MATH 0312: Intermediate Algebra

CRN # 75536/ Fall 15/ M – W/ 7:00 PM -9:00 PM
Textbook: Introductory and Intermediate Algebra – Custom Edition, Pearson Learning Solutions
ISBN 10: 1-323-15682-8 and ISBN 13: 978-1-323-15682-7
MyMathLab Course *ID:abbasi 73554*

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Course Description

Topics include factoring techniques, radicals, algebraic fractions, absolute values, complex numbers, graphing linear equations and inequalities, quadratic equations, systems of equations, graphing quadratic equations and an introduction to functions. Emphasis is placed on algebraic techniques, in order to successfully complete Math 1314 College Algebra, Math 1324 Mathematics for Business & Social Sciences, Math 1342 Statistics, or Math 1332 Mathematics for Liberal Arts. A Departmental Final examination must be passed with a score of 60% or more in order to pass this course.

Prerequisites

Math 0409: Pass with "C" or better; or equivalent score on the placement exam.

Course Goal

This is the final course in the developmental mathematics sequence and its purpose is to prepare students for entry level college math.

Course Student Learning Outcomes (SLO)

1.   Solve algebraic equations and inequalities involving rational expressions, radicals, quadratics, absolute values, or linear expressions.
2.   Examine and interpret the linear and quadratic graphs of equations and inequalities.
3.   Solve application problems.
4.   Use and interpret function notation in both algebraic and graphical contexts.

Learning outcomes

Students will:
1.   add, subtract, multiply and divide polynomials
2.   factor polynomials
3.   add, subtract, multiply and divide rational expressions
4.   simplify complex fractions
5.   solve equations involving rational expressions
6.   simplify equations involving rational exponents and simplify radicals
7.   add, subtract, multiply, divide expressions involving radicals and solve radical equations
8.   add, subtract, multiply and divide complex numbers
9.   solve quadratic equations by factoring, completing the square, quadratic formula and square root property
10. solve systems of linear equations in two variables
11. solve absolute value equations
12. solve absolute value inequalities

13. graph linear equations & linear inequalities in two variables
14. find the slope of a line & write its equation
15. graph quadratic functions and inequalities
16. solve word problems
17. recognize functional notation & evaluate functions

Assessment/Make-up and Grading

You benefit for attending class regularly. You earn rewards as follows:
Perfect attendance (0 absent and 0 tardy) = 5. The point will add to the final exam grade.
The students receive 10 points as extra credit assign to each test with perfect attendance between two tests and doing test review.
Any student who arrives 15 minutes after the class has begun or leaves before the class is dismissed without any prior approval of the instructor is considered absent.
There will be 4 major Test, Homework, quizzes, and comprehensive departmental final exam. One of the lowest grades in your major test will be drop.

There will be no makeup, since the lowest test grade will be drop.

Major test   50%
Homework and Quizzes 30%
Final Exam   20%
Your final course grade is based on the following standard HCCS scale.

Final Average	$90 \leq Avg \leq 100\%$	$80 \leq Avg < 90\%$	$70 \leq Avg < 80\%$	Average $< 70\%$
Final Course Grade	A	B	C	F

Late Assignment
Any quizzes or homework submitted after the time limit for whatever reason will not be accepted. Indeed, the computer will not allow you to take a quiz or an exam once you exceed the time limit.

Project, Term Papers, etc.
There are no projects or tern papers required for this course.

Final Exam Policy in Developmental Mathematics:
The following policy was adopted by Houston Community College regarding the system-wide Final Examinations in developmental mathematics courses:
If a student scores less than a 60 on the Final Exam, then the student receives an F in the course. If a student scores at least a 60 on the Final Exam, then the grades will be averaged in accordance with the grade calculation formula as stated on the student syllabus; i.e., the student earns an A, B, C, F, or FX in the course.

Calendar

Sep 4, 5, and 6   Quiz # 1

Sep 7   Labor Day Holiday

Sep 21   Test # I Chapters one and two

Oct 2, 3, and 4   Quiz # 2

Oct 14   5.5   Solving Equations by the Zero-Factor Property 349

Oct 21   6.1   Rational Expressions and Functions; Multiplying and Dividing 366
                6.2   Adding and Subtracting Rational Expressions 376

Oct 26   6.3   Complex Fractions 385

Oct 28   6.4   Equations with Rational Expressions and Graphs 391

Oct 30   6.5   Applications of Rational Expressions 400

Nov 2   7.1   Radical Expressions and Graphs 434
               7.2   Rational Exponents 442

Nov 9   7.3   Simplifying Radicals, the Distance Formula, and Circles 450
               7.4   Adding and Subtracting Radical Expressions 463

Nov 11   7.5   Multiplying and Dividing Radical Expressions 468
               7.6   Solving Equations with Radicals 479

Nov 16   7.7   Complex Numbers 485
               8.1   The Square Root Property and Completing the Square .. 496

Nov 18   **8.2   The Quadratic Formula** 505
               8.6   More about Parabolas; Application (omit horizontal parabolas)

Dec 2, and 4   Final Exam Review

Pearson's MyLab & Mastering

MyMathLab®
Student Registration Instructions

PEARSON   ALWAYS LEARNING

To register for Math 0312 Fall 15:

1. Go to www.pearsonmylabandmastering.com.

2. Under Register, select **Student**.

3. Confirm you have the information needed, then select **OK! Register now**.

4. Enter your instructor's course **ID: abbasi73554** , and **Continue**.

5. Enter your existing Pearson account **username** and **password** to **Sign In**.

   You have an account if you have used a Pearson product, for example: MyMathLab, MyITLab, MyPsychLab, MySpanishLab or Mastering, such as MasteringBiology.

➢   If you don't have an account, select **Create** and complete the required fields.

6. Select an access option.

➢   Use the access code that came with your textbook or that you purchased separately from the bookstore.
➢   Buy access using a credit card or PayPal account.
➢   If available, get 14 days temporary access. (The link is near the bottom of the screen.)

7. From the confirmation page, select **Go To My Courses**.

8. On the My Courses page, select the course tile **Math 0312 Fall 15** start your work.

To sign in later:

1. Go to www.pearsonmylabandmastering.com.

2. Select **Sign In**.

3. Enter your Pearson account **username** and **password,** and **Sign In**.

4. Select the course tile **Math 0312 Fall 15** to start your work.

To upgrade temporary access to full access:

1. Go to www.pearsonmylabandmastering.com.

2. Select **Sign In**.

3. Enter your Pearson account **username** and **password,** and **Sign In**.

4. Select **Upgrade access** from the course tile **Math 0312 Fall 15**.

5. Enter an access code or purchase access with a credit card or PayPal account.

For a registration overview, go to www.pearsonmylabandmastering.com/students/get-registered. Scroll down to **Need a little help?** and select a video.

HCC Policy Statement - ADA

Services to 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 Office at this college at the beginning of the semester. To make an appointment, please call 713-718-7910. Professors are authorized to provide only the accommodations requested by the Disability Support Office

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.

Distance Education Handbook

The Distance Education Student Handbook contains policies and procedures unique to the DE student. Students should have reviewed the handbook as part of the mandatory orientation. It is the student's responsibility to be familiar with the handbook's contents. The handbook contains valuable information, answers, and resources, such as DE contacts, policies and procedures (how to drop, attendance requirements, etc.), student services (ADA, financial aid, degree planning, etc.), course information, testing procedures, technical support, and academic calendars. Refer to the DE Student Handbook by visiting this link: http://de.hccs.edu/de/de-student-handbook

HCC Policy Statement: Academic Honesty

Note:
As with all developmental mathematics courses at HCC, the use of a calculator during an exam is prohibited and will be considered cheating.

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.

<u>Cheating on a test includes:</u>

- 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 not yet administered;
- Bribing another person to obtain a test that is to be administered.

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

<u>Collusion</u> 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 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.

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

Student Course Reinstatement Policy:

Students have a responsibility to arrange payment for their classes when they register, either through cash, credit card, financial aid, or the installment plan. Faculty members have a responsibility to check their class rolls regularly, especially during the early weeks of a term, and reconcile the official class roll to ensure that no one is attending class whose name does not appear on it. Students who are dropped from their courses for nonpayment of tuition and fees who request reinstatement after the official date of record (OE Date) can be reinstated by making payment in full and paying an additional \$75 per course reinstatement fee. A student requesting reinstatement should present the registrar with a completed **Enrollment Authorization Form** with the signature of the instructor, department chair, or dean who should verify that the student has been attending class regularly. Students who are reinstated are responsible for all course policies and procedures, including attendance requirements.

Resources and supplemental instruction:

Any student enrolled in Math 0312 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. In addition, free online tutoring is provided. . Students can get free assistance, 24 hours a day, 7 days a week, in Math, English and other subjects, at www.hccs.askonline.net.
Typically, posted questions are answered by an HCC tutor or faculty within 24 hours (usually under 6 hours). There are also several online math resources that you can find with an internet search. You may also find information on the Learning Web site accessible through your specific HCCS campus website.

Administration contact information

College - Level Math Courses

Chair of Math	Jaime Hernandez	SW Campus	713-718-7772	Stafford, Scarcella, N108
- Secretary		SW Campus	713-718-7770	Stafford, Scarcella, N108
Math Assoc. Chair	Roderick McBane	CE Campus	713-718-6644	San Jacinto Building, Rm 369
Math Assoc. Chair	Ernest Lowery	NW Campus	713-718-5512	Katy Campus Building, Rm 112
Math Assoc. Chair	Mahmoud Basharat	NE Campus	713-718-2438	Codwell Hall Rm 105

Developmental Math Courses

Chair of Dev. Math	Susan Fife	SE Campus	713-718-7241	Felix Morales Building, Rm 124
- Secretary	Carmen Vasquez	SE Campus	713-718-7056	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Marisol Montemayor	SE Campus	713-718-7153	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Jack Hatton	NE Campus	713-718-2434	Northline Building, Room 321

For issues related to your class, please first contact your instructor.
If you need to contact departmental administration, then contact the appropriate Associate Chair.
If further administrative contact is necessary, then contact the appropriate Department Chair.