

# College Algebra-21062

MATH-1314

DL1 2023 Section 911 3 Credits 09/05/2023 to 12/17/2023 Modified 08/24/2023

### **Our Vision**

Houston Community College shapes the future for all students with innovative, affordable, timely, responsive, and continuously improving educational programs and services. Partnered with the communities we serve, we take a defining role in regional economic, workforce, and social development.

https://www.hccs.edu/about-hcc/ (https://www.hccs.edu/about-hcc/)

# Course Meetings

### **Course Modality**

Safe, face-to-face course with scheduled dates and times

**Meeting Days** 

Monday/Wednesday

#### **Meeting Times**

9:25 - 10:55 am

### **Meeting Location**

HCC Building Room 352

## Seligible Welcome and Instructor Information

#### Dear Students,

Welcome to my college algebra Math 1314 class. 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. The key to succeed in this class is to come to every class , take notes, go over each PowerPoint posted by instructor, watch videos for each class, finish online assignments on time, and ask questions during the class if you have any.

Professor: Hung Lau

Email: hung.lau@hccs.edu Phone: 713-847-4809

Office Hours:

2:00 - 3:30 pm Monday and Wednesday

## What's Exciting About This Course

In this course, you will learn more about functions and equations and use the techniques that you learned from Algebra I and II to solve the real-life problems. The critical thinking and problem solving skills attained can be very help when preparing your SAT or PSAT test and AP Precalculus exam.

### **My Personal Welcome**

Welcome to MATH 1314 College Algebra -l'm excited to be your college algebra instructor! I always expect you do the best in this class by reviewing the course materials, interacting with classmates, and answering questions in the class. It is my hope that by the end of this course you will have a deeper understanding and appreciation for Algebra.

## **Preferred Method of Contact**

Please use HCC Email or Canvas Inbox to communicate. I will respond to emails within 24 hours Monday through Friday; I will reply to weekend messages on Monday mornings.

# Course Overview

### **Course Description**

MATH 1314 - College Algebra Credits: 3 (3 lecture). 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. Topics include quadratics, polynomial, rational, logarithmic and exponential functions, system of equations, matrices and determinants. It is generally transferable as math credit for non-science majors to other disciplines. A departmental final examination will be given in this course. Core Curriculum Course.

### Prerequisites

Must be placed in college-level mathematics or completion of Math 0314. A grade of C or better in Math 0314 or its equivalent or an acceptable placement score. A grade of C or better in Math 0314 or its equivalent or an acceptable placement score.

### **Co-Requisites**

MATH 0314 is a co-requisite to MATH 1314. Since MATH 0314 is co-requisite with MATH 1314, withdrawing from either MATH 0314 or Math 1314 will necessitate withdrawal from the other as well. Please carefully read and consider the repeater policy in the <u>HCCS</u> <u>Student Handbook</u>.

## **Mathematics Department Website**

https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/mathematics/ (https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/mathematics/)

# Ore 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.

# III Student Learning Outcomes and Objectives

## 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 completion of MATH 1314, the student will be 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 1314, 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, and 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.

## E Departmental Practices and Procedures

The Mathematics Department has specific expectations for calculators, proctored exams and grading policies. Refer to the Course Requirements and Devices sections below.

### Last Day to Withdraw

Students must withdraw by the withdrawal deadline in order to receive a "W" on a transcript. Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online <u>Academic Calendar</u>, any HCC Registration Office, or any HCC advisor to determine class withdrawal deadlines.

Be certain you understand HCC policies about dropping a course and consult with a counselor/advisor to determine if withdrawing is in your best interest. It is your responsibility to withdraw officially from a class and prevent an "F" from appearing on your transcript. Senate Bill 1231 and limits the number of W's a student can have to 6 classes over the course of their entire academic career. This policy is effective for students entering higher education for the first time in fall 2007 and subsequent terms. Withdrawals accumulated at any other Texas public higher education institution count toward the 6 course total. Withdrawals for certain circumstances beyond the students control may not be counted toward the 6-drop limit.

In addition, withdrawing from a course may impact your financial aid award or eligibility. Contact the Financial Aid Office or website to learn more about the impact of withdrawing on financial aid.

#### Withdrawal Dates

- Fall 2023 1st 8-WK: Sept. 25
- Fall 2023 Reg 16 WK: Oct. 27
- Fall 2023 2nd Start: Nov. 6
- Fall 2023 2nd 8-WK: Nov. 17

## Instructional Materials and Resources

#### **Instructional Materials**

The <u>HCC Online Bookstore (https://hccs.bncollege.com/shop/hccs-central/page/find-textbooks</u>) provides searchable information on textbooks for all courses. Check with your instructor before purchasing textbooks because the book might be included in your course fees.

The textbook listed below is required for this course.

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

ISBN: 9781264048007 (textbook and access code for Aleks)

ISBN: 9781264048014 (access code with e-book)

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

Required: Aleks Access Code (School might provide one).



#### **Other Instructional Resources**

Khan Academy Algebra Tutorials (https://www.khanacademy.org/math/algebrahome) MathTV Algebra Tutorials (https://mathtv.com/)

## Course Requirements

### Assignments, Exams, and Activities

Туре	Weight	Торіс	Notes
Homework	35	Aleks and In class	Homework will be assigned in Aleks.
Exam 1	15	Chapter 1 and chapter 2	Topics in chapter 3 and chapter 4 will be tested.

Туре	Weight	Торіс	Notes
Exam 2	15	Chapter 3 and 4	Topics in chapter 3 and 4 will be tested.
Exam 3	15	Chapter 5 and 6	Topics in chapter 5 and 6 will be tested.
Quizzes	5	Lesson quiz	Lesson quiz might be given without notice
In-Class Activities	5	Note-taking, survey, etc	Do now and note-taking, surveys, and journal writing.
Final Exam	10	All chapters	HCC comprehensive Final Exam
Extra Credit	5	Finish works on time	Finish all your work on time

### **Grading Formula**

Grade	Range	Notes
А	90 -100	Final grade average is between 90 and 100.
В	80-89	Final grade average is between 80 and 89.
С	70-79	Final grade average is between 70 and 79.
D	60-69	Final grade average is between 60 and 69.
F	0-59	Final grade average is between 0 and 59.

## Instructor's Practices and Procedures

#### **Incomplete Policy**

In order to receive a grade of Incomplete ("I"), a student must have completed at least 85% of the work in the course. In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

### Missed Assignments/Make-Up Policy

There is no make-up exam in this class. If you miss one exam, it will be replaced with the final exam score. If you miss the second exam, it will be zero. Set your own personal calendars and electronic devices in advance to remind you of those dates. You will take the exam at campus. The exams will be on paper or on Canvas. The loss of power, computer functionality or internet connection will NOT constitute an excuse for missing or not completing an exam. Technical access and compliance are strictly the student's responsibility. Remember: this is a distance education course. It is your responsibility to keep up with the course pace, instructions, policies, due dates, and timetable in general, including the assignment deadlines and exam dates. Do NOT procrastinate. Doing so will NOT pay off. You will run out of time. Keep up with the course calendar on Syllabus and Canvas.

### **Academic Integrity**

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 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 College's Policy on Academic Honesty, found in the student handbook. 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; \*Not following the instructions on Lockdown Browser + Webcam.

All forms of academic dishonesty including, but not limited to cheating, plagiarism, and collusion are serious offenses. Possible consequences for academic dishonesty include a grade a 0 or F in the particular assignment, failure in the course, and/or recommendations for probation or dismissal from the institution.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

https://www.hccs.edu/studentprocedures (https://www.hccs.edu/studentprocedures)

### **Attendance Procedures**

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. 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.

The last day to withdraw for this course is Oct 27, 2023.

### **Student Conduct**

Student Expectations During the class:

Students will make sure they sit in a well lit area, without any inappropriate items behind them.

Students will keep themselves muted until the instructor asks them to unmute.

Students will only share their screen with instructor permission.

Students will use any chat features appropriately; to ask questions and make appropriate comments about what is being discussed.

Students will not record any video conferencing sessions.

Students will continue to abide by HCC policies and the Student Handbook

Please note: Instructors will remove a student from a conference session if the above expectations are violated, inform administration to report any inappropriate behavior.

Students should not engage in disruptive activities while in the classroom. Any conduct that is deemed to distract the academic atmosphere, such as cell phone use or consistently talking during instructional delivery, will not be tolerated.

### Instructor's Course-Specific Information

The Math Department is requiring the remote proctoring of all major examinations (including the Final Exam) 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:

1. A functioning webcam and microphone, and

2. A computer with operating system that is capable of running the Respondus LockDown Browser + Webcam.

Note: An exams in this course might be required Lockdown Browser + Webcam. You will have to download the Lockdown Browser + Webcam in order to be able to take any online exams or quizzes.

#### **Devices**

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.

### **Faculty Statement about 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.

### **Faculty-Specific Information Regarding Canvas**

This course section will use Canvas (<u>https://eagleonline.hccs.edu (https://eagleonline.hccs.edu)</u>) to supplement in-class assignments, exams, and activities.

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

### Social Justice Statement

Houston Community College is committed to furthering the cause of social justice in our community and beyond. HCC does not discriminate on the basis of race, color, religion, sex, gender identity and expression, national origin, age, disability, sexual orientation, or veteran status. I fully support that commitment and, as such, will work to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. In this course, we share in the creation and maintenance of a positive and safe learning environment. Part of this process includes acknowledging and embracing the differences among us in order to establish and reinforce that each one of us matters. I appreciate your suggestions about how to best maintain this environment of respect. If you experience any type of discrimination, please contact me and/or the Office of Institutional Equity at 713-718-8271.

## 竝 HCC Policies and Information

### **HCC Grading System**

HCC uses the following standard grading system:

Grade	Grade Interpretation	Grade Points
А	Excellent (90-100)	4
В	Good (80-89)	3

Grade	Grade Interpretation	Grade Points
С	Fair (70-79)	2
D	Passing (60-69), except in developmental courses.	1
F	Failing (59 and below)	0
FX	Failing due to non-attendance	0
W	Withdrawn	0
I	Incomplete	0
AUD	Audit	0
IP	In Progress. Given only in certain developmental courses. A student must re-enroll to receive credit.	0
СОМ	Completed. Given in non-credit and continuing education courses.	0

### Link to Policies in Catalog and Student Handbook

Here's the link to the HCC Catalog and Student Handbook: https://catalog.hccs.edu/ (https://catalog.hccs.edu/)

In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- Ability 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

#### Link to HCC Academic Integrity Statement

### Campus Carry Link

Here's the link to the HCC information about Campus Carry:

https://www.hccs.edu/campuscarry (https://www.hccs.edu/campuscarry)

## **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 (https://www.hccs.edu/email) and activate it now. You may also use Canvas Inbox to communicate.

### **Office of Institutional Equity**

Use the following link to access the HCC Office of Institutional Equity, Inclusion, and Engagement: <u>https://www.hccs.edu/eeo</u> (<u>https://www.hccs.edu/eeo</u>)

#### **Ability 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 <a href="https://www.hccs.edu/accommodations">https://www.hccs.edu/accommodations</a>)

#### Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or genderbased 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 (mailto:Institutional.Equity@hccs.edu)

https://www.hccs.edu/titleix (https://www.hccs.edu/titleix)

#### **Mandatory Reporters**

Under Texas Education Code 51.252 (formerly known as Senate Bill 212), HCC Instructors are mandatory reporters of sexual harassment, dating violence (domestic violence), sexual assault, and stalking. All instructors are required by law to report to the College's Title IX coordinator or Deputy Title IX coordinator all reports disclosed to them relating to sexual harassment, dating violence (domestic violence), sexual assault, and stalking alleged to have been committed by or against a person who was a student enrolled at or an employee of the institution at the time of the incident. Instructors are required by law to include all the information they know about the incident, including the name of the student(s), in the report to the College's Title IX coordinator or deputy Title IX coordinator.

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

#### **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.

### **Canvas Learning Management System**

Canvas is HCC's Learning Management System (LMS), and can be accessed at the following URL:

#### https://eagleonline.hccs.edu (https://eagleonline.hccs.edu)

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

#### **HCC Online Information and Policies**

Here is the link to information about HCC Online classes, which includes access to the required Online Information Class Preview for all fully online classes: <a href="https://www.hccs.edu/online/">https://www.hccs.edu/online/</a> (https://www.hccs.edu/online/</a>

#### Scoring Rubrics, Sample Assignments, etc.

Look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course. <u>https://eagleonline.hccs.edu/ (https://eagleonline.hccs.edu/)</u>

#### 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 during office hours, and 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
- Be aware of and comply with academic honesty policies in the <u>HCCS Student Handbook</u> (<u>https://www.hccs.edu/studenthandbook</u>)

#### EGLS3

The EGLS<sup>3</sup> (Evaluation for Greater Learning Student Survey System (https://www.hccs.edu/egls3)) 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. EGLS<sup>3</sup> surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

https://www.hccs.edu/egls3 (https://www.hccs.edu/egls3)

### Housing and Food Assistance for Students

If you are experiencing any hardship related to food, shelter, mental health, or other basic needs areas, please visit the Basic Needs page for resources (<u>https://www.hccs.edu/cares (https://www.hccs.edu/cares</u>)). You have the option to take the Basic Needs Questionnaire and ask to be contacted by a counselor for additional assistance or support (<u>https://www.hccs.edu/basicneeds (https://www.hccs.edu/basicneeds</u>)). Furthermore, please notify the professor if you are comfortable doing so.

#### **Student Resources**

#### **Tutoring**

HCC provides free and convenient academic support, in a large variety of subjects, to HCC students in both an online environment and in-person on campus. Tutoring is provided by HCC personnel in order to ensure that it is appropriate. Visit the HCC Tutoring Services website for more information at <a href="https://https/https/https/https/ht

#### 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 <a href="https://library.hccs.edu">https://library.hccs.edu</a> (https://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 <a href="https://www.hccs.edu/supplemental-instruction">https://www.hccs.edu/supplemental-instruction</a> (<a href="https://www.hccs.edu/supplemental-instruction">https://www.hccs.edu/supplemental-instruction<

#### **Resources for Students:**

https://www.hccs.edu/covid19students (https://www.hccs.edu/covid19students)

#### **Basic Needs Resources:**

https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/ (https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/)

#### **Student Basic Needs Application:**

https://www.hccs.edu/basicneeds (https://www.hccs.edu/basicneeds)

### COVID-19

Here's the link to the HCC information about COVID-19:

https://www.hccs.edu/covid-19 (https://www.hccs.edu/covid-19)

## Sensitive or Mature Course Content

In this college-level course, we may occasionally discuss sensitive or mature content. All members of the classroom environment, from your instructor to your fellow students, are expected to handle potentially controversial subjects with respect and consideration for one another's varied experiences and values.

### Instructional Modalities

#### In-Person (P)

Safe, face-to-face course with scheduled dates and times

#### Online on a Schedule (WS)

Fully online course with virtual meetings at scheduled dates and times

#### **Online Anytime (WW)**

Traditional online course without scheduled meetings

#### Hybrid (H)

Course that meets safely 50% face-to-face and 50% virtually

#### Hybrid Lab (HL)

Lab class that meets safely 50% face-to-face and 50% virtually

### **Copyright Statement**

In order to uphold the integrity of the academic environment and protect and foster a cohesive learning environment for all, HCC prohibits the unauthorized use of course materials. Materials shared in this course are based on my professional knowledge and experience as an instructor and are presented in an educational context for the students in the course. Authorized use of course materials is limited to personal study or educational uses. Material should not be shared, distributed, or sold outside the course without permission. Students are also explicitly forbidden in all circumstances from plagiarizing or appropriating course materials. This includes but is not limited to publicly posting quizzes, essays, or other materials. This prohibition extends not only during this course, but after. Sharing of the materials in any context will be a violation of the HCC Student Code of Conduct and may subject the student to discipline, as well as any applicable civil or criminal liability. Consequences for unauthorized sharing, plagiarizing, or other methods of academic dishonesty may range from a 0 on the specified assignment and/or up to expulsion from Houston Community College. Questions about this policy may be directed to me, your instructor, or to the Manager of Student Conduct and Academic Integrity.

### **Unauthorized Disclosure**

"Unauthorized disclosure" occurs when any student provides instructional materials and/or assessments to other students in violation of a clear prohibition by the instructor. Examples include: posting assessment items to online sites such as Chegg or CourseHero; asking exam questions in forums like Reddit or Yahoo Answers; discussions of confidential question using Wechat or GroupMe, etc.

## 請 Course Calendar

WEEK

8. 28 - 9.1	Syllabus 1.1 Linear Rational Equations 1.4 Solve Quadratic Equations
9.4 - 9.8	1.5 Applications of Quadratic Equations   1.7 Compound and Absolute Value Inequalities
9.11 - 9.15	1.1 The Rectangular System 2.2 Circles
9.18 - 9.22	2.3 Functions and Relations   2.4 Equations in Two Variables & Linear   Functions
9.25 - 9.29	2.5 Applications of Linear Equations 2.6 Transformations of Graphs
10.2 - 10.6	<ul><li>2.7 Analyzing Graphs of Functions and Piecewise</li><li>2.8 Algebra of Functions and Function Composition</li><li>Exam I: Covers topics in chapter 1 and 2</li></ul>
10.9 -10.13	3.1 Quadratic Functions 3.2 Introduction to Polynomial Functions
10.16 - 10.20	3.3 Division of Polynomials 3.4 Zeros of Polynomials
10.23 -10.27	3.5 Rational Functions 3.6 Polynomial and Rational Inequalities
10.30 -11.3	4.1 Inverse Functions 4.2 Exponential Functions
11.6 - 11.10	<ul><li>4.3 Logarithmic Functions</li><li>4.4 Properties of Logarithms</li></ul>
11.13 - 11.17	<ul><li>4.5 Exponential and Logarithmic Equations</li><li>5.1 Systems of Linear Equations in two Variables</li><li>Exam II : Covers topics in chapter 3 and 4</li></ul>
11.20 - 11.24	THANKSGIVING BREAK

11.27 -12.1	5.2 System of Non-Linear Equations 6.1 Matrices
12.4 -12.8	Review of HCC Final Exam
12.11 - 12.15	HCC Comprehensive Final Exam

### **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.

## Additional Information

### **Departmental/Program Information**

Program Information for Majors: https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/mathematics/

HCC Math Student Organization: Mu Alpha Theta: Application: <u>https://www.hccs.edu/resources-for/current-students/stem-science-technology-engineering--mathematics/stem-clubs/mu-alpha-theta-application/</u>

### Process for Expressing Concerns about the Course

If you have concerns about any aspect of this course, please reach out to your instructor for assistance first. If your instructor is not able to assist you, then you may wish to contact the Department Chair.

#### **Mathematics Courses**

Chair of Math	Mahmoud Basharat	SW Campus	713-718-2438	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	Solomon Osifodunrin	NW Campus	713-718-2458	Katy Campus Building, Rm 306.24
Math Assoc. Chair	Hien Nguyen	NE Campus	713-718-2440	Northline, Rm 324

#### **Developmental Mathematics Courses**

Chair of Dev. Math	Dorothy A. Muhammad	SE Campus	713-718-5846	Felix Morales Building, Rm 124
- Admin. Assistant	Carmen Vasquez	SE Campus	713-718-7056	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Jack Hatton	SE Campus	713-718-2434	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Adnan Ulhaque	SW Campus	713-718-5463	Stafford Scarcella, N108