SOUTHWEST COLLEGE
Department of Mathematics

COURSE SYLLABUS

MATH 0308: Fundamentals of Math II

Fall 2013 / Math 0308 / CRN# 64934 / Mon & Wed 3-5pm / SW Learning Hub Rm. 222

INSTRUCTOR:	Arnaz Mistry
CONTACT INFORMATION:	arnaz.mistry@hccs.edu
MYMATHLAB COURSE ID:	mistry72872

Conference Times: By appointment

Contact Information: arnaz.mistry@hccs.edu
Please feel free to contact me concerning any problems that you are experiencing in this course. You do not need to wait until you have received a poor grade before asking for my assistance. Your performance in my class is very important to me. I am available any time to hear your concerns and to discuss course topics.

Course Description

1. Topics include real numbers, basic geometry, polynomials, factoring, linear equations, inequalities, and rational expressions.

2. <u>A departmental final examination must be passed with a score of 60% or higher in order to pass the course.</u>

Prerequisites

Must be placed into MATH 0308 (or higher) or completion of MATH 0306.

Course Goal

This course is intended for students who require state mandated remediation.
Also, this course is intended for students who have never been exposed to algebra or who have been away from the subject for quite some time. In particular, this course is intended to prepare students for the study of Intermediate Algebra, a course that builds the foundation for the study of College Algebra.

Student Learning Outcomes	Course Objectives
1. Identify and apply properties of real numbers, and perform accurate arithmetic operations with numbers in various formats and number systems.	1.1 Add, subtract, multiply and divide real numbers and manipulate certain expressions. 1.2 Solve problems using scientific notation. 1.3 Find square roots of perfect square numbers
2. Demonstrate the ability to manipulate/simplify algebraic expressions, and to classify and solve algebraic equations with appropriate techniques.	2.1 Solve problems using equations and inequalities. 2.2 Factor polynomials using the techniques of the greatest common factor, grouping, difference of two squares and special trinomials. 2.3 Multiply and divide, and simplify rational expressions.
3. Demonstrate the use of elementary graphing techniques.	3.1 Plot ordered pairs and graph linear equations.
4. Apply basic geometric theorems and formulas to rectangles, squares, parallelograms, triangles, trapezoids, circles, and angles.	4.1 Find the perimeter and area of rectangles, squares, parallelograms, triangles, trapezoids and circles; volume and surface area, relations between angle measures, congruent and similar triangles, and properties of parallelograms.

Instructional Method

As an instructor, I want my students to be successful. I feel that it is my responsibility to provide you with knowledge concerning mathematical concepts contained in our developmental math curriculum. This knowledge will prepare you for College Algebra and will allow you to meet the math requirements that are needed for your career of choice.

As a student wanting to master the mathematical concepts contained in the developmental math curriculum, it is your responsibility to read the textbook, submit assignments on the due dates, study for the exams, participate in classroom activities, attend class, and enjoy the learning experience.

In this course, you will be involved in discussions with your classmates and your instructor. As you will want to contribute to these discussions, you will need to come to class prepared to discuss, analyze and evaluate information from your text and notes.

Student Assignments and Homework

All homework must be completed online using MyMathLab (MML).
You need 3 pieces of information to register in MML:
(1) Access code: It is included in the book package at the bookstores. It can also be purchased separately online or at the bookstore.
(2) MML Course ID: mistry72872
(3) School zip code: 77477 (Stafford zip code)

To register for MyMathLab and to access the homework, go to www.coursecompass.com.
Phone number of MyMathLab Tech Support is 1-800-677-6337.
Homework will be due on the date assigned in MyMathLab.

You can also access MyMathLab to review problems, work interactive exercises, view video presentations related to specific topics, and use the tutoring component. You should complete your homework after each class, and you are encouraged to do more practice problems to gain proficiency.

Testing policy and Grading Formula
There are 3 Tests, MyMathLab homework, and a Final Exam.
The overall score will be calculated as follows:

- Best 3 grades, out of 3 tests and homework (at 25% each): **75%**
- Final Exam: **25%**

The best 3 grades out of the 3 tests and homework will be taken. This means the lowest test grade can be dropped and replaced by homework. The tests will be only on the material covered after the previous test, whereas the Final exam will cover the entire course.

Grading Formula:
25% each of the 3 highest scores out of 3 Tests and Homework + 25% of Final exam.

Final Examination
The final examination is departmental and consists of about 33 multiple-choice problems. The problems cover all the material required in the course. <u>If you score lower than 60% on the final exam, you automatically are given a course grade of "F", as noted under the grading policy</u>. If your score on the final exam is 60% or higher, then your grades are averaged using the formula specified under grading policy. You MUST pass the final exam in order to pass the course.
Students should bring green scantrons, pencils and erasers for all the tests/exams. If a student does not perform well in any test, then it is the student's responsibility to see the instructor as soon as possible in order to discuss the situation.

Make-up policy
<u>No make-up test will be allowed.</u> The lowest score out of 3 tests and Homework will be dropped, so if you miss a test, that will be your lowest score.

Calculators
Graphing calculators are not allowed. Cell phones (and the calculator functions in cell phones) cannot be used. Prior to each test and exam, the students will be informed if a non-graphing calculator can be used.

Grading
Your instructor will conduct exams, and monitor your progress on homework assignments to determine how successful you are at achieving the course learning outcomes outlined in the syllabus. If you find you are not mastering the material and skills, you are encouraged to reflect on how you study and prepare for each class. Your instructor welcomes a dialogue on what you discover and may be able to assist you in finding resources on campus that will improve your performance.

<u>Grading Scale</u>
90 - 100 = A
80 - 89 = B
70 - 79 = C
60 - 69 = D
Below 60 = F

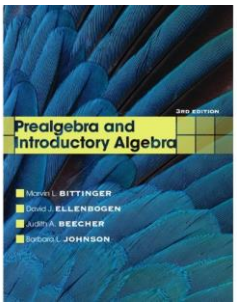
Final Grade of FX
Students who stop attending class and do not withdraw themselves prior to the withdrawal deadline may either be dropped by their professor for excessive absences or be assigned the final grade of "FX" at the end of the semester. Students who stop attending classes will receive a grade of "FX", compared to an earned grade of "F" which is due to poor performance. Logging into a DE course without active participation is seen as non-attending.

Please note that HCC will not disperse financial aid funding for students who have never attended class. Students who receive financial aid but fail to attend class will be reported to the Department of Education and may have to pay back their aid. A grade of "FX" is treated exactly the same as a grade of "F" in terms of GPA, probation, suspension, and satisfactory academic progress

EGLS3 -- Evaluation for Greater Learning Student Survey System
At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

Instructional Materials

Textbook:
Prealgebra and Introductory Algebra
by Bittinger & Ellenbogen; 3rd Ed.
Publisher: Addison Wesley, 2011
ISBN-13: 9780321731630



Chapter 8 Geometry

8.1 Basic Geometric Figures
8.2 Perimeter
8.3 Area
8.4 Circles
8.5 Volume and Surface Area
8.6 Relationships Between Angle Measures
8.7 Congruent Triangles and Properties of Parallelograms
8.8 Similar Triangles

Chapter 9 Introduction to Real Numbers and Algebraic Expressions

9.1 Introduction to Algebra
9.2 The Real Numbers
9.3 Addition of Real Numbers
9.4 Subtraction of Real Numbers

9.5 Multiplication of Real Numbers

9.6 Division of Real Numbers

9.7 Properties of Real Numbers

9.8 Simplifying Expressions; Order of Operations

Chapter 10 Solving Equations and Inequalities

10.1 Solving Equations: The Addition Principle

10.2 Solving Equations: The Multiplication Principle

10.3 Using the Principles Together

10.4 Formulas

10.5 Applications of Percent

10.6 Applications and Problem Solving

10.7 Solving Inequalities

10.8 Applications and Problem Solving with Inequalities

Chapter 11 Graphs of Linear Equations

11.1 Graphs and Applications (Omit applications.)

Chapter 12 Polynomials: Operations

12.1 Integers as Exponents

12.2 Exponents and Scientific Notation

12.3 Introduction to Polynomials

12.4 Addition and Subtraction of Polynomials

12.5 Multiplication of Polynomials

12.6 Special Products

12.7 Operations with Polynomials in Several Variables

12.8 Division of Polynomials (monomial divisors only)

Chapter 13 Polynomials: Factoring

13.1 Introduction to Factoring

13.2 Factoring Trinomials of the Type $x^2 + bx + c$

13.3 Factoring $ax^2 + bx + c$, $a \neq 1$: The Foil Method

13.4 Factoring $ax^2 + bx + c$, $a \neq 1$: The ac – Method

13.5 Factoring Trinomial Squares and Differences of Squares

13.6 Factoring: A General Strategy

Chapter 14 Rational Expressions and Equations

14.1 Multiplication and Simplifying Rational Expressions

14.2 Division and Reciprocals

HCC Policy Statement – ADA Services to Students with Disabilities Students who require reasonable accommodations for disabilities are encouraged to report to Dr. Becky Hauri at 713-718-7910 to make necessary arrangements. Faculty is only authorized to provide accommodations by the Disability Support Service Office.

HCC Policy Statement: Academic Honesty
A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the University's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty": includes, but is not limited to, cheating on a test, plagiarism, and collusion.

Cheating on a test includes:

- Copying from another students' test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test that has not been administered;
- Bribing another person to obtain a test that is to be administered.

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

HCC Policy Statements
Class Attendance - It is important that you come to class! Attending class regularly is the best way to succeed in this class. Research has shown that the single most important factor in student success is attendance. Simply put, going to class greatly increases your ability to succeed. You are expected to attend all lecture and labs regularly. You are responsible for materials covered during your absences. Class attendance is checked daily. Although it is your responsibility to drop a course for nonattendance, the instructor has the authority to drop you for excessive absences.

If you are not attending class, you are not learning the information. As the information that is discussed in class is important for your career, students may be dropped from a course after accumulating absences in excess of six (6) hours of instruction. The six hours of class time would include any total classes missed or for excessive tardiness or leaving class early.

You may decide NOT to come to class for whatever reason. As an adult making the decision not to attend, you do not have to notify the instructor prior to missing a class. However, if this happens too many times, you may suddenly find that you have "lost" the class.

Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, <u>you are responsible for all material missed.</u> It is a good idea to find a friend or a buddy in class who would be willing to share class notes or discussion or be able to hand in paper if you unavoidably miss a class. Class attendance equals class success.

HCC Course Withdrawal Policy

If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of withdrawal. Before, you withdraw from your course; please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor *may* "alert" you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

If you plan on withdrawing from your class, you **MUST** contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done **PRIOR** to the withdrawal deadline to receive a "W" on your transcript. **Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. ***Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline.*** If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.

Repeat Course Fee

The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

Classroom Behavior
As your instructor and as a student in this class, it is our shared responsibility to develop and maintain a positive learning environment for everyone. Your instructor takes this responsibility very seriously and will inform members of the class if their behavior makes it difficult for him/her to carry out this task. As a fellow learner, you are asked to respect the learning needs of your classmates and assist your instructor achieve this critical goal.

Use of Camera and/or Recording Devices
As a student active in the learning community of this course, it is your responsibility to be respectful of the learning atmosphere in your classroom. To show respect of your fellow students and instructor, you will turn off your phone and other electronic devices, and will not use these devices in the classroom unless you receive permission from the instructor.

Use of recording devices, including camera phones and tape recorders, is prohibited in classrooms, laboratories, faculty offices, and other locations where instruction, tutoring, or testing occurs. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information regarding reasonable accommodations.

Instructor Requirements

As your Instructor, it is my responsibility to**:**

- Provide the grading scale and detailed grading formula explaining how grades are to be derived
- Facilitate an effective learning environment through class activities, discussions, and lectures
- Description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness and make up
- Provide the course outline and class calendar which will include a description of any special projects or assignments
- Arrange to meet with individual students before and after class as required

To be successful in this class, it is the student's responsibility to**:**

- Attend class and participate in class discussions and activities
- Read and comprehend the textbook
- Complete the required assignments and exams:
- Chapter Exams, MyMathLab Homework, Final Exam
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts and all assignments

Test Schedule:

Test	Date
Test # 1	Wed. Oct. 2, 2013
Test # 2	Wed. Oct. 23, 2013
Test # 3	Mon. Nov. 25, 2013
Final Exam	Mon. Dec. 9, 2013, at 3pm (2 hrs)

Last date to drop/withdraw the class: Fri. Nov. 1, 2013, before 4:30pm. (Please check academic calendar.)