



**Division of Mathematics
Mathematics Department**

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

Math 1332: Contemporary Mathematics | ONLINE | CRN 19750

Fall 2020 | 12 Weeks (9/21/2019 -12/10/2020)

Scheduled Online virtual class: M, Wed: 10 a.m.-11:50 p.m.

3 Credit Hours | 48 hours per semester

******This is an ONLINE course that requires virtual meeting twice a week ******

Instructor Contact Information

Instructor: Mohammad **Ravandi**, Ph.D.
Office: South East Campus., Room.....

Office Phone: 713-718-xxxx
Office Hours: T,Th 10:25-10:55 am
M, W: 11-11:30 am

HCC Email: mohammad.ravandi@hccs.edu
Campus Faculty Area

Office Location: South East

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear the concerns and just to discuss course topics.

Instructor's Preferred Method of Contact

Please feel free to contact me via canvas messaging. That is my preferred method of contact with you so I can focus on the messages I receive. Campus email @hccs.edu is not my first choice since your message can get lost among hundreds of HCC employees and others. We also communicate via Cisco Webex video conferencing. I can provide a jabber line phone # for more urgent contacts. Jabber phone: 7137182000 ext. 41364. Let's save this for emergencies only

This is an online course which meets twice-a-week, M,W 10:00-11:50pm. This means, just like a face to face class you are expected to attend class (virtually) and expect to be counted absent if you are not. I am going to be flexible and understanding of your possible excuses but, do your best to show that you are in it to win it. (pass the course, I mean!)

>> I will do all possible to respond to emails within 24 hours Monday through Friday; I will reply to weekend messages on Monday mornings.

What's Exciting About This Course

This is an exciting course that teaches a variety of topics that are to enlighten students who are not necessarily math or business majors. In the past students claimed they have learned

fascinating and very useful, practical everyday life knowledge from this course. I hope you end up feeling the same way! I am certainly excited about our course.

What To Do First!

1. Please sign up for MyMathLab (MML) as soon as possible. That is needed for homework, e-book, quizzes, videos and tests. My instructor id is under textbook section. Let's do it the first couple of days of the start. You can take advantage of free sign up period. Instruction attached in canvas
2. Take care of your technology needs, canvas, internet connection, webcam, microphone, tec. You don't want to have technical problems doing assignments, if you can help it.
3. Familiarize yourself with the 'how to' stuff for an online course. Find somebody who can answer your technical-computer-related problems. I have had students telling me past midpoint of the semester ' how do I contact you?, how do I join a Webex video conference?' NOT ACCEPTABLE!
4. Do NOT allow yourselves to fall too far behind on your assignments. STAY WITH THE COURSE!

My Personal Welcome

Welcome to Math 1332—I'm delighted that you have chosen this course! One of my passions is to know as much as I can about the some useful interesting topics in math minus the usual upper level math rigor, and I can hardly wait to pass that on. I will present the information in the most exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life.

As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by my canvas message. The best way to really discuss issues is in person-online video and I'm available during posted office hours to tackle the questions. My goal is for you to walk out of the course with a better understanding of yourself and of human behavior. So please visit me or contact me by email whenever you have a question.

Taking a class online is undoubtedly challenging for both the students and instructors. I like everybody to know I understand the challenge and I am here to help you. Just reach out to me. I will help you anyway I can.

**** My welcome video is posted on canvas****

Prerequisites and/or Co-Requisites

Prerequisites: A grade of C or better in Math 0309 or its equivalent or an acceptable placement score. A grade of C or better in Math 0310 or Math 0314 its equivalent or an acceptable placement score.

Co-Requisites: MATH 0332 is a co-requisite to MATH 1332. Since MATH 0332 is co-requisite with MATH 1332, withdrawing from either MATH 0332 or Math 1332 will necessitate withdrawal from the other as well. Please carefully read and consider the repeater policy in the [HCCS Student Handbook](#).

Canvas Learning Management System

This section of MATH 1332 will use [Canvas \(https://eagleonline.hccs.edu\)](https://eagleonline.hccs.edu) to supplement in-class assignments, exams, and activities. We will be using MyMathLab as our learning supplement and we do all homework and quizzes on MyMathLab which provide you with a wealth information such as videos, sample problems and sample tests. More detail in later sections.

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

5. HCC Online Information and Policies

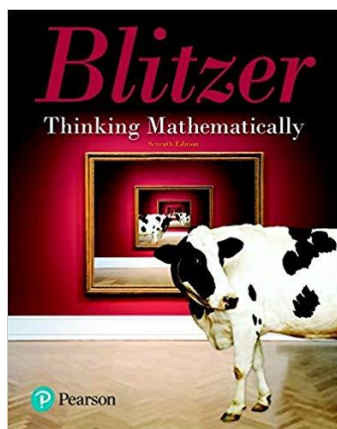
Include if Online course. Here is the link to information about HCC Online classes including the required Online Orientation for all fully online classes: <http://www.hccs.edu/online/>

6. 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. <https://eagleonline.hccs.edu/login/ldap>

Instructional Materials

This is what the cover page of the Textbook looks like



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

Thinking Mathematically, 7th ed By Robert Blitzer, Pearson, 2016 ISBN-13: 978-0135323038

It is included in a package that contains the text as well as an access code and are found at the [HCC Bookstore](#). You may either use a hard copy of the book or the e-book through MyMathLab.

**** I don't know what that cow is doing on the cover either!**

**

Temporary Free Access to E-Book

For temporary free access to MathLab and the online eBook, go to www.pearson.com and register using the MathLab **Course ID: ravandi14076*****-*******

Other Instructional Resources

7. 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.

8. 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>.

9. 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.

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 0309 or meet TSI college-readiness standard for college-level mathematics.

Co-requisite: MATH 0309 is a co-requisite to MATH 1332. Since MATH 0309 is co-requisite with MATH 1332, withdrawing from MATH 0309 will necessitate withdrawal from MATH 1332 as well.

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.

Core Curriculum Objectives (CCOs)

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

- **Critical Thinking:** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

- **Communication Skills:** to include effective development, interpretation and expression of ideas through written, oral and visual communication.
- **Quantitative and Empirical Literacy:** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Program Student Learning Outcomes (PSLOs)

Students in the Mathematics Program will:

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

Course Student Learning Outcomes (CSLOs)

Upon completion of MATH 1332, the student will be able to:

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

Upon completion of MATH 1332, the student will be able to:

1. Use Venn diagrams to solve application problems.
2. Identify sets and subsets and perform set operations.
3. Be familiar with the basic concepts of probability.
4. Express statements using symbols.
5. Form the negation of a statement.
6. Express compound statements symbolically.
7. Construct truth tables.
8. Determine truth value of compound statements.
9. Use truth tables to show that statements are equivalent.
10. Use truth tables to determine validity of arguments.
11. Convert fractions and decimals to percents.
12. Convert percents to decimals and fractions.
13. Find simple and compound interest.
14. Find the future value of a given annuity.
15. Find the monthly payment and the total interest for a given simple interest amortized loan.
16. Find the probability of an event.
17. Use tree diagrams to find possible outcomes and use combinations and permutations.
18. Solve application problems involving probability.
19. Be familiar with the fundamentals of statistics.
20. Assess a statistical study.

21. Find the mean, median, and mode of given sets of raw data.
22. Interpret statistical tables and graphs.
23. Identify normal and skewed distribution curves.
24. Determine variance and standard deviation from a given sample.
25. Find the margin of error associated with a given sample.
26. Apply linear and quadratic functions.
27. Apply exponential and logarithmic functions.

Student Success

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

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

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

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

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

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook](#)

Assignments, Exams, and Activities

All homework, quizzes assignments are done on MML. Exam are going to be posted during the semester on canvas and videos.

Exams

There will be four regular online exams some or all will be cam monitored. The lowest grade of the 4 will be dropped as long as the exam was not skipped or scored under 40. A few quizzes will be given to cover each chapter. One or two lowest score quizzes will be dropped at the end. You will have 1 or 2 projects that will be posted on canvas each worth 5% of your grade. A comprehensive final will be given worth 25% scheduled for December 9. Good Attendance and participation will positively impact your grade.

Final Exam

All students will be required to take a cumulative Final exam.

Final Exam Review Sessions: HCC MATH DAYS

Final Exam is (tentatively) set for December 9, 2020 at 11 am.

The Math Department will offer several Final Exam Review sessions (i.e., **HCC Math Days**) for this course near the end of the semester (Fall and Spring semesters only). We encourage you to attend at least one of these sessions as you prepare for the comprehensive Final Exam. Your professor will provide you with more information regarding HCC Math Days locations and session times later in this semester.

While the full-time Math Department faculty leading these review sessions are prepared to answer students' questions on a variety of course topics, the **Final Exam Study Guide** will provide the basis for the HCC Math Days sessions. Therefore, to get the most out of these review sessions, be sure review and to work through the **Final Exam Study Guide** before you attend the review session(s). Please ask your professor if you have any questions regarding these sessions. Finally, the Math 1332 **Final Exam Study Guide** and the **dates** for the Math Days review sessions are located at:

<https://cofinite.com/MathDays/Math1332.php>

Grading Formula

Course Grade:

Best 3 of 4– regular online Exams	= 45%
Online Homework (MML)	= 20%
Online Quizzes (canvas)	= 5%
projects	= 5%
Final Exam	= 25%
Attendance/contacts (qualified bonus!)	= 3%

ALL EXAMS and QUIZZES will be on canvas only homework is done on MyMathLab.

***Grading extras and bonuses:**

Extra points and bonuses of up to 3% of the course grade will be given to students for good attendance, participation and honesty in the course, at my discretion.

****A score of 80% or better on the proctored final exam, may save you from failing the course!**

****If a test is skipped and not made-up, the score for that test will be 0. If you cannot take a test or quiz during the allotted time, you must inform the instructor immediately and explain your justification then request a make-up time.**

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

For distance Ed (Online courses):

The Math Department requires that at least **45%** of your course grade will consist of scores from *at least two in-person proctored exams in the Testing Center.*

10. 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.

11. HCC Grading Scale can be found on this site under Academic Information:

<http://www.hccs.edu/resources-for/current-students/student-handbook/>

Math 1332. Course Outline Fall 2020. Regular 12-wk Term

Week 1. Sept. 21

Welcome. Introduction. Learn your basics of online course. How to sign up in canvas. How to sign up for MML. Your course ID. How to join video conference, etc. The sooner you learn, the better off you are

Start Chapter 2. Set Theory. Section 2.1

Week 2. Sept. 28

Sections: 2.2 , 2.3, 2.4

Week 3. Oct. 5

****EXAM I: Oct. 4 – 5. { Chapter 2 }**

Start chapter 3. Mathematical Logic

3.1, 3.2

Week 4: Oct.12

3.3, 3.4, 3.5

Week 5. Oct. 19

Review Chapter 3

****Exam II: Oct. 19 – 20. { chapter 3 }**

Start Chapter 8.

8.1, 8.2, 8.3

Week 6. Oct. 26

8.4, 8.5

Week 7. Nov. 2

****EXAM III: Nov. 1 – 2 { chapter 8 }**

Start Chapter 11

11.1, 11.2

Week 8. Nov. 9

11.3, 11.4

Week 9. Nov.16

Sections: 12.1, 12.2

Week 10. Nov. 23

12.3, 12.4

Week 11. Nov. 30

****EXAM IV: Nov. 30 – Dec. 1. { chapter 11 and 12 }**

Review for the final week

Week 12. Dec. 7 – Dec. 10

*****FINAL EXAM : Wed. December 9.**

Exam Days:

- 1) **Oct 4**
- 2) **Oct. 18**
- 3) **Nov.1**
- 4) **Nov.29**
- 5) **Dec. 9**

Instructor's Practices and Procedures

Missed Assignment

Missed Exams, Homework, Quizzes can be made-up provided that the student inform the instructor in advance(if possible) and have a convincing excuse.

Remember: ASK you shall receive!

Academic Integrity

Dishonesty Does Not Pay In The Long Run!

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):

<http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/>

Attendance Procedure

Just like a face-to- face class, students are required to 'attend class' and be present in the online class in the form videos/lectures and messaging. I need to know you are there and you are participating. If you are a no show, I may decide to drop you from the class.

***** The last day to withdraw: Nov. 09, 2020.*****

Student Conduct

In a online set-up, honesty plays a significant role. When giving tests on LockDown browser with webcam we, the instructors, based on our experience in teaching know who is honest and who is not. Please don't arouse any suspicion and make your work be you work. I Trust you.

Electronic 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.

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/>

HCC Policies

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

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

EGLS³

The EGLS³ (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 long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <http://www.hccs.edu/support-services/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/>

Office of the Dean of Students

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

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

Department Chair Contact Information

College - Level Math Courses

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

Developmental Math Courses

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

For issues related to your class, please first contact your instructor.

If you need to contact departmental administration, then contact the appropriate Associate Chair.

If further administrative contact is necessary, then contact the appropriate Department Chair.