

Mathematics

Northeast Northline Campus

Math 1351: Mathematics for Teachers II CRN 34321 – FALL/2017 HCC ONLINE

3 hour lecture course / 48 hours per semester/ 16 weeks
Textbook: A Problem Solving Approach to Mathematics for Elementary Teachers, 12th ed, Pearson
By Billstein, Libeskind, and Lott
ISBN: 13: 978-0133865479

Instructor: Charles Gabi

Instructor Contact Information: Charles.gabi@hccs.edu / 713-718-2435

For Email Communication, please use "Math 1351-Online" as entire subject line AND be sure to include your name.

Office location and hours Northline Room 321. By Appointment

10 to 11 Mon thru Thurs,

12:30 to 1 pm Mon, Thurs

Learning Web: http://learning.hccs.edu/faculty/Charles.gabi

Homework is assigned on www.coursecompass.com and e-book is also viewable on this site. The access code for homework is required.

Course Description MATH 1351: This course is 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.

Prerequisites

MATH 1314 or the equivalent.

Course Goal

This course is intended for students who are planning on majoring in Elementary Education

Course Student Learning Outcomes (SLO):

- 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 outcomes

Students will:

- 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 data.
- 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

Core Objectives

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.

Course policies

Supplementary Instructional Activities

(Hurricane Harvey makeup)

- 1. <u>Tutoring is available during office hours and in the learning center on the 4th floor at Northline by appointment.</u>
- 2. Chapter Section videos are assigned for each section and are available through Connect-Math.

"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."

Exam Policy:

There are three major exams and a comprehensive final exam. Each major exam will count 18%. The final exam

will count 30%. All exams are in MyMathLab Online. The final exam and exam 2 must be proctored at 3100 Main and SJAC Building at Central. You must log in to Eagle Online at least twice a week to update the information and announcements.

Homework policy:

Homework will be online using MYMATHLAB. The course ID: gabi93244. Homework is required and you must score at least an 80 % on all corresponding homework to be able to take an exam.

MyMathLab 1351:

You are <u>REQUIRED</u> to use MyMathLab to do online homework for this course. MyMathLab is available on any computer with internet access. <u>Register TODAY!</u>

Once you register with MyMathLab, you can log in to MyMathLab anytime at www.coursecompass.com. When you log in to MyMathLab and click on the "MATH 1351 Fall 34321" link, you can:

- Click the "DO HOMEWORK" link to access the online homework assignments
- Click the "GRADEBOOK" link to check your MyMathLab homework grades
- Click the "Chapter Contents" link to view an online version of the textbook (including exercises and solutions), as well as online video clips and PowerPoint presentations that accompany the textbook, and much more.

Student Assignments

Graded MyMathlab Homework (required) Student Assignments

I will assign homework assignments to be completed online in MyMathLab. Log in to MyMathLab, click "MATH 1351 Fall 34321", and click "Homework" to select and work on an assignment. For each exercise, you can choose "Help Me Solve This" for hints or "View an Example" for more help. You can also email questions to me, view an appropriate section of the textbook and, in some cases, view a video clip or a PowerPoint presentation. A template on the left side of the screen enables you to create fractions, exponents, radicals, etc. for typing in your answers. You can attempt each exercise until you get it right, and you do not have to complete an entire assignment in one sitting. You can continue to improve your grade on each assignment, up to 100%. All corresponding assignments are due on Test day and must be completed with at least an 80%. Although homework does not have a due date in the system.

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!

Make-up Policy:

There will be no make-up exams in this class. If you miss one exam, it would be replaced with final exam score. If you miss the second exam, it will be zero and you should most likely drop the course

Final Examination:

The final Exam is a required, comprehensive online exam given at a testing Center or a preapproved proctored testing center, if outside the Houston area. The student will not be able to take the final exam at *any* location of his/her choice or without being proctored. Presentation of a photo ID upon arrival at the testing center is required for identification purposes. Please refer to the section on final exam in our Eagle Online course page for more information about policy, guidelines and instructions for the final.

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.

Students Outside of HCC Service Area:

Students who live or work outside the HCC service area and cannot take exams at HCC testing locations MUST make arrangements at a proctored testing center in their area to take the final exam. It is a requirement that the final exam for this course be taken at an HCC-approved testing center. For more information and to obtain the required Proctor Approval Form, go to the DE Student Handbook and select "Testing Locations and Procedures" or contact DE department at de@hccs.edu for more information.

Course Outline:

TEXT REFERENCE

Chapter 9 - **Probability**

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

Chapter 10 – Data Analysis/Statistics: An Introduction Sections: 10-2, 10-3, 10-4, 10-5 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.

Exam 1: Chapter 9 and Chapter 10

Chapter 11 - Introductory Geometry

Sections: 11-1, 11-2, 11-3, 11-4

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

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

Chapter 12 - Congruence and Similarity with Constructions

Sections: 12-1, 12-2, 12-3, 12-4, 8-5

This chapter investigates congruence through construction, congruence properties, similar triangles and figures, and lines in a Cartesian coordinate system.

Exam 2: Chapter 11 & 12, and section 8.5

Chapter 13 – Congruence and Similarity with Transformations

Sections: 13-1, 13-2, 13-3, 13-4

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

Chapter 14 - **Motion geometry** Sections 14-1, 14-2, 14-3, 14-4*, 14-5*

This chapter explores linear measure, areas of polygons and circles, the Pythagorean Theorem, surface area, volume, mass, and temperature

Exam 3: Chapter 13 &14

Final exam: Chapter 9, 10, 11, 12, 13, and 14

TENTATIVE CALENDAR

Tentative Test Schedule:

Test	Chapters Covered on Test	Date	
Test #1	Chapter 9 & 10	10/5 to 10/7 Online	
Test #2	Chapter 11,12 & section 8.5	11/2-11/4 Proctored	
Test #3	Chapter 13 & 14	12/10 -12/13 Online	
Final Exam	Comprehensive	12/14 – 12/16 Proctored	

Note: Proctored Exams will be held at a designated Testing Center.

- 1.Exam 2 will be proctored at 3100 Main in Basement for all 3 days.
- 2.Final Exam will be proctored at 3100 Mail on 12/14 but on 12/15 & 12/16 it will be at Central Campus SJAC# 385.

3. Exam Times

Thursdays 4pm to 9pm, last Admit 6:50pm; Fridays 10 am to 9 pm with last admit 6:50pm Saturdays 10am to 3pm, Last Admit 12:50pm.

Last Admit is strictly enforced, be there before indicated last admit time to avoid missing the test.

Instructional Methods

Use of Multimedia Library in MyMathLab, Discussion and Eagle Online Resources to include notes and PowerPoints

Assessments: Grading Policy

0.18[Exam1+Exam2+Exam3] + 0.16[Homework aver] + 0.3[Final Exam]

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 sexincluding 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

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 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.

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

<u>Collusion</u> 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)

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. Please Log into Mymathlab at least thrice a week.

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 11/3/17 by 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

Be respectful of all people all the time.

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.

Calculator Policy:

You are allowed use of a basic calculator or a scientific calculator on exams. Graphing calculators are strictly prohibited during testing.

Instructor Requirements

Students are required to complete all Homework Assignments in MyMathLab and take all scheduled Tests.

Grading Scale

90 - 100 = A

80 - 89 = B

70 - 79 = C

60 - 69 = D

Below 60 = F

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 for times and locations. For more information about tutoring at HCC, visit 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.

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

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 Campu	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 Montemayo	SE Campus	713-718-7153	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Jack Hatton	NE Campus	713-718-2434	Northline Building, Room 321

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

If you need to contact departmental administration, then contact the appropriate Associate Chair, Mr. Basharat. If further administrative contact is necessary, then contact the appropriate Department Chair, Dr. Hernandez