

Division of College Readiness Developmental Mathematics Department

https://learning.hccs.edu/programs/developmental-mathematics

Math 0314: Corequisite Support of Math 1314 | Lecture | #19724

Spring 2021 | 16 Weeks (1.19.2021-5.9.2021)
Online on a Schedule | Central Campus | TR 9:30 a.m.-10:50 p.m.
3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor: Victor Hernandez Office Phone: 713-718-6493

Office: SJAC Building, Room 369 Office Hours: MW 10-11am; TR 4-5:30pm HCC Email: victor.hernandez7@hccs.edu Office Location: Central College Math Dept

HCC is offering **FOUR** ways to learn during the Spring 2021 Semester. Descriptions of each type of courses can be found at: https://www.hccs.edu/campaigns/college-your-way/

Online on a Schedule

Students enrolled in this class take classes online at the scheduled class time that they select when enrolling. Students never come to campus, but log into their class on the scheduled dates and times. Look for the code WS when reviewing the updated schedule. Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear the concerns and just to discuss course topics.

Instructor's Preferred Method of Contact

It is best to communicate with me through the Canvas Inbox. Due to the volume of online communication that occurs during online and flexCampus class, contacting me through normal email might mean that I do not see your message quickly enough for a timely response but the Canvas inbox ensures that messages are properly handled. Students can expect a response from me within 24 hours on weekdays. Any email sent on Sunday, Saturday, or after 5pm on Friday will receive a response by the end of the day Monday.

Due to restrictions placed on the campus due to COVID-19 quarantine measures, in person meetings will not take place at the start of the semester. If the situation remains stable or improves, in person office hours may be announced at that time.

What's Exciting About This Course

This course has been designed to guide students to the skills that are necessary to succeed in a College Algebra course, a course which is often the first step into a career in STEM. In this

course you will practice the skills and techniques to tackle rigorous algebraic problems and gain the practice and experience to do so comfortably.

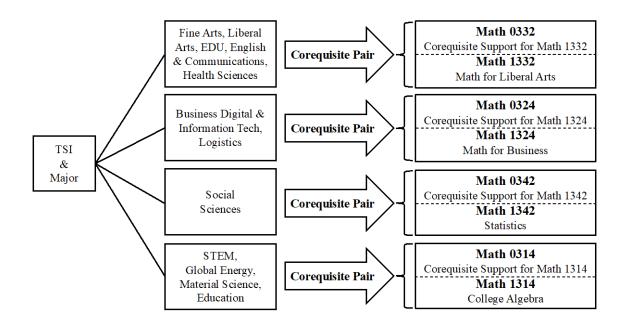
My Personal Welcome

I look forward to working with you through this course. I love math and it is the best part of my job to help you understand that which I enjoy.

Prerequisites/Corequisites

MATH 0314 requires either that a student has passed MATH 0309 or MATH 0314P with a "C" or better **OR** TSIA Math Score 336-349 with Intermediate Algebra score 4-15 **OR** an equivalent score on a Placement Exam

<u>Corequisites</u>: MATH 0314 is a corequisite support course for MATH 1314. Students should be aware that sections of these courses are <u>LINKED</u>. Therefore, developmental math students who enroll in Math 0314 must also enroll in the linked section of Math 1314 (in the same semester). Developmental students <u>must maintain satisfactory attendance in BOTH</u> Math 0314 and Math 1314. If a developmental student withdraws or drops from one course in the corequisite pair, then he/she will be dropped from the other linked course. Corequisite courses must be taken during the same semester. Please carefully read and consider the repeater policy in the <u>HCCS Student Handbook</u>.

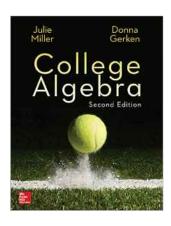


Canvas Learning Management System

This section of MATH 0314 will use <u>Canvas</u> (<u>https://eagleonline.hccs.edu</u>) to supplement inclass assignments, exams, and activities.

HCCS Open Lab locations may be used to access the Internet and Canvas. **USE FIREFOX OR CHROME AS THE INTERNET BROWSER**.

Instructional Materials



Textbook Information

There is no additional textbook requirement for the class. However, students must have access to Connect Math as well as the required textbook for College Algebra.

College Algebra Math 2nd ed. (by Julie Miller and Donna Gerken, McGraw Hill Publishing, 2016).

ISBN: 9781260029604 (textbook and access code for Connect

Math)

ISBN: 9781260029611 (access code with e-book)

You may either use a hard copy of the book or the e-book through

Connect Math.

Temporary Free Access to E-Book

For temporary free access to Connect Math and the online eBook, log into your Canvas account and complete the sign in on the "Connect Math" page which you can find in the Start Here Module

Other Instructional Resources

Students must have access to the workbook and Math 1314 textbook. Any additional supplemental material will be provided by the instructor as needed.

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the <a href="https://example.com/hCC-utoring-com/

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at http://library.hccs.edu.

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at http://www.hccs.edu/resources-for/current-students/supplemental-instruction/.

Course Overview

This course helps students with basic math concepts required to be successful in MATH 1314. Topics include factoring, linear equations, distance and midpoint formulas, quadratic equations and applications, complex numbers, other types of equations, linear inequalities in one variable, and other types of inequalities, linear equations in two variables, functions, analyzing graphs of functions, a library of Parent functions, transformations of functions, combinations of functions, quadratic functions and models, polynomial functions of higher degree, zeros of polynomial functions, rational functions, and inequalities, inverse functions, exponential functions and their graphs, logarithmic functions and their graphs, properties of logarithm and exponential and logarithmic equations, linear and nonlinear systems of equations, two variable linear systems, solving system of equations using matrices, operations with matrices.

Core Curriculum Objectives (CCOs)

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

Program Student Learning Outcomes (PSLOs)

Students in the Mathematics Program will:

- 1. Engage in problem solving strategies, such as organizing information, drawing diagrams and modeling.
- 2. Use symbolic representations to solve problems. This includes manipulating formulas, solving equations, and graphing lines.
- 3. Build the foundational mathematical skills that will enable a student to successfully complete a college level mathematics course.

Course Student Learning Outcomes (CSLOs)

Upon successful completion of this course, students will be successful in MATH 1314 and able to:

- 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.

Learning Objectives

Upon completion of MATH 0314, the student will be able to:

- 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.
- 12. Determine the rational zeros of a polynomial.
- 13.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
- 14. Understand the inverse relationship between the exponential and logarithmic functions.
- 15. Perform operations with matrices.
- 16. Solve and apply systems of linear equations using matrices.

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Attain a raw score of at least 50% on the final review test
- Be aware of and comply with academic honesty policies in the <u>HCCS Student Handbook</u>

Assignments, Exams, and Activities

Module Exams

Module exams are designed to help student study and succeed in the college level tests.

In this class we will have 8 short (10 question) exams, 2 for each module in College Algebra. Each exam will cover approximately half of one module. The lowest of these 8 exam grades will be dropped.

The Developmental Math Department is requiring the remote proctoring of examinations (including the final review test) to ensure the integrity of the assessment process and to prevent acts of academic dishonesty. In this course, in addition to a reliable internet connection, you will be required to have hardware that meets the following minimal requirements:

- a) A functioning webcam and microphone, and
- b) A computer with operating system that is capable of running the Respondus LockDown Browser and Respondus Monitor.

If you are unable to obtain the hardware listed above, please speak with the class instructor.

Homework

The homework for this class will consist of creating and then completing exam study guides based on the material that is covered in College Algebra. You will find detailed instructions along with due dates in our Canvas course.

In Class Activities

In-classes activity grades are based on participation. This is the chance to ask questions, test your abilities, and participate without worrying about getting something wrong. As long as you fully participate in each activity, contributing when asked, you will get full credit for these activities. These activities consist of answering questions and completing problems while in class. You will be instructed on that day's activity and what is expected when we start the activity so we all start on the same page.

College Level Cumulative Prep Exam

A 25 item test based on the college level cumulative prep exam will be given in class on 5-4-2021

Grading Formula

Remember that you can look on Canvas for a record of your grades up to date.

Homework 20% of your grade In-Class Activities 20% of your grade 8 Exams 40% of your grade Cumulative Prep Exam 20% of your grade

Grade	Overall Percentage		
Α	90% +		
В	80%-89%		
С	70%- 79%		
IP	<70% first time		
F	<70% not first time		
FX	Excessive absences		

Developmental Math Department Grading Policy:

The grade of **D** is not allowed in developmental math courses. The grade of **FX** is given when a student fails due to lack of attendance. Any student that has failed this course for the first time is eligible to receive an IP. Any subsequent failures will receive an F. A grade of **W** may be given on or before the official withdrawal date but not at the time of final grade submission.

Further support will be recommended for students who pass this class and do not pass the college level class.

HCC Grading Scale can be found on this site under Academic Information: http://www.hccs.edu/resources-for/current-students/student-handbook/

Course Calendar

Week	Date	Material to be covered				
1	1/19					
	1/21					
2	1/26	Module 1 Exam: Part 1				
	1/28					
3	2/2	Module 1 Exam: Part 2				
	2/4					
4	2/9					
	2/11					
5	2/16	HCC Closed due to weather				
	2/18	HCC Closed due to weather				
6	2/23	HCC Closed due to weather				
	2/25	Module 2 Exam: Part 1				
7	3/2					
	3/4	Module 2 Exam: Part 2				
8	3/9					
	3/11					
	3/16	Spring Break				
	3/18					
9	3/23	Module 3 Exam: Part 1				
	3/25	Module 3 Exam: Part 2				
10	3/30					
	4/1					
11	4/6	Last day to withdraw 4-6-2021				
	4/8					
12	4/13					
	4/15	Module 4 Exam: Part 1				
13	4/20					
	4/22					
14	4/27					
	4/29	Module 4 Exam: Part 2				
15	5/4	Cumulative Prep Exam				
	5/6					

Syllabus Modifications

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

Instructor's Practices and Procedures

Missed Assignments

There are no make-up exams in this class. The lowest Module Exam grade, the lowest homework grade and the lowest 3 activity grades will be dropped.

Academic Integrity

All forms of academic dishonesty including, but not limited to cheating, plagiarism, and collusion are serious offenses. Any student found cheating in any way during this course will be immediately dropped from the course with the grade of F.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance): http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/

Attendance Procedures

MATH 0314 is a corequisite support course for MATH 1314. Students should be aware that sections of these courses are **LINKED**. Therefore, developmental math students who enroll in Math 0314 must also enroll in the linked section of Math 1314 (in the same semester). Developmental students **must maintain satisfactory attendance in BOTH** Math 0314 and Math 1314. If a developmental student withdraws or drops from one course in the corequisite pair, then he/she will be dropped from the other linked course. Corequisite courses must be taken during the same semester. Please carefully read and consider the repeater policy in the <u>HCCS Student Handbook</u>.

Attendance is taken daily in class. Attendance will not be used when computing your average in this class, however, being absent for more than 4 days in a semester is grounds for being withdrawn from the course. The last day to withdraw from this course is April 6, 2021

Student Conduct

As your instructor and as a student in this class, it is our shared responsibility to develop and maintain a positive learning environment for everyone. I take this responsibility very seriously and will inform members of the class if their behavior makes it difficult for me to carry out this task. Students that behave disrespectfully to others will be asked to leave the class for the day.

Electronic Devices

Personal communication devices are to not be on the student desk, in a student's hand, or lap during examinations. Usage of such devices, along with headphones, is expressly prohibited during examinations and will be considered cheating.

The use of electronic devices by students in the classroom is up to the discretion of the instructor. Any use of such devices for the purposes other than student learning is strictly prohibited unless authorized as an appropriate ADA accommodation from the ADA Counselor. **The use of a calculator during any exam, including the final exam, is prohibited.**

Mathematics Program Information

- HCC Math Student Organizations: Mu Alpha Theta: Application:
 https://www.hccs.edu/resources-for/current-students/stem--science-technology-engineering--mathematics/stem-clubs/mu-alpha-theta-application/
- Mathematics related Scholarships: T-Stem: https://www.hccs.edu/t-stem

HCC Policies

Here's the link to the HCC Student Handbook http://www.hccs.edu/resources-for/current-students/student-handbook/ In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- disAbility Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

EGLS³

The EGLS³ (<u>Evaluation for Greater Learning Student Survey System</u>) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/

Campus Carry Link

Here's the link to the HCC information about Campus Carry: http://www.hccs.edu/departments/police/campus-carry/

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go to HCC Eagle ID and activate it now. You may also use Canvas Inbox to communicate.

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their

college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

Office of Institutional Equity

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (http://www.hccs.edu/departments/institutional-equity/)

disAbility Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, 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/support-services/

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
(713) 718-8271
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu
http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/

Department Chair Contact Information

College Level Math Courses

Chair of Math	Susan Fife	SW Campus	713-718-7241	Stafford, Scarcella, N108				
- Admin. Assistant	Tiffany Pham	SW Campus	713-718-7770	Stafford, Scarcella, N108				
- Admin. Assistant	Christopher Cochran	SW Campus	713-718-2477	Stafford, Scarcella, N108				
Math Assoc. Chair	Jaime Hernandez	CE Campus	713-718-7772	San Jacinto Building, Rm 369				
Math Assoc. Chair	Mahmoud Basharat	NW Campus	713-718-2438	Katy Campus Building, Rm 112				
Math Assoc. Chair	Emmanuel Usen	NE Campus	713-718-8062	Northline, Rm 324				

Developmental Math Courses

Chair of Dev. Math	Marisol Montemayor	SE Campus	713-718-7153	Felix Morales Building, Rm 124
- Admin. Assistant	Carmen Vasquez	SE Campus	713-718-7056	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Hien Nguyen	SE Campus	713-718-2440	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Jack Hatton	SW Campus	713-718-2434	Stafford, Learning Hub, Room 208

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.