



**Division of Mathematics
Mathematics Department**

<https://learning.hccs.edu/programs/mathematics>

MATH 1314: College Algebra | Lecture | #13782

FALL 2020 | 16 Weeks (8.24.2020-12.13.2020)

This Section of Math 1314 is Flex Campus | FM-307 | TTH 1:00 PM – 2:20 PM
3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor:	Eddy A. Attar	Office Phone:	713-718-7274
Office:	AM-101.15G	Office Hours:	After Class
HCC Email:	eddy.attar@hccs.edu	Office Location:	Online

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 your concerns and just to discuss course topics.

Instructor's Preferred Method of Contact

eddy.attar@hccs.edu. I will respond to emails within 24 hours that are sent Monday through Friday; I will reply to weekend (Begins at 5:00 PM on Friday) messages on Monday mornings.

What's Exciting About This Course

This course will be a combination of lecture, and tutoring. Beginning Tuesday August 25th, I will be Conducting Live Lectures in Canvas Conferences every Tuesday and Thursday from 1:00 PM – 2:20 PM until October 6th (Tentatively we are scheduled to return to Campus on October 6th). Logging into these Live lectures are required for attendance; however, if you are unable to Join us Live, you can view it later in Conferences in Canvas (Note: It takes about 2 hours for the recording to Upload in conferences, and Canvas only saves these Live Recordings for 2 Weeks). To Join the Live Conference or to View the Recording later, click Conferences on the Left side of the Home Page of Canvas. For Attendance, you are required to login to the Live Conference from 1:00 PM – 2:20 PM TTH to be counted present for the day. Watching the Video Recording later is not counted as being Present for the day.

My Personal Welcome

Welcome to Math 1314 College Algebra, I hope you enjoy this course.

Prerequisites and/or Co-Requisites

A grade of C or better in Math 0312 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.

Eagle Online Canvas Learning Management System

This section of MATH 1314 will be using [Eagle Online Canvas \(https://eagleonline.hccs.edu\)](https://eagleonline.hccs.edu) for Lectures, Announcements, Discussions, Homework, Quizzes, and Exams.

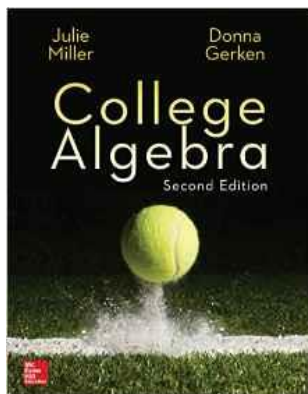
The Math Department is requiring the remote proctoring of all major examinations (including the Final Exam) to ensure the integrity of the assessment process and to prevent acts of academic dishonesty. In this course, in addition to a reliable internet connection, you will be required to have hardware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

- 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.

It is recommended that you **USE FIREFOX OR CHROME AS YOUR BROWSER.** (Note: Technical Issues are not an excuse for not being able to complete any Homework Assignment, Quiz, Test, or Final Exam, or for not being able to complete it on time). For Quizzes you will be given 2 attempts, for Tests and the Final Exam you will only have 1 attempt. Make sure you check your answers before Submitting any Quiz, Test, or Final Exam. Due Dates will not be extended. There are "No Exceptions".

Instructional Materials

Textbook Information



The textbook listed below is **required** for this course.

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

This course is participating in the HCC First Day Program. The charge for electronic access to Connect Math is included in your tuition fees. You will receive immediate access to Connect Math in Canvas for the semester which includes the e-Book and access to assignments. You do not need to go to the bookstore or purchase a special code to access Connect MATH. The bookstore may stock a low-cost loose-leaf version of the textbook or help you place an order for the low-cost printed text option. The low cost printed text is only available for students participating in the First Day program.

To Access ConnectMath, Log into [Eagle Online Canvas \(https://eagleonline.hccs.edu\)](https://eagleonline.hccs.edu) click on Modules on the left side of the Canvas Course Home Page, then click on McGraw Hill Campus Classic, and Register.

Other Instructional Resources

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 [HCC Tutoring Services](#) website for services provided.

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 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.

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 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

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.

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 online in Conferences in Canvas
- Completing Homework, Quizzes, Exams, and other assignments online.
- Check Announcements in Canvas Daily.
- 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 your 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 make up
- Provide the course outline and class calendar which 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 (Possibly October 6th) or Online in Conferences in Canvas
- Participate actively by reviewing course material, interacting with classmates in Canvas Discussions, 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 HCCS Student Handbook

Assignments, Exams, and Activities

Exams, Quizzes, and Homework

Three tests will be given during the course totaling 35% of your grade. Performance on five quizzes will determine another 15%. A comprehensive final exam will be given counting 40% of your grade. The remaining 10% will come from homework (ConnectMath).

Final Exam

All students will be required to take a cumulative departmental Final Exam Online consisting of 33 multiple choice questions. We will have two REVIEW DAYS on Tuesday July 7th, and Wednesday July 8th to cover the Final Exam.

Grading Formula

Students can use Canvas to estimate their current Grade.

Assessments:

Tests	35%
Quizzes	15%
Homework	10%
Final Exam	40%
TOTAL =	100%

Grade	Overall Percentage
A	90% +
B	80%-89%
C	70%- 79%
D	60%-69%
F	<60%

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

Course Calendar

Tentative, and Subject to Change

Week	Dates	Topic/What's due
1	Tues. Aug 25	Syllabus
1	Thurs. Aug 27	Section 1.1 Linear Equations and Rational Equations
2	Tues. Sept. 1	Section 1.4 Quadratic Equations
2	Thurs. Sept. 3	Section 1.5 Applications of Quadratic Equations Section 1.6 More Equations and Applications
3	Tues. Sept. 8	Section 1.7 Linear, Compound, and Absolute Value Inequalities
3	Thurs. Sept 10	QUIZ 1 (Ch. 1) Due Tues. Sept. 15 th at 1:00 PM, 2 Attempts
4	Tues. Sept. 15	Section 2.1 The Rectangular Coordinate System and Graphing Section 2.2 Circles
4	Thurs. Sept 17	Section 2.3 Functions and Relations Section 2.4 Linear Equations in Two Variables & Linear Functions
5	Tues. Sept. 22	Section 2.5 Applications of Linear Equations Section 2.6 Transformations of Graphs
5	Thurs. Sept 24	Section 2.7 Analyzing Graphs of Functions and Piecewise Functions Section 2.8 Algebra of Functions and Function Composition
6	Tues. Sept. 29	QUIZ 2 (Ch. 2) Due Thurs. Oct. 1 st at 1:00 PM, 2 Attempts
6	Thurs. Oct. 1	TEST 1 (Ch. 1 & 2) Use Quiz 1 and Quiz 2 for Review Due Tues. Oct. 6 th at 1:00 PM, 1 Attempt
7	Tues. Oct. 6	Section 3.1 Quadratic Functions Section 3.2 Introduction to Polynomial Functions
7	Thurs. Oct. 8	Section 3.3 Division of Polynomials

8	Tues. Oct. 13	Section 3.4 Zeros of Polynomials Section 3.5 Rational Functions
8	Thurs. Oct. 15	Section 3.6 Polynomial and Rational Inequalities
9	Tues. Oct. 20	QUIZ 3 (Ch. 3) Due Thurs. Oct. 22 nd at 1:00 PM, 2 Attempts
9	Thurs. Oct. 22	Section 4.1 Inverse Functions Section 4.2 Exponential Functions
10	Tues. Oct. 27	Section 4.3 Logarithmic Functions Section 4.4 Properties of Logarithms
10	Thurs. Oct. 29	Section 4.5 Exponential and Logarithmic Equations
11	Tues. Nov. 3	QUIZ 4 (Ch. 4) Due Thurs. Nov. 5 th at 1:00 PM, 2 Attempts
11	Thurs. Nov. 5	TEST 2 (Ch. 3 & 4) Use Quiz 3 & Quiz 4 for Review Due Tues. Nov. 10 th at 1:00 PM, 1 Attempt
12	Tues. Nov. 10	Section 5.1 Systems of Linear Equations in Two Variables Section 5.4 Systems of Nonlinear Equations in Two Variables
12	Thurs. Nov. 12	Section 6.1 Solving Systems of Linear Equations Using Matrices
13	Tues. Nov. 17	Section 6.3 Operations on Matrices Section 6.5 Determinants
13	Thurs. Nov. 19	QUIZ 5 (Ch. 5, 6) Due Tues. Nov. 24 th at 1:00 PM, 2 Attempts
14	Tues. Nov. 24	TEST 3 (Ch. 3, 4, 5 & 6)) Use Test 2 and Quiz 5 for Review Due Tues. Dec. 1 st at 1:00 PM, 1 Attempt
14	Thurs. Nov. 26	THANKSGIVING HOLIDAY, SCHOOL CLOSED NOV. 26-NOV. 29
15	Tues. Dec. 1	REVIEW FOR FINAL EXAM (Homework Due at 1:00 PM)
15	Thurs. Dec. 3	REVIEW FOR FINAL EXAM
16	Tues. Dec. 8	FINAL EXAM – (Opens Tues. Dec. 8th at 8:00 AM and will be due Thurs. Dec. 10th at 8:00 AM), 1 Attempt Mandatory, No Make-Ups
16	Thurs. Dec. 10	No Class Final Exam Week

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

NOTE: There will be no make-up tests or quizzes under any circumstances. Missing only one test will not penalize any student. In the event that a student should miss one test, the final exam will be substituted in its place. Quizzes cannot be made up. ***It is the responsibility of the student to get with the instructor concerning any missed assignments.***

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:

- 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.

(Note: Technical Issues are not an excuse for not being able to complete any Homework Assignment, Quiz, Test, or Final Exam, or for not being able to complete it on time). For Quizzes you will be given 2 attempts, for Tests and the Final Exam you will only have 1 attempt. Make sure you check your answers before Submitting any Quiz, Test, or Final Exam. Due Dates will not be extended. There are "No Exceptions".

Academic Integrity

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 College Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty": includes, but is not limited to, cheating on a test, plagiarism, and collusion.

Cheating on a test includes:

- Copying from another students' test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test not yet administered;
- Bribing another person to obtain a test that is to be administered.

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

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

This semester, there are three modalities for Developmental Math courses: Online Anytime, Online on a Schedule, and Flex Campus. Online Anytime classes are traditional online

courses; coursework is online, and there are no meetings at specific times. Online on a Schedule classes are online courses with traditional meeting components; coursework is online, and there are specific times to log in for scheduled class meetings. Flex Campus are in-person classes; coursework is online, and students have the choice to come to campus or to participate online during scheduled class meetings.

This Section of Math 1314 is Flex Campus which requires attendance either in-person or online from 1:00 PM –2:20 PM TTH

Class Attendance - It is important that you attend class online! 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, attending 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. You will be counted Present as long as you view the Live Conference, or view the Recording later. 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.**

You may decide NOT to attend class for whatever reason. As an adult making the decision not to attend, you do not have to notify the instructor prior to missing a class. However, if this happens too many times, you may suddenly find that you have "lost" the class.

Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, you are responsible for all material missed.

The last day to withdraw is: Friday October 30, 2020.

Student Conduct

Appropriate behavior online is expected. Please be kind and considerate of fellow classmates and instructor.

Electronic 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. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information about 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	Incomplete Grades
Academic Support	International Student Services
Attendance, Repeating Courses, and Withdrawal	Health Awareness
Career Planning and Job Search	Libraries/Bookstore
Childcare	Police Services & Campus Safety
disAbility Support Services	Student Life at HCC
Electronic Devices	Student Rights and Responsibilities
Equal Educational Opportunity	Student Services
Financial Aid TV (FATV)	Testing
General Student Complaints	Transfer Planning
Grade of FX	Veteran Services

EGLS³

The EGLS³ ([Evaluation for Greater Learning Student Survey System](#)) 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 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/disability-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/>

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.