

Division of Mathematics Mathematics Department

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

Math 1351: Mathematics for Elementary Teachers II | Lecture | #13303

Summer 2021 | 5 Weeks (6.07.2021-7.11.2021)

HCC ONLINE ANYTIME

3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor: Charles Gabi Office Phone: 713-718-2435

Office: NL 321/ Virtual Office Hours: T-R 11:00-12:30 a.m.

M, W 7pm-18 pm

HCC Email: charles.gabi@hccs.edu Office Location: Northline

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

I will 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 course will give a deeper understanding of Elementary School Mathematics topics and how you might present them at an appropriate grade level.

My Personal Welcome

Welcome to Math 1351 HCC Online class. Please feel free to contact me and visit with me whenever you need help.

Prerequisite

Prerequisite: A grade of C or better in Math 1314 or its equivalent. If you have enrolled in this course having satisfied these prerequisites, you have a higher chance of success than students who have not done so. Please carefully read and consider the repeater policy in the HCCS Student Handbook.

Canvas Learning Management System

This section of MATH 1351 will use <u>Canvas</u> (https://eagleonline.hccs.edu) to supplement inclass assignments, exams, and activities. **You will be using Canvas for class discussions and presentations.**

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

HCC Online Information and Policies

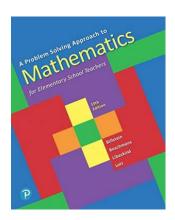
Here is the link to information about HCC Online classes including the required Online Orientation for all fully online classes: http://www.hccs.edu/online/

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

Textbook Information



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

A Problem Solving Approach to Mathematics for Elementary Teachers, 13th ed; By Billstein, Libeskind, and Lott, Addison-Wesley, 2016 ISBN-13: 978-0136485988

It is included in a package that contains the text as well as an access code and are found at the <u>HCC Bookstore</u>. You may either use a hard copy of the book or the e-book through MyMathLab.

Temporary Free Access to E-Book

Temporary access to Canvas has a 2 week window, giving you time to update and pay for the service. You will be able to register for MyLab through your CANVAS course.

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 intended for students who are planning to major in Elementary Education. It is also intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking.

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 1351, the student will be able to:

- 1. Apply fundamental terms of geometry such as points, lines, and planes to describe two and three dimensional figures.
- 2. Make and test conjectures about figures and geometric relationships.
- 3. Use a variety of methods to identify and justify congruency and similarity of geometric objects.
- 4. Perform geometric transformations.
- 5. Demonstrate fundamental probability techniques and apply those techniques to solve problems.
- 6. Explain the use of data collection and statistics as tools to reach reasonable conclusions.
- 7. Recognize, examine, and utilize the basic principles of describing and presenting data.
- 8. Perform measurement processes and explain the concept of a unit of measurement.
- 9. Develop and use formulas for the perimeter, area, and volume for a variety of figures.

Learning Objectives

Upon completion of MATH 1351, the student will be able to:

- 1. Determine the outcome of an event
- 2. Demonstrate the fundamental probability techniques and apply these techniques to solve problems.
- 3. Explain the use of data collection and statistics as tools to reach reasonable conclusions.
- 4. Recognize, examine and interpret the basic principles of describing and presenting
- 5. Define and demonstrate knowledge involving polygons, angles, and geometry in three dimensions
- 6. Find linear measures, and area of polygons and circles
- 7. Find and demonstrate visually surface areas, and volume
- 8. Show congruence through constructions
- 9. Demonstrate the congruence and similar properties
- 10. Perform geometric transformations.
- 11. Demonstrate the proof of the Pythagorean Theorem and its application
- 12. Identify and construct lines in a Cartesian Coordinate system

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

Exams

There are three major exams and a comprehensive final exam. Each major exam will count 15% and the final exam will count 25%. All exams are in CANVAS Online and will be administered using a Lockdown Browser with a camera.

You will also have chapter quizzes for each chapter which will count for 15% of your total grade.

You must log in to Canvas Online daily for updates and announcements.

Homework

Homework will be online using MYMATHLAB which you will access through Canvas and will not need a course ID. Homework is required and you must score at least an 80 % on all corresponding homework before taking an exam. You will be able to access your MyMathLab homework through your Canvas course.

For each section, there are two assignments: media homework and regular homework. You are supposed to do the media homework first (includes videos, power point slides, and section text) and then go to do your regular homework. Both of them count toward your homework average.

DON'T PUT OFF THE MYMATHLAB ASSIGNMENTS!

Work on them soon after they are assigned, while the material is fresh in your mind! Your MyMathLab average can have a major impact on your overall grade!

Final Exam

The final Exam is a required, comprehensive online exam.

If you fail to take the Final you will receive an F for the course. An I will not be given for missing the Final Exam.

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.

APPROXIMATE TIME

TEXT REFERENCE

Chapter 9 - **Probability**

Sections: 9-1, 9-2, 9-3, 9-4

(6 hours)

This chapter introduces elementary probability. Included topics are: Determining probability, experiments with tree diagrams, geometric probabilities, simulations, odds and expected value.

This chapter investigates types of graphs for different data: line graphs line plot graphs, bar graphs, histograms, measures of central tendency and variation, and abuses of statistics.

This chapter includes basic concepts on the basic building blocks of geometry, lines, polygons, and angles.

This chapter investigates congruence through construction, congruence properties, similar triangles and figures. In addition, section 8-5 covers graphing linear equations.

This chapter explores translations rotations, reflections, glide reflections, dilations, and tessellations*.

*Means the section is optional

This chapter covers area, the Pythagorean theorem, three dimensional geometry, surface area, volume, and conversion among measures.

Tentative Schedule

Test	Chapters Covered on Test	Date
Test #1	Chapter 9 & 10	6/16/21 to 6/17/21 Online Canvas
Test #2	Chapter 11, 12 & Section 8.5.	6/26/21 to 6/27/21. Online Canvas
Test #3	Chapter 13 & 14	7/6/21 to 7/7/21 Online Canvas
Final Exam	Comprehensive 9 thru 14 including section 8.5	7/8/21–7/9/21 Online Canvas

Instructional Methods

The instructor will strive to facilitate an effective learning environment through lectures notes, classroom practice activities, discussions, and review sessions.

Student Assignments

All homework must be completed online using **Math_Lab.**. You must have a score of at least 80% on all corresponding homework to take any Test. Homework should be completed the day before the test by 7 pm.

Assessments

Your final grade for the course will be evaluated according to the following ratio:

1. Three Examinations	15% each
2. Quizzes	15%
3. Homework	15%
Comprehensive Final e	xamination25%.

Extra Credit:

You will earn 5 extra points on a test for participating in corresponding class discussion activities.

Grade	Overall	
	Percentage	
Α	90% +	
В	80%-89%	
С	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*.

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.

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

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

Make-Up Policy

All exams are required. You have a whole to schedule a convenient time to take each test. There is no reason why you will not be able to take the test unless you're hospitalized. Be reminded that you will need to have completed all corresponding homework with at least an 80% in each section.

Instructor Requirements

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To be su	ccessful in this class, it is the student's responsibility to complete the following tasks.
	Constantly Check Canvas for updates.
	Participate in all online discussions.
	Read and study the textbook.
	Complete the Math-Lab homework and required
	assignments. Work the reviews before taking the
	tests.
	Take all the tests.
	Pass the Final Exam and Mid-Term.
	Keep copies of all paperwork, including this syllabus, handouts, and all
	homework assignments in a 2-inch binder.

Academic Integrity

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 Procedures

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

authority to drop you for excessive absences. You are expected to log into homework or Canvas daily.

The last day to withdraw June 28, 2021.

Student Conduct

Be respectful and considerate of all people always.

Electronic Devices/ Calculator Policy

A graphing calculator is allowed on exams. A TI 83//84 Plus is highly recommended. There are a number of problems in your homework that can only be done using a TI 83/84 Plus.

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/

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
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

Conege - Lever 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.