



Mathematics West Loop

Math 0409: Foundations of Mathematics

CRN 16188 – Fall 2016

Room C128| 5:30 7:30p.m. | (Mon and Wed)

4 hour lecture course / 64 hours per semester/ # of weeks

Textbook: Introductory and Intermediate Algebra. Houston Community College Developmental Math Courses

0409/0312 (Custom Edition). Pearson Learning Solutions: Boston, 2015

ISBN 13: 978-1-323-15682-7.

MyMathLab Course ID: **abbasi35445**

Instructor: Mohammad Abbasi

Instructor Contact Information: mohammad.abbasi@hccs.edu

Course Description

Foundations of Mathematics: Topics include real numbers, basic geometry, polynomials, factoring, linear equations, linear inequalities, set operations, rational expressions, and an introduction to modeling which may include exponential, quadratic and linear models. A departmental final examination must be passed with a score of 60% or more in order to pass the course. Prerequisite: MATH 0106 or equivalent test score.

Prerequisites

TSIA Reading Score above 341 or GUST 0339 with a grade of C or higher; TSIA ABE level 5 or 6; TSIA Math Score 336 – 347 with Elementary Algebra Score 5 – 15 and Intermediate Algebra Score 0 – 6; Math 0106: Pass with “C” or better

Course Goal:

This course is intended for students who have either never been exposed to algebra or who have been away from the subject for quite some time. Particularly, this course is intended to prepare students for the study of Math 0312 or for a non-Calculus-based College Level Math course, specifically Math 1332 or Math 1333.

Course Student Learning Outcomes (SLO):

1. Identify and apply properties of real numbers, and perform accurate arithmetic operations with numbers in various formats.
2. Demonstrate the ability to manipulate/simplify algebraic expressions, & classify/solve algebraic equations with appropriate techniques.
3. Demonstrate the use of elementary graphing techniques.
4. Apply basic geometric theorems and formulas to rectangles, squares, parallelograms, triangles, parallelograms, triangles and circles.
5. Apply “Proportional Reasoning” to solve related problems including ratios, rates, proportion, percent and conversions of units.
6. Recognize, examine, and interpret the linear, quadratic, exponential, and/or rational models of equations.

Learning objectives

Students will:

1. add, subtract, multiply and divide real numbers and manipulate certain expressions.
2. find the perimeter and area of rectangles, squares, parallelograms, triangles and circles.
3. solve problems using scientific notation.
4. simplify algebraic expressions.
5. solve problems using equations and inequalities.
6. factor polynomials using the techniques of the greatest common factor, grouping, difference of two squares and trinomials of the form $x^2 + bx + c$.
7. multiply and divide, and simplify rational expressions

8. plot ordered pairs and graph linear equations.
9. graph linear inequalities.
10. Find the rate of change of a line & write its equation.
11. Model situations with linear, quadratic, or exponential functions.

Assessment/Make-up and Grading

There are assigned homework problems after every section. It is crucial for you to succeed in this class that you do faithfully your homework every week on MyMathLab.

There will be 4 major Test, Homework 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.

Final Exam Policy in Developmental Mathematics

The final letter grade will be determined accordingly:

Students who score less than 60% on the Final Examination will be awarded a course grade of “F.”

b. A student whose score is greater than or equal to 60% on the Final Examination will have their grades averaged and awarded a grade based upon the standard 10 point scale.

AVERAGE	GRADE
$90\% \leq \text{Final Average} \leq 100\%$	A
$80\% \leq \text{Final Average} < 90\%$	B
$70\% \leq \text{Final Average} < 80\%$	C
Final Average < 70%	F

Note: The instructor cannot assign a grade of IP or W. The grade of “FX” is given when a student fails due to lack of attendance.

Assessments (Break down of grade calculation by points or percentage – see sample below)

The assessments weights are as follows:

Homework=20%

Exams=55 %,

Final exam=25%.

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.

CALENDAR

Aug 22	Sec 8.2 Perimeter Sec 8.3 Area
Aug 24	Sec 8.4 Circles
Aug 29	Sec 1.1 Introduction to Algebra Sec 1.2 the Real Numbers
Aug 31	Sec 1.3 Addition of Real Numbers Sec 1.4 Subtractions of Real Numbers
Sep 5	Labor day Holiday
Sep 7	Sec 1.5 Multiplication of Real Numbers
Sep 12	Sec 1.6 Division of Real Numbers
Sep 14	Sec 1.7 Properties of Real Numbers Sec 1.8 Simplifying Expressions; Order of Operations
Sep 19	Test # 1
Sep 21	Sec 2.1 Solving Equations: The Addition Principle Sec 2.2 Solving Equations: The Multiplication Principle
Sep 26	Sec 2.3 Using the Principles Together Sec 2.4 Formulas
Sep 28	Sec 2.5 Applications of Percent Sec 2.6 Applications and Problem Solving
Oct 3	Sec 2.7 Solving Inequalities Sec 2.8 Applications and Problem Solving with Inequalities
Oct 5	Test # 2
Oct 10	Sec 3.1 Graphs Linear Equations Sec 3.2 More with Graphing and Intercepts

Oct 12 **Sec 3.3** Slope and Applications
 Sec 3.5 Graphing Using the Slope and the y-Intercept

Oct 17 **Sec 3.7** Graph Linear Inequalities in Two Variables
 Sec 4.1 Integers as Exponents

Oct19 **Sec 4.2** Exponents and Scientific Notation
 Sec 4.3 Introduction to Polynomials

Oct 24 **Sec 4.4** Additions and Subtraction of Polynomials
 Sec 4.5 Multiplication of Polynomials

Oct 26 **Sec 4.6** Special Products

Oct 28 **Last Day for Student Withdrawn**

Oct 31 **Sec 4. 7** Operations with Polynomials in Several Variables
 Sec 4.8 Division of Polynomials (Monomials Divisors Only)

Nov 2 **Test # 3**

Nov 7 **Sec 5.1** Introduction to Factoring (GCF and Grouping)
 Sec 5.2 Factoring Trinomials (of the type $x^2 + bx + c$ only)

Nov 9 **Sec 5.5** Factoring Trinomial Squares and Differences of Squares
 Sec 5.6 Factoring: A General Strategy (Omit $ax^2 + bx + c$,
 $a \neq 1$; include trinomial squares with $a \neq 1$)

Nov 14 **Sec 6.1** Multiplication and Simplifying Rational Expressions (Omit $ax^2 + bx + c$,
 Sec 6.2 Division and Reciprocals (Omit $ax^2 + bx + c$, $a \neq 1$)

Nov 16 **Sec 6.7** Rational Equations and applications (Proportions only)
 Sec 6.8 Applications Using Rational Equations and Proportions (proportions only)

Sec 7.1 Introduction to Radical Expressions (Include Perfect Square Radicands Only)
 Linear Modeling, Quadratic Modeling, and Exponential

Nov 21 **Test # 4**

Nov 23 -27 Thanks Giving Holiday

Nov 28 and 30 Final Exam Review

Dec 5 5:30 PM – 7:30PM Comprehensive Final Exam

Pearson's MyLab & Mastering

MyMathLab® Student Registration Instructions

PEARSON

ALWAYS LEARNING

To register for **Math 0409 Fall 16**:

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: abbasi35445** 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 0409 Fall 16** to 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 0409 Fall 16** 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 0409 Fall 16**.
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 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.

HCC Policy Statement: Title IX

HCC is committed to provide a learning and working environment that is free from discrimination on the basis of sex which includes all forms of sexual misconduct. Title IX of the Education Amendments of 1972 requires that when a complaint is filed, a prompt and thorough investigation is initiated. Complaints may be filed with the HCC Title IX Coordinator available at 713 718-8271 or email at oie@hccs.edu.

Title IX of the Education Amendments of 1972 requires that institutions have policies and procedures that protect students' rights with regard to sex/gender discrimination.

Information regarding these rights are on the HCC website under Students-Anti-discrimination. Students who are pregnant and require accommodations should contact any of the ADA Counselors for assistance.

It is important that every student understands and conforms to respectful behavior while at HCC.

Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations.

Log in to www.edurisksolutions.org. Sign in using your HCC student email account, then go to the button at the top right that says Login and enter your student number.

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.

Cheating on a test includes:

- Copying from another student's 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.

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 means 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 be on time at the beginning of each class period. For complete information regarding Houston Community College's policies on attendance, please refer to the Student Handbook. 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. **This is the place to put your attendance policy, if any.**

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, you are responsible for all material missed. 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 your work if you unavoidably miss a class.

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. **The last day to withdraw month/day/year**

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**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

Personal Communication Device Policy:

All personal communication devices (any device with communication capabilities including but not limited to cell phones, blackberries, pagers, cameras, palmtop computers, lap tops, PDA's, radios, headsets, portable fax machines, recorders, organizers, databanks, and electronic dictionaries or translators) must be muted or turned off during class. Such activity during class time is deemed to be disruptive to the academic process. Personal communication devices are to not be on the student desk during examinations. Usage of such devices during exams is expressly prohibited during examinations and will be considered cheating (see academic honesty section above).

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:

Free tutoring is available The Learning Emporium at the Central Campus is available to all HCC students for tutoring in Mathematics, among other subjects. You may visit them in SJAC 384 or contact them at 713-714-6356 Additional help is also available through Student Support Services. 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.

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. Visit www.hccs.edu/EGLS3 for more information.

Administration contact information**College - Level Math Courses**

Chair of Math	Jaime Hernandez	SW Campus	713-718-2477	Stafford, Scarcella, N108
- Secretary	Tiffany Pham	SW Campus	713-718-7770	Stafford, Scarcella, N108
Math Assoc. Chair	Clen Vance	CE Campus	713-718-6421	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
Technical Support Specialist	Hien Nguyen	NE Campus	713-718-2440	Northline Building, Rm 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.