



## Mathematics HCCS Northeast Distance Education

Math 1332: Contemporary Mathematics  
CRN 34287 – Fall /2017

3 hour lecture course / 48 hours per semester/ 12 weeks  
Textbook: Thinking Mathematically, 6th Edition, by Robert Blitzer  
ISBN-13: 978-0321923233  
MyMathLab CourseID: hatton19123



**Instructor:** Jack Hatton

**Instructor Contact Information:** [jack.hatton@hccs.edu](mailto:jack.hatton@hccs.edu)      **Phone:** 713.718.2434

**Office location and hours:** Northline Campus, Room 324 M-F: By appointment

### Course Description

MATH 1332: Mathematics for Liberal Arts is a course designed for liberal arts, non-mathematics, non-science, and non-business majors. The course provides students with an appreciation of the history, art, and beauty of mathematics in the world around us.

### Prerequisites

A grade of C or better in Math 0312 or the equivalent.

### Course Goal

The intent of this course is to provide the student certain manipulative skills with limits insofar as they apply to concrete but elementary problems in the social and natural sciences. Mathematical rigor will be kept to a minimum.

### Course Student Learning Outcomes (SLO):

1. Apply the language and notation of sets.
2. Use the tools of logic to determine the validity of an argument or statement.
3. Solve problems in mathematics of finance.
4. Demonstrate fundamental probability techniques and apply those techniques to solve problems.
5. Interpret and analyze various representations of data.
6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.

### Learning Objectives:

Students will:

- 1.1 Use Venn diagrams to solve application problems.
- 1.2 Identify sets and subsets and perform set operations.
- 1.3 Be familiar with the basic concepts of probability.
- 2.1 Express statements using symbols.
- 2.2 Form the negation of a statement.
- 2.3 Express compound statements symbolically.
- 2.4 Construct truth tables.
- 2.5 Determine truth value of compound statements.
- 2.6 Use truth tables to show that statements are equivalent.
- 2.7 Use truth tables to determine validity of arguments.

- 3.1 Convert fractions and decimals to percents.
- 3.2 Convert percents to decimals and fractions.
- 3.3 Find simple and compound interest.
- 3.4 Find the future value of a given annuity.
- 3.5 Find the monthly payment and the total interest for a given simple interest amortized loan.
- 4.1 Find the probability of an event.
- 4.2 Use tree diagrams to find possible outcomes and use combinations and permutations.
- 4.3 Solve application problems involving probability.
- 5.1 Be familiar with the fundamentals of statistics.
- 5.2 Assess a statistical study.
- 5.3 Find the mean, median, and mode of given sets of raw data.
- 5.4 Interpret statistical tables and graphs.
- 5.5 Identify normal and skewed distribution curves.
- 5.6 Determine variance and standard deviation from a given sample.
- 5.7 Find the margin of error associated with a given sample.
- 5.8 Apply linear and quadratic functions.
- 5.9 Apply exponential and logarithmic functions.

**Core Objectives**

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.

**CALENDAR**

Test Number	Chapter(s)	Testing Window
1	2	October 7 <sup>th</sup> -8 <sup>th</sup>
2 (On-Site Exam)	3	October 27 <sup>th</sup> -29 <sup>th</sup> (On-Site Exam)
3	8	November 10 <sup>th</sup> -12 <sup>th</sup>
4	11 & 12	November 27 <sup>th</sup> – 29 <sup>th</sup>
Final Exam (On-Site Exam)	Cumulative: Chapters 2, 3, 8, 11 & 12	December 8 <sup>th</sup> - 9 <sup>th</sup> (On-Site Exam)

**NOTE:** This is a tentative testing schedule for the class. Testing dates are subject to change at the discretion of the instructor. Testing locations for the on-site exams are as follows.

**Instructional Methods**

This course is delivered through both Canvas and MyMathLab. MyMathLab is **REQUIRED** for this class. Homework and online exams will be administered in MyMathLab. Instructions for registering for MyMathLab will be posted on the homepage in Canvas.

## Calculator Policy

A non-graphing scientific calculator may be used on both homework and exams in this class. Graphing calculators and cell phone calculators are not allowed.

## Student Assignments, Policy on Late Assignments and Make-Up Exams:

All homework assignments must be submitted by 11:59pm of the due date in MyMathLab. Also, there will be NO makeup exams. If you miss an exam, the final exam will count twice. It will count once for the missed exam and again for the final exam itself.

## Notice for Students Outside Of HCC Service Area: Proctoring

Students living out of the HCC service area during the semester in which they are enrolled at HCC in online classes need to make special arrangements to accommodate their needs.

In the event the course requires onsite exams, it is the student's responsibility to obtain a proctor. The proctor must be someone in the testing center at a local community college or at a university. The proctor will need to provide a secure testing environment and possibly (depending on the course) a computer with Internet access.

The proctor approval form MUST be completed and approved at least 2 weeks prior to the first scheduled exam. For additional questions, you may contact us at: [hcc.online@hccs.edu](mailto:hcc.online@hccs.edu)

## Assessments

There will be 3 or 4 major examinations (at least one of these is an on-site exam) given in this class plus one comprehensive final examination (on-site exam). There will be **NO** makeup exams. If you miss an exam, then the final exam will count twice. If you miss a second exam, then the second missed exam grade will be recorded as a “zero.”  
Break down of grade calculation by points or percentage.

Semester grades will be calculated using the following formula.

**Tests**-45%

**Homework**-20%

**Final Exam**-35%

90 - 100 = A

80 - 89 = B

70 - 79 = C

60 - 69 = D

Below 60 = F

**HCC Policy Statement - Students with disabilities**

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <http://www.hccs.edu/district/students/disability-services/>

**Ability Services Contact Information**

Central College	713-718-6164	
Coleman College	713-718-7376	
Northeast College	713-718-8322	
Northwest College	713-718-5422	713-718-5408
Southeast College	713-718-7144	
Southwest College	713-718-5910	
Adaptive Equipment/Assistive Technology	713-718-6629	713-718-5604
Interpreting and CART services	713-718-6333	

**HCC Policy Statement: Title IX:**

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual’s fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status-in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

*David Cross*  
*Director EEO/Compliance*  
*Office of Institutional Equity & Diversity*  
*3100 Main*  
Houston, TX 77266-7517 or [Institutional.Equity@hccs.edu](mailto:Institutional.Equity@hccs.edu)  
Phone number: 713-718-8271

**Campus Carry statement:**

At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at <http://www.hccs.edu/district/departments/police/campus-carry/>.”

**HCC Policy Statement: Academic Honesty**

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 student's 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)

### **HCC Policy Statements**

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

**Distance Education students who do not log in to their MyMathLab account and submit any assigned homework or tests before the Official Day of Record will be AUTOMATICALLY dropped for non-attendance. Completing the DE online orientation does not count as attendance.**

If you are not attending class, you are not learning the information. As the information that is discussed in class is important for your career, **students may be dropped from a course after accumulating absences in excess of six (6) hours of instruction.** The six hours of class time would include any total classes missed or for excessive tardiness or leaving class early.

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

Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, 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.

### **HCC Course Withdrawal Policy**

If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of withdrawal. Before you withdraw from your course; please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor *may* "alert" you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

If you plan on withdrawing from your class, you **MUST** contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done **PRIOR** to the withdrawal deadline to receive a "W" on your transcript. **\*\*Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline.** If you do not

withdraw before the deadline, you will receive the grade that you are making in the class as your final grade. **The last day to withdraw is Monday, November 13, 2017 at 4:30 pm.**

### **Repeat Course Fee**

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

### **Classroom Behavior**

As with on-campus classes, all students in HCC Distance Education courses are required to follow all HCC Policies & Procedures, the Student Code of Conduct, the Student Handbook, and relevant sections of the Texas Education Code when interacting and communicating in a virtual classroom with faculty and fellow students. Students who violate these policies and guidelines will be subject to disciplinary action that could include denial of access to course-related email, discussion groups, and chat rooms or being removed from the class.

### **Misuse of Electronic Devices in the Classroom**

The use of electronic devices by students in the classroom is up to the discretion of the instructor. Any use of such devices for purposes other than student learning is strictly prohibited unless authorized as an appropriate ADA accommodation from the ADA Counselor.

### **Instructor Requirements**

When communicating with me through email during this class, please use either your HCC or Canvas email address. I will post and/or email the procedures for emailing me during the semester.

### **Personal Communication Device Policy:**

All personal communication devices (any device with communication capabilities including but not limited to cell phones, blackberries, pagers, cameras, palmtop computers, lap tops, PDA's, radios, headsets, portable fax machines, recorders, organizers, databanks, and electronic dictionaries or translators) must be muted or turned off during class. Such activity during class time is deemed to be disruptive to the academic process. Personal communication devices are to not be on the student desk during examinations. Usage of such devices during exams is expressly prohibited during examinations and will be considered cheating (see academic honesty section above).

### **Student Course Reinstatement Policy:**

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

### **Resources:**

The HCC Tutoring Centers provide free tutoring for individual subjects offered at specific times throughout the week on various campuses. There is no need to make an appointment. If you need a tutor, visit: [www.hccs.edu/findatutor](http://www.hccs.edu/findatutor) for times and locations. For more information about tutoring at HCC, visit [www.hccs.edu/district/students/tutoring](http://www.hccs.edu/district/students/tutoring).

Additional help is also available through Student Support Services. Students can get free assistance, 24 hours a day, 7 days a week, in Math, English and other subjects, at <https://hccs.upswing.io/>. Typically, posted questions are answered by an HCC tutor or faculty within 24 hours (usually under 6 hours). There are also several online math resources that you can

find with an internet search. You may also find information on the Learning Web site accessible through your specific HCCS campus website.

**EGLS<sub>3</sub> -- 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](http://www.hccs.edu/EGLS3) for more information.

**Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so.**

**Administration Contact Information**

**College - Level Math Courses**

Chair of Math	Jaime Hernandez	SW Campus	713-718-2477	Stafford, Scarcella, N108
- Admin. Assistant	Tiffany Pham	SW Campus	713-718-7770	Stafford, Scarcella, N108
- Admin. Assistant	Dipal Parekh	SW Campus	713-718-2477	Stafford, Scarcella, N108
Math Assoc. Chair	Clen Vance	CE Campus	713-718-6421	San Jacinto Building, Rm 369
Math Assoc. Chair	Ernest Lowery	NW Campus	713-718-5512	Katy Campus Building, Rm 112
Math Assoc. Chair	Mahmoud Basharat	NE Campus	713-718-2438	Codwell Hall Rm 105

**Developmental Math Courses**

Chair of Dev. Math	Susan Fife	SE Campus	713-718-7241	Felix Morales Building, Rm 124
- Admin. Assistant	Carmen Vasquez	SE Campus	713-718-7056	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Marisol Montemayor	SE Campus	713-718-7153	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Jack Hatton	NE Campus	713-718-2434	Northline Building, Room 324

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.