Mathematics 0312
West Loop Campus

Math 0312-0012: Intermediate Algebra
CRN 60143 – Spring 2018
West Loop Center Rm C128| 6 pm – 7:50 pm | Mon and Wed
3 hour lecture course +1hour lab / 64 hours per semester/ 16 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: **teewaree45072**

Instructor: Dr. Anil R Teewaree

Instructor Contact Information: anil.teewaree@hccs.edu

Type of Instruction: In-class, Didactic

Office location and hours: During class sessions

Preferred Method of Contact: Email or during class

Class Cancellation: The department secretary will call the students in case of cancellation

Course Description
Intermediate Algebra: Topics include factoring techniques, radicals, algebraic fractions, 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. A Departmental Final examination must be passed with a score of 60% or more in order to pass this course.

Prerequisites
ASSET: Elementary Algebra Raw Score: 14-25; Scaled Score: 45-55; ASSET: Intermediate Algebra Raw Score: 0-15; Scaled Score: 23-45; Math 0308: Pass with "C" or better

Course Goal
This is the final course in the developmental mathematics sequence and its purpose is to prepare students for College Algebra.

Course Student Learning Outcomes (SLO)
1. Define, represent, and perform operations on real and complex numbers.
2. Recognize, understand, and analyze features of a function.
3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational expressions.
4. Identify and solve absolute value, polynomial, radical, and rational equations.
5. Identify and solve absolute value and linear inequalities.
6. Model, interpret and justify mathematical ideas and concepts using multiple representations.
7. Connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines.

Learning objectives
Students will:
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, quadratic formula and square root property
1.10 solve systems of linear equations in two variables
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

3.1 solve word problems
4.1 recognize functional notation & evaluate functions

Core Objectives

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

Critical Thinking Skills: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

Communication Skills: to include effective development, interpretation and expression of ideas through written, oral and visual communication.

Empirical and Quantitative Skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

CALENDAR

Exams	Chapters covered on exam	Tentative Exam Dates
Exam 1	Ch 1, 2 and 3	Wednesday 21st February 2018 Exam 1 (15%)
Exam 2	Ch 4, 5 and 8	Wednesday 4th April 2018 Exam 2 (15%)
Exam 3	Ch 6 and 7	Monday 23rd April 2018 Exam 3 (15%)
Final Exam	Comprehensive (all chapters) 1,2,3,4,5,6,7,8	Wednesday 9th May 2018 Final Exam (40%)

Note: Homework contributes 15% to final grade.

Instructional Methods

I encourage open and free discussions throughout my sessions. We are all here to learn and explore Mathematics as a doorway to a career. Class attendance is integral to Examination performance but I also encourage punctuality and professionalism while class is in session.

Chapter 1   Linear Equations, Inequalities, and Applications
  1.1 Linear Equations in One Variable
  1.2 Formulas and Percent
  1.3 Applications of Linear Equations
  1.5 Linear Inequalities in One Variable
  1.7 Absolute Value Equations and Inequalities
Chapter 2   Linear Equations, Graphs, and Functions
  2.1 Linear Equations in Two Variables
  2.2 The Slope of a Line
  2.3 Writing Equations of Lines
  2.4 Linear Equations in Two Variables
  2.5 Introduction to Relations and Functions
  2.6 Linear Equations in Two Variables
Chapter 3   Systems of Linear Equations

  3.1 Systems of Linear Equations in Two Variables

Chapter 4   Exponents, Polynomials, and Polynomial Functions
  4.1 Integer Exponents and Scientific Notation
  4.3 Polynomial Functions
  4.4 Multiplying Polynomials

4.5 Dividing Polynomials

Chapter 5   Factoring

5.1 Greatest Common Factors; Factoring by Grouping
5.2 Factoring Trinomials
5.3 Special Factoring
5.4 A General Approach to Factoring
5.5 Solving Equations by the Zero-Factor Property

Chapter 6   Rational Expressions and Functions

6.1 Rational Expressions and Functions; Multiplying and Dividing
6.2 Adding and Subtracting Rational Expressions
6.3 Complex Fractions
6.4 Equations with Rational Expressions and Graphs
6.5 Applications of Rational Expressions

Chapter 7   Roots, Radicals, and Root Functions

7.1 Radical Expressions and Graphs
7.2 Rational Exponents
7.3 Simplifying Radicals, the Distance Formula, and Circles
7.4 Adding and Subtracting Radical Expressions
7.5 Multiplying and Dividing Radical Expressions
7.6 Solving Equations with Radicals
7.7 Complex Numbers

Chapter 8   Quadratic Equations, Inequalities, and Functions

8.1 The Square Root Property and Completing the Square
8.2 The Quadratic Formula
8.3 More about Parabolas; Application (omit horizontal parabolas)

APP   Graphing Quadratic Inequalities

Appendix: Graphing Quadratic Inequalities

Instructor Requirements

Students are expected to submit homework online thru MyMathLab by the designated due dates and take all exams during the scheduled testing dates.

Classroom Behavior

Everyone will be expected to conduct themselves with courtesy, professionalism and respect in this classroom.

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 below).

Calculator Policy: As with all developmental mathematics courses at HCC, **the use of a calculator during any exam, including the final exam, is prohibited** and will be considered cheating (see academic honesty section below).

Student's Assessments

Homework assessments will be submitted online through MyMathLab. Homework accounts for 15% of the final grade. Three major Mid-term exams and the final exam will be proctored and taken in class for no more than 2 hours each. Each Mid-term Exam contributes to 15% of the Final Grade. The Final Exam is comprehensive and contributes 40% of the Final Grade. Students can only receive the grades of A, B, C, F or IP. (no "D" grades allowed). The grade of "IP" can be given only once in the course.

Homework/LAB policy:
Math 0312 has MyMathLab Homework and Lab that must be done from the Web Site integrated in Canvas by all students. This homework can be done from your home computer, the Math Lab computers in Learning Resources Center, or the computers in the open Lab Room (Computer Room); you can even load it on your smart phone. To register into the homework for my section, sign in Canvas using your HCC username and password. The MML homework/LAB will count 15.

Exam policy:
There are Three (3) in class major exams at 100 points each and a Departmental Final exam.

Make-up policy:
There are no make-up exams given.

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:

> a. Students who score less than 60% on the Final Examination or who have an overall course average less than 70% will be awarded a grade of "IP" or "F." The "IP" grade will be awarded to those students who took Math 0409 for the 1st time. The "F" grade will be awarded to those students who are repeating Math 0312.

> b. Students who score 60% or higher on the Final Examination and whose overall course average is equal to or greater than 70%, will have their grades averaged and awarded a grade based upon the standard 10 point scale.

Instructor's Grading Criteria:
HCC Grading Scale:

A = 100 – 90......................................4 points per semester hour
B = 89 – 80..3 points per semester hour
C = 79 – 70..2 points per semester hour
69 and below = F or IP ....0 points per semester hour
IP (In Progress) ....0 points per semester hour
W(Withdrawn) ....0 points per semester hour
I (Incomplete).................................0 points per semester hour
AUD (Audit) ....0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses. To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.

Note: The grade of "FX" is given when a student fails due to lack of attendance. A grade of "W" may be given on or before the official withdrawal date but not at the time of final grade submission.

HCC Policy Statement – ADA, Academic Honesty, Student Attendance, 3-peaters, Withdrawal Deadline

Access Student Services Policies on their Web site: http://www.hccs.edu/district/students/student-handbook/

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to http://www.hccs.edu/district/students/disability-services/

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. **The best way to succeed in this course is to attend lectures and use the Textbook for review.**

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 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.

There will always be a no-tolerance policy towards Academic Dishonesty of any sort at Houston Community College.

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 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 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)

The last day to withdraw is 4:30pm on April 3rd, 2018

Campus Carry Policy: At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at http://www.hccs.edu/district/departments/police/campus-carry/."

Resource Materials: In addition, this course has an associated CANVAS Model course. Course materials are available within the CANVAS Course Management System. Any student enrolled in Math 0409 at HCC has access to the Learning Resource Center (LRC) where they may get additional help in understanding the theory or in improving their skills. The LRC is staffed with mathematics faculty and/or student assistants, and offers tutorial help, videos and computer-assisted drills.

HCC Policy Statement: Sexual Misconduct
Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status-in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:
David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu

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:
The HCC Tutoring Centers provide free tutoring for individual subjects offered at specific times throughout the week on various campuses. There is no need to make an appointment. If you need a tutor, visit: www.hccs.edu/findatutor for times and locations. For more information about tutoring at HCC, visit www.hccs.edu/district/students/tutoring.

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 https://hccs.upswing.io/. 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.

Any student that faces challenges securing their food or housing and believes this may affect their performance in the course are urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable us to provide any resources that HCC may possess

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.