

# Mathematics Spring Branch Campus

Math 0312: Intermediate Algebra CRN 57787 – Spring/2018

Room 321| 10:00 – 11:50 AM | Tu-Th

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: unruh47264

**Instructor**: Phil Unruh

Instructor Contact Information: phil.unruh@hccs.edu Office Phone: 713-718-5874

# Website: http://learning.hccs.edu/faculty/phil.unruh

# **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 Proposed Exam Schedule

	Approx.		MyMathLab	
Week	Date	Chapter	Homework	
1	16	1.1-1.3	Assigned	
1	18	1.5	On Line	
2	23	1.7		
2	25	2.1-2.2		
3	30	2.3-2.4		
3	1	2.5-2.6		
4	6	Review		
4	2-8	TEST		
5	13	3.1		
5	15	4.1,4.3		
6	20	4.4-4.5		
6	22	5.1		
7	27	5.2-5.3		
7	3-1	5.4		
8	6	5.5		
8	8	Review		
9	20	TEST		
9	22	6.1-6.2		
10	27	6.3-6.4		
10	29	6.5		
11	3	7.1-7.2		
11	5	7.3-7.4		
12	10	7.5-7.7		
12	12	Review		
13	17	TEST		
14	19	8.1-8.2		
14	24	8.6, App		
	26	Review		
15	5-1	TEST		
15	3	Review		
16	10	Final	10-11:50AM	

#### **Instructional Methods**

Students should be on time for class. Students should be prepared for class activities by completing assigned homework.

### **Student Assignments**

**Computer Requirement:** Students are required to demonstrate content mastery of various Math 0312 lessons with MyMathLab software, outside regular class time. The software is available from either the HCCS Bookstore or online at <a href="https://www.mymathlab.com">www.mymathlab.com</a>. This will count 1/4 of the final grade. Course Code: <a href="https://www.mymathlab.com">unruh47264</a>.

### Make-up policy:

In order to pass the course you must take all the exams and the final. If you miss an exam I will replace it with the Final Test Grade. I give no make-ups for any reason. I do drop the lowest of the four exams, but not the Final Test.

#### **Final Examination:**

The final exam is comprehensive, and questions on it can deal with any of the course objectives. The final examination must be taken by all students.

#### Final Grade:

Grades will be posted online at the end of the semester when all grades have been finalized. The Family Education Rights and Privacy Act (FERPA) does not allow any grades or scores to the transmitted over any electronic means. Do not call or email about your grade. If you wish to discuss your grade, please come by at the beginning of class at the start of the next semester and I will be happy to go over your scores.

### **GRADE DETERMINATION:**

Your grade will be determined by the following	Details	Points (if applicable)	Percent of Final Average
Exams and Quizzes	Four exams will be given and 8 quizzes	100	50
Computer/Lab Assignments	MyMathLab-Homework	100	25
Final Exam	Thursday, May.10, 10:00-11:50 AM	100	25
	Total:		100%

## LETTER GRADE ASSIGNMENT:

# 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 1<sup>st</sup> 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.

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.

Letter Grade	Final Average in Percent		
A	100-90		
В	89-80		
С	79-70		
F or IP	69-and below		

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.

<u>Note</u>: 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 - Students with disabilities**

Houston Community College is dedicated to providing an inclusive learning environment by removing barriers and opening access for qualified students with documented disabilities in compliance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act. Ability Services is the designated office responsible for approving and coordinating reasonable accommodations and services in order to assist students with disabilities in reaching their full academic potential. In order to receive reasonable accommodations or evacuation assistance in an emergency, the student must be registered with Ability Services.

If you have a documented disability (e.g. learning, hearing, vision, physical, mental health, or a chronic health condition), that may require accommodations, please contact the appropriate Ability Services Office below. Please note that classroom accommodations cannot be provided prior to your Instructor's receipt of an accommodation letter and accommodations are not retroactive. Accommodations can be requested at any time during the semester, however if an accommodation letter is provided to the Instructor after the first day of class, sufficient time (1 week) must be allotted for the Instructor to implement the accommodations. For more information, please go to <a href="http://www.hccs.edu/district/students/disability-services/">http://www.hccs.edu/district/students/disability-services/</a>

**Ability Services Contact Information** 

Central College	713-718-6164	
Coleman College	713-718-7376	
Northeast College	713-718-8322	
Northwest College	713-718-5422	713-718-5408
Southeast College	713-718-7144	
Southwest College	713-718-5910	
Adaptive Equipment/Assistive Technology	713-718-6629	713-718-5604
Interpreting and CART services	713-718-6333	

# **HCC Policy Statement: Title IX:**

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 <a href="mailto:Institutional.Equity@hccs.edu">Institutional.Equity@hccs.edu</a>

Phone number: 713-718-8271

### **Campus Carry statement:**

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/."

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

# **HCC Policy Statement: Academic Honesty**

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.

<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 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, <u>you are responsible for all material missed</u>. 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 from this course is April 3, 2018.

# 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**

Students should not engage is disruptive activities while in the classroom. Any conduct deemed annoying or bothersome to the academic atmosphere, such as cell phone use or consistent talking during instructional delivery, will not be tolerated. Any student engaging in such activities will be asked to leave the 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

### Misuse of Electronic Devices in the Classroom

The use of electronic devices by students in the classroom is up to the discretion of the instructor. Any use of such devices for purposes other than student learning is strictly prohibited unless authorized as an appropriate ADA accommodation from the ADA Counselor.

#### **Instructor Requirements**

Students are expected to complete homework assignments and to be prepared for class discussions.

### **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:**

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: <a href="www.hccs.edu/findatutor">www.hccs.edu/findatutor</a> for times and locations. For more information about tutoring at HCC, visit <a href="www.hccs.edu/district/students/tutoring">www.hccs.edu/district/students/tutoring</a>.

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 <a href="https://hccs.upswing.io/">https://hccs.upswing.io/</a>. 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.

### EGLS<sub>3</sub> -- 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 <a href="https://www.hccs.edu/EGLS3">www.hccs.edu/EGLS3</a> for more information.

# Administration contact information

### **College - Level Math Courses**

Chair of Math	Jaime Hernandez	SW Campus	713-718-2477	Stafford, Scarcella, N108
- Admin. Assistant	Tiffany Pham	SW Campus	713-718-7770	Stafford, Scarcella, N108
- Admin. Assistant		SW Campus	713-718-2477	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
- Admin. Assistant	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.

# **Basic Needs Security Statement**

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is 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.