Mathematics
West Loop Campus

Math 0312: Intermediate Algebra
CRN 60272 – Spring 2018
Room C127| Tuesdays & Thursdays | 8:00 – 9:50 P.M.
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: ranjbaran00463

Instructor: Fahimeh (Farah) Ranjbaran

Instructor Contact Information: fahimeh.ranjbaran@springbranchisd.com / Cell: (281) 989 - 8927

Type of Instruction: Face to Face

Office location and hours: By Appointment Only.

Preferred Method of Contact: Email, Text, Call

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.

Instructional Methods
This is an on campus class. Most of the instruction will come from a homework management system called MyMathLab, which must be purchased for this class. The MyMathLab Course ID for this class is **ranjbaran00463**

Instructor Requirements
Homework and quizzes/assessments will be submitted online through MyMathLab and will count as an exam grade. Four major exams and the final exam will be proctored and taken in class. **No calculators or formula sheets will be allowed on any proctored exam, except for the Geometric Formula sheet**.

Classroom Behavior
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 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/LAB policy:
Math 0312 has MyMathLab Homework and Lab that must be done from the Web Site 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 (enter room); you can even load it on your smart phone. This will have a grade for the semester and will count as an exam grade.

Exam policy:
There are four (4) in class major exams at 100 points each, MyMathLab Homework assignment at 100 points, and a departmental final exam. The worse major exam/MyMathlab grade will be dropped. Each major exam/MyMathLab will count 20%. Final exam will count 30%.

Make-up policy:
There will be ***NO MAKE-UP EXAM***. If a student is absent for a test, it will count as a zero. The zero will be considered the lowest score, which will be dropped.

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:
Your final course grade is based on the following standard HCC scale. A grade of "IP" (In Progress) will not be given. A grade of "F" is given if the final average is below 60 or the final exam grade is below 60. The lowest grade out of the 5 exam grade (4 exams and mathlab homework grade) will be dropped. Then 70% of the remaining four exam grades and 30% of the final exam will determine your semester grade.
The grading formula is as follows after the lowest grade being dropped:

$$(E1 + E2 + E3 + E)/4 * 70\% + 30\% * \text{Final Exam} = \text{Semester Grade}$$

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.

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/

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.
Students who demonstrate academic honesty will receive a grade of "0".
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)

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.

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

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 is April 3, 2018 by 4:30 p.m.**

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.

Tentative Schedule for Intermediate Algebra Math 0312, Spring 2018

January 16 **1.1** Application of Linear Equations - Pg. 44
1.5 Linear Inequalities in One Variable – pg. 90

January 18 **1.7** Absolute value equations and inequalities – Pg. 111
2.1 Linear Equations in Two Variables – Pg. 136

January 23	**2.2** The Slope of a Line – Pg. 148 **2.3** Writing Equation of a Line – Pg. 162
January 25	**2.4** Linear Inequalities in Two Variables –Pg. 179 **2.5** Introduction to Relation and Functions – Pg. 186
January 30	**2.6** Function notation and linear functions – Pg. 197
February 1	**Test Review**
February 6	***Test #1 - Chapters 1 & 2***
February 8	**3.1** System of Linear Equations in Two Variables – Pg. 216
February 13	**4.4** Multiplying Polynomials – Pg. 298 **4.5** Dividing Polynomials – Pg. 307
February 15	***Test #2 - Chapters 3 & 4***
February 20	**5.1** Greatest Common Factors; Factoring by Grouping – Pg. 324 **5.2** Factoring Trinomials Pg. 330
February 22	**5.3** Special Factoring – Pg. 338 **5.4** A General Approach to Factoring – Pg. 334
February 27	**5.5** Solving Equations by the Zero-Factor Property Pg. 349 **6.1** Rational Expressions and Functions; Multiplying and Dividing - Pg. 366
March 1	**6.2** Adding and Subtracting Rational Expressions – Pg. 376
March 6	**6.3** Complex Fractions – Pg. 385
March 8	**6.4** Equations with Rational Expressions and Graphs – Pg. 391 **6.5** Applications of Rational Expressions – Pg. 400
March 12 – 18	**Happy Spring Break**
March 20	**Test Review**
March 22	***Test #3 - Chapters 5 & 6***

March 27	**7.1** Radical Expressions and Graphs – Pg. 434
March 29	**7.2** Rational Exponents – Pg. 442 7.3 Simplifying Radical Expressions, the Distance Formula, and Circles Pg. 450 **7.4** Adding and Subtracting Radical Expressions – Pg. 463
April 3	**7.5** Multiplying & Dividing Radical Expressions – Pg. 468 **Last Day to Withdraw**
April 5	**7.6** Solving Equations with Radicals – Pg. 479
April 10	**7.7** Complex Numbers – Pg. 485
April 12	**8.1** The Square Root Property and Completing the Square – Pg. 496
April 17	**8.2** The Quadratic Formula – Pg. 505
April 19	**8.6** More about Parabolas; Application (Omit horizontal parabolas) Pg. 541
April 24	**APPENDIX** Graphing Quadratic Inequalities – Pg. 664
April 26	**Test Review**
May 1	***Test #4 - Chapters 7 & 8***
May 3	**Final Exam Review**
May 10	***Final Exam- Thursday from 6 to 8 p.m.***