent score to replace your lowest test score. However, a test with a score of zero cannot be replaced by the final score You must take the final to pass this class.
## Tentative Class Schedule

| DATE | TOPICS | ASSIGNMENTS DUE |  |
| :---: | :--- | :--- | :--- |
| Monday | June 22 | Chapter 1 <br> 2.1, Review |  |
| Wednesday | June24 | $2.3,2.4,2.5,2.6$ | Homework \#1 |
| Thursday | June25 | $2.7,2.8,3.1,3.2$ | Homework \#2 |
| Monday | June29 | $3.3,3.4,3.5$ | Homework \#3 |
| Wednesday | July 1 | $4.1,4.2,4.3,4.4$ | Quiz \#1 |
| Thursday | July 2 | 3.6 <br> Review | Homework \#4 |
| Monday | July 6 | 5.1, 5.2, 5.3, 5.4, |  |
| Wednesday | July 8 | Test \#1 <br> $5.5,5.6, ~ 5.7 ~$ | Homework \#5 |
| Thursday | July 9 | $6.1,6.2,6.3,6.4$ |  |
| Monday | July 13 | $6.5,6.6,7.1,7.2$ | Homework \#6 |
| Wednesday | July 15 | $7.3,7.4,7.5,7.6$ | Homework \#7 |
| Thursday | July 16 | $7.7,7.8$ <br> $8.1,8.2$ | Quiz \#2 |
| Monday | July 20 | Review, | Homework \#9 |
| Wednesday | July 22 | Test \#2 <br> $8.3,8.4$ |  |
| Thursday | July 23 | $8.5,8.6,8.7$ | Homework \#10 |
| Monday | July 27 | $8.7,9.1,9.2,9.3$ | Homework \#11 |
| Wednesday | July 29 | Review | Quiz \#3 |
| Thursday | July 30 | Final exam |  |

## Grade Sheet

| Homework 1 |  |  |
| :--- | :--- | :--- |
| Homework 2 | + |  |
| Homework 3 | + |  |
| Homework 4 | + |  |
| Homework 5 | + |  |
| Homework 6 | + |  |
| Homework 7 | + |  |
| Homework 8 | + |  |
| Homework 9 | + best 10) |  |
| Homework 10 |  |  |
| Homework 11 | + | $/ \mathbf{1 2 0}$ |
|  | + | $/ 85$ |
| Quiz 1 | QUIZZES | $=$ |
| Quiz 2 |  | $/ 85$ |
| Quiz 3 |  | $/ \mathbf{2 5 5}$ |
|  | TESTS | $=$ |
| Test 1 |  | $/ 170$ |
| Test 2 | $=$ | $/ \mathbf{3 4 0}$ |
|  | TOTAL |  |

