DE Orientation

COURSE SYLLABUS

MATH 0312: Intermediate Algebra

INSTRUCTOR: Tamseela Ulhaque
CONTACT INFORMATION: tamseela.ulhaque@hccs.edu

Textbook:

Intermediate Algebra, 10th Edition. Margaret Lial, John Hornsby, & Terry McGinnis.

Pearson / Addison Wesley: Boston, 2008.

Catalog Description:
Topics include factoring techniques, radicals, algebraic fractions, complex numbers, graphing linear equations and inequalities, quadratic equations, systems of equations, an introduction to functions, and graphing quadratic functions. Emphasis is placed on the algebraic techniques needed in order to successfully complete Math 1314 College Algebra. A departmental final examination must be passed with a score of 60% or higher in order to pass the course.

Prerequisites: Math 0308 or MATH 0108: Pass with "C" or better
          Or
      Suitable placement test score.

Credit: 3 hours credit (3 hours lecture and 1 hour lab).

Course Intent & Audience:
This course is intended for students who require state mandated remediation. It is the final course in the developmental mathematics sequence, and its purpose is to prepare students for College Algebra.

Homework and Quiz policy:
All homework must be completed online using MYMATHLAB. The MyMathLab grade will be the equivalent of one test grade. To register for MyMathLab and to access the homework, go to www.coursecompass.com. You need to **buy the access code** in order to do the homework.

Testing policy:
There will be three major exams and a departmental final exam. All students are responsible for knowing the material that will be on a test. If you do not understand the material then ask for help.

Make-up policy:
There will be no make-up exams.

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

FINAL AVERAGE	FINAL COURSE GRADE
$90 \leq$ Average $\leq 100\%$	A
$80 \leq$ Average $< 90\%$	B
$70 \leq$ Average $< 80\%$	C
$60 \leq$ Average $< 70\%$	D
Average $< 60\%$ or Final Exam Grade < 60	F

A grade of "F" is given if the final average is below 60 or the final exam grade is below 60.

For your course grade, the scores from your homework, three major tests, and the final examination will be taken into consideration as shown in the following formula.

Final Average= (T1+T2+T3+My Math Lab Home Work+Final)
$$\frac{}{5}$$

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 are given a course grade of 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.

Calculators:
Scientific Calculators are recommended. Graphing Calculators are not allowed on tests or quizzes. Cell phones may not be used as calculators.

Withdrawal policy:
The State of Texas imposes penalties on students who drop courses excessively. Students are limited to no more than SIX total course withdrawals throughout their educational career at a Texas public college or university.

To avoid having to drop/withdraw from a class, contact your DE professor regarding your academic performance. You may also want to contact your DE counselor to learn about helpful HCC resources (e.g. online tutoring, child care, financial aid, job placement, etc.).

In order to withdraw from your DE class and receive a "W" on your transcript, you MUST first contact your DE professor PRIOR to the withdrawal deadline. After the withdrawal deadline has passed, you will receive a grade. Zeros averaged in for required coursework that is not submitted will lower your semester average significantly, most likely resulting in a failing grade of "F". It is the responsibility of the student to withdraw from the class; however, your professor reserves the right to withdraw you without your request due to excessive absences. If you do not feel comfortable contacting your professor to withdraw, you may contact a DE counselor. However, please do **not** contact both a DE counselor and your DE professor to request a withdrawal; either one is sufficient.

Distance Education Counseling Services:
DE student information can be found on the DE Student Services website: de.hccs.edu. Advising or counseling can be accomplished through the online request form AskDECounseling. Student Services Associates (SSA) and Counselors can assist students with admissions, registration, entrance testing requirements, degree planning, transfer issues, withdrawals, and career counseling. In-person, confidential sessions can also be scheduled to provide brief counseling and community referrals to address personal concerns impacting academic success.

Resources and supplemental instruction:
Any student enrolled in Math 0312 at HCC has access to the math tutoring labs which are staffed with student assistants who can aid students with math problems and offer help with MyMathLab. In addition, free online tutoring is provided. For more information and for tutoring hours and locations, go to the math department web page at http://swc2.hccs.edu/math/, and select the tutoring link. One other 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 Support Services (DSS) Office at the beginning of the semester. Professors are authorized to provide only the accommodations requested by the Disability Support Services Office.
Students may contact the most convenient DSS office for assistance:
Disability Support Services Offices:
System: 713.718.5165
Central: 713.718.6164 – also for Deaf and Hard of Hearing Services and Students Outside of the HCC District service areas.
Northwest: 713.718.5422   Southeast: 713.718.7218
Northeast: 713.718.8420   Southwest: 713.718.7909
International Students:
International Students are restricted to ONLY ONE online/distance education class per semester. Please contact the International Student Office at 713-718-8520 if you have additional questions about your visa status.

Blackboard Student User ID:
Your Blackboard login user ID will be your HCC User ID (sometimes referred to as the "W" number). All HCC students have a unique User ID. If you do not know your User ID you can look it up by visiting the HCC home page:
   o From www.hccs.edu, under the column "CONNECT", click on the "Student System

Sign In" link.

   o Then click on "Retrieve User ID" and follow the instructions.

Or use the direct link to access the Student Sign In page:
https://hccsaweb.hccs.edu:8080/psp/csprd/?cmd=login&languageCd=ENG

The default student password is "distance." Students will then be prompted to change their password after their first login. Please visit the DE Technical Support website if you need additional assistance with your login.

Course Schedule:

<u>Chapters and Sections</u>

Chapter 2 Linear Equations, Inequalities, and Applications
>   2.5 Linear Inequalities in One Variable

Chapter 3 Graphs, Linear Equations, and Functions
>   3.1 The Rectangular Coordinate System
>   3.2 The Slope of a Line
>   3.3 Linear Equations in Two Variables
>   3.4 Linear Inequalities in Two Variables (Omit compound inequalities.)
>   3.5 Introduction to Functions

Chapter 4 Systems of Linear Equations
>   4.1 Systems of Linear Equations in Two Variables

Chapter 5 Exponents, Polynomials, and Polynomial Functions
>   5.4 Multiplying Polynomials
>   5.5 Dividing Polynomials

Chapter 6 Factoring
>   6.1 Greatest Common Factors; Factoring by Grouping
>   6.2 Factoring Trinomials
>   6.3 Special Factoring
>   6.4 A General Approach to Factoring
>   6.5 Solving Equations by Factoring

Chapter 7 Rational Expressions and Functions
>   7.1 Rational Expressions and Functions; Multiplying and Dividing
>   7.2 Adding and Subtracting Rational Expressions
>   7.3 Complex Fractions
>   7.4 Equations with Rational Expressions and Graphs
>   7.5 Applications of Rational Expressions

Chapter 8 Roots, Radicals, and Root Functions
>   8.1 Radical Expressions and Graphs (Omit graphs of radical expressions.)

Chapter 9 Quadratic Equations, Inequalities, and Functions

Student Learning Outcomes	Course Objectives
1. Solve algebraic equations and inequalities involving rational expressions, radicals, quadratics, or linear expressions.	1.1 Add, subtract, multiply and divide polynomials 1.2 Factor polynomials 1.3 Add, subtract, multiply and divide rational expressions 1.4 Simplify complex fractions 1.5 Solving equations involving rational expressions 1.6 Simplify equations involving rational exponents and simplify radicals 1.7 Add, subtract, multiply, divide expressions involving radicals and solve radical equations 1.8 Add, subtract, multiply and divide complex numbers 1.9 Solve quadratic equations by factoring, completing the square, use of the quadratic formula and the square root property 1.10 Solve systems of linear equations in two variables
2. Examine and interpret the linear and quadratic graphs of equations and inequalities.	2.1 Graph linear equations & linear inequalities in two variables 2.2 Find the slope of a line & write its equation 2.3 Graph quadratic functions and inequalities
3. Solve application problems.	3.1 Solve word problems
4. Use and interpret function notation in both algebraic and graphical contexts.	4.1 Recognize functional notation & evaluate functions