COURSE SYLLABUS

HCC Policy Statements

Class Attendance - It is important that you come to class! Attending class regularly is the best way to succeed in this class. Research has shown that the single most important factor in student success is attendance. Simply put, going to class greatly increases your ability to succeed. You are expected to be on time at the beginning of each class period. For complete information regarding Houston Community College’s policies on attendance, please refer to the Student Handbook. You are responsible for materials covered during your absences. Class attendance is checked daily.

If a special situation arises which causes you to miss more than two (2) consecutive classes, please email me. If your schedule causes you to be late consistently, please inform me.

STUDENT DISCIPLINE: I expect you to be respectful to me and to fellow students. Please do not talk unnecessarily, without permission, after class has begun. You are here to study math and we will all benefit from appropriate behavior. Please read your catalog. College policy will be strictly adhered to.

CALCULATORS: Calculators may be used on homework and exams, but with possible restrictions announced by the instructor. In no manner may you program the calculator to solve your problems. I will inform you of any variations of calculator use. The major use will be assistance in numerical calculations.

GRADING: Four major examinations will be given during the semester. If an exam is missed, the final exam will be counted in its place.

<table>
<thead>
<tr>
<th>DAILY</th>
<th>MAJOR EXAMS</th>
<th>FINAL EXAM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

FINAL COURSE AVERAGE

<table>
<thead>
<tr>
<th>FINAL GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>F</td>
</tr>
</tbody>
</table>

MAKE UP EXAMINATIONS: No make-up examinations will be given. If a student misses an examination, the final examination score will be substituted in its place.

HOMEWORK: Homework is not used in determining the final grade. The primary purpose of homework is to build your mathematical skills. It is very important that you keep up with homework on a daily basis.

Personal Communication Device Policy:

All personal communication devices (any device with communication capabilities including but not limited to cell phones, blackberries, pagers, cameras, palmtop computers, lap tops, PDAs, radios, headsets, portable fax machines, recorders, organizers, databanks, and electronic dictionaries or translators) must be muted or turned off during class. Such activity during class time is deemed to be disruptive to the academic process. Personal communication devices are not to be on the student desk during examinations. Usage of such devices during exams is expressly prohibited during examinations and will be considered cheating (see academic honesty section).
Catalog Description: MATH 1324 Mathematics for Business & Social Sciences.
The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. 3 credit (3 lecture).

Prerequisite: A grade of C or better in Math 0312 or its equivalent or Meet TSI college-readiness standard for Mathematics.

Course Intent: This course is intended for students majoring in liberal arts and secondary education.

Audience: Students who are enrolled in the business area may take this course as an elective in order to obtain a broader background in the technique of linear programming and to further expand their mathematical knowledge.

Course Learning Outcomes
1. Apply elementary functions, including linear, quadratic, polynomial, rational, logarithmic, and exponential functions to solving real-world problems.
2. Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans.
3. Apply basic matrix operations, including linear programming methods, to solve application problems.
4. Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.
5. Apply matrix skills and probability analyses to model applications to solve real-world problems.


Note: Please use this ISBN when creating your MyMathLab course shell; students will get the reduced rate for MyMathLab purchase.

Resources:
Free tutoring is available in the library when scheduled (provided later) at the Learning Emporium at the Central Campus. Additional help is also available through Student Support Services. You may visit them in SIAC 384 or contact them at 713-714-6136. Typically, posted questions are answered by an HCC tutor or faculty within 24 hours (usually under 6 hours). There are also several online math resources that you can find with an internet search. You may also find information on the Learning Web site accessible through your specific HCCS campus website.
Course Outline: Instructors may find it preferable to cover the course topics in the order listed below. However, the instructor may choose to organize topics in any order, but all material must be covered.

<table>
<thead>
<tr>
<th>UNIT</th>
<th>APPROXIMATE TIME</th>
<th>TEXT REFERENCE</th>
</tr>
</thead>
</table>
| UNIT I | Review (2 hours) | 1 hour 2.1 Graphs  
| | | 1 hour 2.2 Equations of Lines |
| UNIT II | Nonlinear Functions (12 hours) | 2 hours 3.4 Quadratic Functions  
| | | 2 hours 3.7 Rational Functions  
| | | 2.5 hours 4.1 Exponential Functions  
| | | 2.5 hours 4.3 Logarithmic Functions  
| | | 3 hours 4.4 Logarithmic and Exponential Equations |
| UNIT III | Systems of Linear Equations (7 hours) | 2 hours 6.1 Systems of Two Linear Equations in Two Variables  
| | | 2 hours 6.2 Larger Systems of Linear Equations  
| | | 2 hours 6.3 Applications of Systems of Linear Equations  
| | | 1 hour 6.4 Basic Matrix Operations |
| UNIT IV | Linear Programming (8.5 hours) | 1/2 hour 7.1 Graphing Linear Inequalities in Two Variables  
| | | 1.5 hours 7.2 Linear Programming: The Graphical Method  
| | | 2 hours 7.3 Applications of Linear Programming  
| | | 2 hours 7.4 The Simplex Method: Maximization  
| | | 2 hours 7.5 Maximization Applications |
| UNIT V | Sets and Probability (6 hours) | 1 hour 8.1 Sets  
| | | 8.2 Applications of Venn Diagrams (Optional)  
| | | 11/2 hours 8.3 Introduction to Probability  
| | | 11/2 hours 8.4 Basic Concepts of Probability  
| | | 2 hours 8.5 Conditional Probability and independent Events |
| UNIT VI | Counting, Probability Distributions, and Further Topics in Probability (6 hours) | 11/2 hours 9.1 Probability Distributions and Expected Value  
| | | 11/2 hours 9.2 The Multiplication Principle, Permutations, and Combinations  
| | | 11/2 hours 9.3 Applications of Counting  
| | | 11/2 hours 9.4 Binomial Probability |
| UNIT VII | Mathematics of Finance (6.5 hours) | 1/2 hour 5.1 Simple Interest and Discount  
| | | 1 hour 5.2 Compound Interest  
| | | 2 hours 5.3 Annuities, Future Value, and Sinking Funds  
| | | 2 hours 5.4 Annuities, Present Value, and Amortization |

Resource Materials: Any student enrolled in Math 1324 at HCCS has access to the Academic Support Center where they may get additional help in understanding the theory or in improving their skills. The Center is staffed with mathematics faculty and student assistants, and offers tutorial help, video tapes and computer-assisted drills. Also available is a student’s Solutions manual which may be obtained from the Bookstore.
**Americans with Disabilities Act (ADA)**

Any student with a documented disability (e.g., physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at his or her respective college at the beginning of each semester. Faculty members are authorized to provide only the accommodations requested by the Disability Support Services Office. Persons needing accommodations due to a documented disability should contact the ADA counselor for their college as soon as possible. At Central College, a student may contact John Reno by visiting his office located in SJAC 102, e-mail at john.reno@hccs.edu, or telephone at 713.718.6164. Also, interested students may wish to consult the Disability Support Services Student Handbook which may be found online.

For questions, please contact Donna Price at 713-718-5165. To visit the ADA Web site, please visit [www.hccs.edu](http://www.hccs.edu) then click Future students, scroll down the page and click on the words Disability Information.

---


Title IX of the Education Amendments of 1972 requires that institutions have policies and procedures that protect students' rights with regard to sex/gender discrimination. Information regarding these rights are on the HCC website under Students-Anti-discrimination. Students who are pregnant and require accommodations should contact any one of the ADA Counselors for assistance.

It is important that every student understands and conforms to respectful behavior while at HCC. Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations.

Log in to: [www.educationalsolutions.org](http://www.educationalsolutions.org). Sign in using your HCC student e-mail account, then go to the button at the top right that says Login and enter your student number.

---

**HCC Policy Statement: Academic Honesty**

A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the University's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you.

Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty" includes, but is not limited to, cheating on a test, plagiarism, and collusion.

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

**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** means 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)
Sexual Harassment: It is a violation of HCCS policy for an employee, agent, or student of the college to engage in sexual harassment as defined in the EEOC guidelines (EEO/AA Compliance Handbook 47).

Student Course Reinstatement Policy:
Students have a responsibility to arrange payment for their classes when they register, either through cash, credit card, financial aid, or the installment plan. Faculty members have a responsibility to check their class rolls regularly, especially during the early weeks of a term, and reconcile the official class roll to ensure that no one is attending class whose name does not appear on it. Students who are dropped from their courses for nonpayment of tuition and fees who request reinstatement after the official date of record (OE Date) can be reinstated by making payment in full and paying an additional $75 per course reinstatement fee. A student requesting reinstatement should present the registrar with a completed Enrollment Authorization Form with the signature of the instructor, department chair, or dean who should verify that the student has been attending class regularly. Students who are reinstated are responsible for all course policies and procedures, including attendance requirements.

EGLS3 – Evaluation for Greater Learning Student Survey System
At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term. Visit www.hccs.edu/EGLS3 for more information.

Administration contact information

<table>
<thead>
<tr>
<th>College - Level Math Courses</th>
<th>ext. 82477</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair of Math</td>
<td>Jaime Hernandez</td>
</tr>
<tr>
<td>- Secretary</td>
<td>Tiffany Pham</td>
</tr>
<tr>
<td>Math Assoc. Chair</td>
<td>Roderick McBane</td>
</tr>
<tr>
<td>Math Assoc. Chair</td>
<td>Ernest Lowery</td>
</tr>
<tr>
<td>Math Assoc. Chair</td>
<td>Mahmoud Basharat</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Developmental Math Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair of Dev. Math</td>
</tr>
<tr>
<td>- Secretary</td>
</tr>
<tr>
<td>Dev. Math Assoc. Chair</td>
</tr>
<tr>
<td>Dev. Math Assoc. Chair</td>
</tr>
</tbody>
</table>

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.

Withdrawal policy:
If your name is on the roll at the end of the term, you WILL receive a grade. If you wish to drop the class, then it is your responsibility to do that before the final drop date. Neither you nor your instructor will be able to perform the drop after the final drop date. Please refer to the following notice before dropping the class:

NOTICE: Students who take a course three or more times will face significant tuition or fee increases at HCC and other Texas public colleges and universities. In addition, state law dictates that students are allowed a maximum of 6 course withdrawals during their entire college career. Starting in the fall of 2007, students with more than 6 drops will be required to pay additional fees. Prior to course withdrawal, you must confer with your professor or counselor about your study habits, homework, test-taking skills, attendance, course participation, and tutoring or other assistance that is available.
I cannot overemphasize how important it is for you to keep up with your assignments daily. This class moves very fast and if you get behind, you may jeopardize your chance for success. Thank you in advance for your dedicated hard work and cooperation. Please keep me informed of any conflicts regarding your attendance in this class. Feel free to email me if it is important to contact me outside of class.

INSTRUCTOR'S WITHDRAWAL POLICY:

NOTICE: I will not withdraw you from this course for any reason. It is your responsibility to drop the course if you decide that it is in your best interest.

LAST DAY TO WITHDRAW: Tuesday, April 5, 2016.

SCHEDULE: (16 weeks) January 19, 2016 – May 15, 2016

CLASS: (88721) Room 215, Katy Campus

TIME: 11:00 AM – 12:30 PM, Monday & Wednesday,

2 days per week-1 ½ hours

Use of Camera and/or Recording Devices:

As a student active in the learning community of this course, it is your responsibility to be respectful of the learning atmosphere in your classroom. To show respect of your fellow students and instructor, you will turn off your phone and other electronic devices, and will not use these devices in the classroom unless you receive permission from the instructor.

---

Final exam

MONDAY, MAY 9, 2016

May 9 Spring 2016: For classes that start between 11:00 am-11:30 am

Final exams for students will be given at 11:00 a.m.