

Department of Mathematics

West Loop

Math 1314: College Algebra CRN 37617 –Fall 2017 SS Room 171| 12:00Pm – 3:50 Pm | Sunday

3 hour lecture course / 48 hours per semester Textbook: College Algebra 2nd ed, by Julie Miller and Donna Gerken McGraw Hill, 2016 ISBN-13:978-0077836344

INSTRUCTOR: Mohammad Abbbasi

CONTACT: <u>mohammad.abbasi@hccs.edu</u>

Office Hours I will be available after and before class by appointment

Please send me an email for appointment

Course Description

In-depth study and applications of quadratic, polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices and matrices and determinants

<u>A departmental final examination will be given in this course.</u> Prerequisites

Math 0312 or its equivalent or an acceptable placement test score.

Course Goal

This course is designed as a review of advanced topics in algebra for science and engineering students who plan to take the calculus sequence in preparation for their various degree programs. It is also intended for non-technical students who need college mathematics credits to fulfill requirements for graduation and prerequisites for other courses. It is generally transferable as math credit for non-science majors to other disciplines.

Course Student Learning Outcomes (SLO):

Upon successful completion of this course, students will:

- 1. Demonstrate and apply knowledge of properties of functions, including domain and range, Operations, compositions, and inverses.
- 2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
- 3. Apply graphing techniques.
- 4. Evaluate all roots of higher degree polynomial and rational functions.
- 5. Recognize, solve and apply systems of linear equations using matrices.

Assessment/Make-up and Grading

You benefit for attending class regularly. You earn rewards as follows: Perfect attendance (0 absent and 0 tardy) = 5. The point will add to the final exam grade. The students receive 5 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.

Exam

There will be 4 major Test, Homework, quizzes, and comprehensive departmental final exam. One of the lowest grades in your major test will be drop.

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

Calculator: Student cannot use a calculator in this class

The sum of best three test score
Homework and Quizzes Ave
Comprehensive Final Exam
Grading Scale

50 %
25 %

90 - 100 = A

80 - 89 = B

70 - 79 = C

60 - 69 = D

00 - 59 = F

Note: The instructor cannot assign a grade of W.

Calendar

Oct 1	Sec 1.4, 1.5, and 1.6			
Oct 8	Sec 1.7, 2.2, and 2.3			
Oct 14	Quiz # 1 and homework due date			
Oct 15	Test # 1			
	Sec 2.4			
Oct 22	Sec 2.5, 2.6, 2.7			
Oct 29	Sec 2.8, 3.1			
Nov 4	Quiz # 2 & homework due date			
Nov 5	Test # 2			
	Sec 3.2,			

Nov 12 Sec 3.3, 3.4 3.5, 3.6 Last Day for Students Administrative withdrawal **Nov 13 Nov 18** Quiz # 3 & homework due date **Nov 19 Test # 3** Sec 3.6, 4.1 Nov 17 Sec 4.1, 4.3 Sec 4.4, 4.5 Thanks Giving Holiday Nov 24- 26 Dec 3 Sec 5.1, 5.4 Sec 6.1, 6.3, 6.5 Dec 9 Quiz # 4 & homework due date Test # 4 **Dec 10 Final Exam Review** 12:00 pm – 2:00 pm Comprehensive Departmental Final

Connect Math Student Registration Instructions

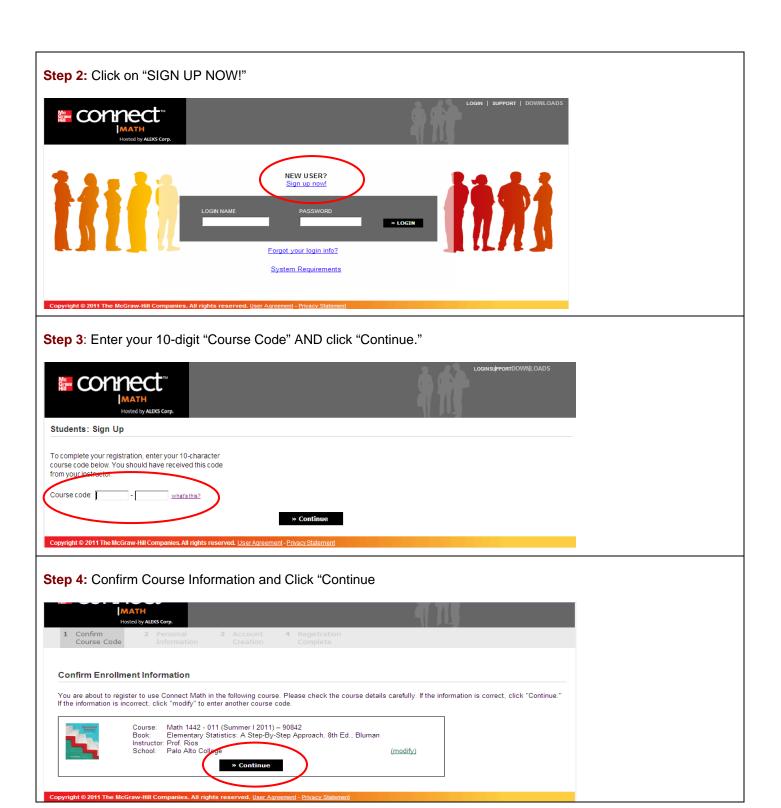
Before you begin, you will need:

Your e-mail address

Exam

A 10-digit Course Code supplied by your Instructor: H9KC9-CR9JT

Step 1: Go to the Connect Math website by typing in the following address: http://www.connectmath.com on your web browser.



To Access Connect Math again, Go to http://www.connectmath.com and enter your Connect login name and password and click on "LOGIN."

password and click on "LOGIN."		
My Login Name:		

My Password: __

To check the system requirements for Connect Math, go to the following site:

http://www.connectmath.com/support/system_requirements

If you need technical support, please contact Connect Math Customer Support:

E-mail: http://support.connectmath.com Phone: (949) 390-2095

Hours: Monday - Friday, 7:00 AM to 10:00 PM

Your Course Code is: H9KC9-CR9JT
Your Financial Aid Access Code is: 097B7-606B5-7CEB1-4DB9A

The Financial Aid Access Code does not add an additional two weeks to your account.

NOTE: This code gives you temporary access to Connect Math for a two-week period. Once the code expires, you will be locked out of your Connect Math account until you purchase a regular Student Access

Code. It is highly recommended that you purchase the Student Access Code BEFORE the two weeks expire to prevent interruptions with your Connect Math account.

- 1. To sign up to Connect Math using the Financial Aid Access Code, go to: https://www-awh.connectmath.com
- 2. Click on the "Sign up now!" link located under "NEW USER?"
- 3. Enter your "Course Code" and press "Continue".
- 4. Verify that you are registering for the correct course and click on "**Continue**." Enter the 20-character Financial Aid Access Code.
- 5. Continue with the registration process until your account has been set up successfully.
- 6. After you complete your account set up you will be logged into Connect Math and can immediately begin working in the course.
- 7. You can extend your Connect Math account at any time by clicking on "extend your account" and entering a purchased Student Access Code. If your temporary access expires before you purchase a Student Access Code, simply log in to Connect Math and you will be directed on how to extend your current account. You will then be able to continue your course where you left off before the temporary access expired. You do NOT need to create a new Connect Math account to continue your course.

Enjoy your course.

If you require technical assistance, please contact Connect Math at https://www.connectmath.com/support/form

Late Assignment

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

Project, Term Papers, etc.

There are no projects or tern papers required for this course.

Objectives

Students will:

- 1. Solve Quadratic Equations in one variable by the method of factoring, square root property, completing the square and the quadratic formula.
- 2. Solve radical equations, fractional equations, and equations of quadratic form.
- 3. Solve linear inequalities and linear equations involving absolute value, state the solution in interval notation, and graph the solution.
- 4. Solve non-linear (quadratic and rational) inequalities, state the solution in interval notation, and graph the solution.
- 5. Solve exponential and logarithmic equations.
- 6. Solve systems of linear and nonlinear in two variables.
- 7. Find the distance and midpoint between two points in the Cartesian Plane.
- 8. Recognize the equation of a straight line, graph the equation of a straight line, find the slope and intercepts of a line, know the relationship between the slopes of parallel and perpendicular lines, and be able to determine the equation of a line
- 9. Graph linear functions, quadratic functions, piecewise-defined functions, absolute value functions, polynomial functions, rational functions, exponential functions, and logarithmic functions.
- 10. Understand vertical and horizontal shifts, stretching, shrinking, and reflections of graphs of functions.
- 11. Recognize the equation of a circle, sketch the graph of a circle, and find the equation of a circle.
- 13. Determine the rational zeros of a polynomial.
- 14. Apply the definition of a function, determine the domain and range of a function, evaluate expressions involving functional notation, simplify expressions involving the algebra of functions, graph functions by plotting points, use the definition
- 15. Understand the inverse relationship between the exponential and logarithmic functions.
- 16. Perform operations with matrices.
- 17. Solve and apply systems of linear equations using matrices.

Core Objectives

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.

FINAL GRADE OF FX

Students who stop attending class and do not withdraw themselves prior to the withdrawal deadline may either be dropped by their professor for excessive absences or be assigned the final grade of "FX" at the end of the semester. Students who stop attending classes will receive a grade of "FX", compared to an earned grade of "F" which is due to poor performance. Logging into a DE course without active participation is seen as non-attending.

Please note that HCC will not disperse financial aid funding for students who have never attended class. Students who receive financial aid but fail to attend class will be reported to the Department of Education and may have to pay back their aid. A grade of "FX" is treated exactly the same as a grade of "F" in terms of GPA, probation, suspension, and satisfactory academic progress.

HCC Policy Statement - Students with disabilities

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/

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 Institutional.Equity@hccs.edu

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/."

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 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 should contact a HCC advisor prior to withdrawal. The withdrawal must be done **PRIOR** to the Last Day to Withdraw 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 advisor to determine class withdrawal deadlines. If you plan to discuss withdrawal options with an advisor or your professor, then please allow at least a 24-hour response time when communicating via email or telephone. *If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade*.

Repeat Course Fee

The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

Classroom Behavior

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.

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: 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.

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
- Admin. Assistant	Tiffany Pham	SW Campus	713-718-7770	Stafford, Scarcella, N108
- Admin. Assistant	Dipal Parekh	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.

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."