HOUSTON COMMUNITY COLLEGE SYSTEM

Central COLLEGE
Department of Mathematics
COURSE SYLLABUS

MATH 0308: Fundamentals of Math II

Fall 2011 / Tues-Thurs 6 – 8 pm /Gay Hall Rm 151/CRN: 51534

INSTRUCTOR:	Henry Ibekwe, B.S., M.S.
CONFERENCE TIMES:	By Appointment Only
CONTACT INFORMATION:	henry.ibekwe@hccs.edu, henri8@math.com
MyMathLab Course ID:	**ibekwe54908**

Textbook:
Prealgebra and Introductory Algebra (3rd Ed) by Bittinger, Ellenbogen, Beecher and Johnson
ISBN-13: 9780321731715

Catalog Description:
Topics include real numbers, basic geometry, polynomials, factoring, linear equations, inequalities, and rational expressions. A departmental final examination must be passed with a score of 60% or higher in order to pass the course.

Prerequisites: Math 0306: Pass with "C" or better
Or
Suitable placement test score.

Credits: 3 credit hours (3 Lecture).

Course Intent:
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.

Audience:
This course is intended for students who require state mandated remediation.

Make-up policy:
Any exam makeup will be at the discretion of the instructor and the student must provide sufficient reasons why they were unable to take the exam at the regular scheduled time.

Grading policy:
Your final course grade is based on the following standard HCCS scale.

Final Average	90 ≤ Avg ≤ 100	80 ≤ Avg < 90	70 ≤ Avg < 80	60 ≤ Avg < 70	Avg < 60
Final Course Grade	**A**	**B**	**C**	**D**	**F**

A grade of "IP" (In Progress) is not longer awarded as of Spring 2008. As of Spring 2008, a grade of D in a developmental mathematics course will qualify the student to enroll in a one-credit hour developmental mathematics course – Math 0106, Math 0108 or Math 0112. Each of Math 0106, Math 0108, and Math 0112 is an abbreviated and accelerated competency – based course in which students are required to complete select objectives, usually comprising one or two instructional units. By enrolling in and successfully completing a "bridge" course during the first four weeks if the semester, the student may then enroll the nest level twelve-week, second-start course during the remainder of the semester.

Determination of Your Final Grade: There will be 3 or 4 major examinations given in this class plus one comprehensive final examination. Your final course grade is awarded based on the following standard HCCS ten point scale.

1. **3 or 4 test = 40%**
2. **Homework/Mymathlab = 30%**
3. **Class participation = 5%;**
4. **Final Exam = 25%**

Final Examination:
The final examination is departmental and consists of 33 multiple-choice problems. The problems cover all the material required in the course. If you score lower than 60% on the final exam, you automatically get a course grade of IP or F, as noted under the grading policy. 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.

Attendance policy:
Attendance is checked during every class. When you have accumulated 12.5 % or 6 hours of absences, the instructor is obligated by law to drop you from the class.

Tardiness policy:
Students must make sure they come to class on time. You are responsible for any material or discussion missed as a result of their tardiness

Withdrawal policy:
If your name is on the roll at the end of the term, you WILL receive a grade. If you wish to drop the class, then it is your responsibility to do that before the final drop date. Neither you nor your instructor will be able to perform the drop after the final drop date. Please refer to the following notice before dropping the class.

NOTICE: Students who take a course three or more times will face significant tuition or fee increases at HCC and other Texas public colleges and universities. In addition, state law dictates that students are allowed a maximum of 6 course withdrawals during their entire college career. Starting in the fall of 2007, students with more than 6 drops will be required to pay additional fees. Prior to course withdrawal, you must confer with your professor or counselor about your study habits, homework, test-taking skills, attendance, course participation, and tutoring or other assistance that is available.

Homework policy:
All homework must be completed online using MYMATHLAB. All homework must be completed before the stated due dates.

Calculators:
Calculators will be allowed depending on the test difficulty as determined by the instructor.

Student conduct:
Students should not engage in disruptive activities while in the classroom. Any conduct that is deemed detrimental to the academic atmosphere, such as cell phone use or consistently talking during instructional delivery, will not be tolerated. Any student found guilty of such conduct will be asked to leave the classroom until further notice.

Academic dishonesty:
All students are required to exercise academic honesty in completion of all tests and assignments. Penalties for academic dishonesty (cheating on a test, collusion on an assignment, etc.) include, but are not limited to, a reduced grade, a "0" on that test or assignment, a "W" in the course, or an "F" in the course. The use of recording devices, including camera phones and tape recorders, is prohibited in all locations where instruction, tutoring, or testing occurs. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Disability Services Office for information.

Resources and supplemental instruction:
Any student enrolled in Math 0308 at HCC has access to the tutoring labs where one-on-one help is available. The math tutoring labs are staffed with student assistants who can aid students with math problems and offer help with MYMATHLAB. Please check with your instructor for the hours of the tutoring labs. In addition, free online tutoring is provided. For information, go to the math department web page and select the online tutoring link. Another resource is the student solutions manual that may be obtained from the bookstore.

Students with Disabilities:

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at his or her respective college at the beginning of each semester. Faculty members are authorized to provide only the accommodations requested by the Disability Support Services Office. Persons needing accommodations due to a documented disability should contact the ADA counselor for their college as soon as possible. For questions, please contact Donna Price at 713.718.5165. To visit the ADA Web site, please visit www.hccs.edu then click Future students, scroll down the page and click on the words Disability Information.

Course Schedule TOPICS

8	**GEOMETRY**	**(3 hours)**

This unit presents the basic geometric figures and their relations. The instructor should emphasize the perimeter and area of rectangles, squares, parallelograms, triangles, trapezoids, and circles; volume and surface area; and relations among angle measures. This unit concludes with congruent and similar triangles; the properties of parallelograms.

9	**INTRO. TO REAL NUMBERS & ALGEBRAIC EXPRESSIONS**	**(4 hours)**

This unit presents an introduction to algebra and the real number system. The instructor should emphasize addition, subtraction, multiplication and division of real numbers and the properties of real numbers. This unit concludes with simplifying expressions and the order of operations.

RECOMMEND EXAMINATION I*: COVERS CHAPTERS 8 & 9** ***(1 to 1.5 hours)

10	**SOLVING EQUATIONS AND INEQUALITIES**	**(4 hours)**

The major emphasis of this chapter is to teach solving linear equations. A mastery of this chapter requires that the student have a thorough understanding of combining like terms and properties of equality. The skills necessary for solving equations is extended to include working with the equality of two fractions and solving inequalities in a single variable.

11	**GRAPHS OF LINEAR EQUATIONS**	**(3 hours)**

This unit introduces plotting ordered pairs and concludes with sketching a linear equation

12	POLYNOMIALS: OPERATIONS	(4 hours)

This unit begins with integer exponents and scientific notation. The topics include the techniques to recognize a polynomial and find the degree of a polynomial; perform addition, subtraction, multiplication and division of polynomials.

***RECOMMEND EXAMINATION 2*: COVERS CHAPTERS 10 & 12 (1.5 HOURS)**

13	POLYNOMIALS: FACTORING	(4 hours)

This unit covers factorization of polynomials.

14	RATIONAL EXPRESSIONS AND EQUATIONS	(4 hours)

This unit begins with multiplying and simplifying rational expressions. The topics include the techniques to reduce or build–up fractions; perform addition, subtraction, multiplication and division of fractions.

14.1 Multiplication and Simplifying Rational Expressions 1034

14.2 Division and Reciprocals 1044

16	RADICAL EXPRESSIONS AND EQUATIONS	(4 hours)

This unit covers finding the principal square roots, identifying radicands of radical expressions, identifying whether a radical expression represents a real number and simplifying radical expressions with a perfect-square radicand.

16.1 Introduction to Radical Expressions 1174

***RECOMMEND EXAMINATION 3*: CHAPTERS 13, 14.1, 14.2 AND 16.1 (1.5 HOURS)**

Test Schedule:

Test	Chapters Covered on Test	Date
Test #1	Chapter 8 & 9	TBA:
Test #2	Chapter 10, 11 & 12	TBA:
Test #3	Chapter 13, 14 & 16	TBA:
Final Exam	All Chapters (2hrs 6:00-8:00 pm)	**Thurs. Dec 15th 2011**

Course Objectives:

Upon completion of this course, a student should be able to:

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.
2. Add, subtract, multiply and divide real numbers, and manipulate certain expressions.
3. Solve problems using equations and inequalities. Solve problems using scientific notation.
4. Factor polynomials using the techniques of the greatest common factor, difference of two squares, special trinomials, and grouping.
5. Simplify, multiply, and divide rational expressions.
6. Plot ordered pairs and graph linear equations.