

Division of College Readiness Developmental Math Department

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

MATH 0310: Basic Concepts for Business Math and Statistics Lecture | #17764

Spring 2019 | 8 Weeks (1-14-2019 to 3-10-2019) In-Person | Southeast Workforce Building 218 | MW 11 a.m.-1:50 p.m. 3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor:	Sherry Liu	Office Phone:	713-718-6913
Office:	Felix Morales, Room 124E	Office Hours:	MW 10-11a
HCC Email:	Sherry.Liu@hccs.edu	Office Location:	Southeast - Eastside

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 your concerns and to discuss course topics.

Instructor's Preferred Method of Contact

Please contact me via HCC email or Canvas. 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 has been designed to guide students to the basic skills that are necessary to succeed in either a Statistics or Business Mathematics course. So, while some of the material is the arithmetic and algebra that you would expect to see in a typical math course, we will also be spending a large part of the semester looking at some very practical applications including finance, data representation, and an introduction to probability. Also, because this is one of our co-requisite developmental courses, you may be taking this right alongside a college-level course and getting the additional time and support to help you succeed in your college-level course all in one semester.

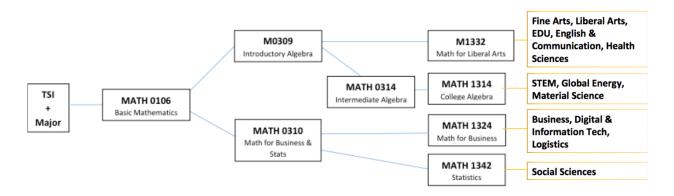
My Personal Welcome

I truly believe every student have the capacity to learn and be successful in math. In my class, every student begins with a clean slate. Regardless of your current math skills, everyone can participate in making this a productive semester.

Prerequisites and/or Co-Requisites

MATH 0310 requires either a TSIA ABE level 5 or 6 **OR** TSIA Math Score 336 – 349 with Intermediate Algebra Diagnostic Score 0 – 3 **OR** Math 0106: Pass with "C" or better.

MATH 0310 is a co-requisite to MATH 1324 and MATH 1342. Since MATH 0310 is co-requisite with MATH 1324 and MATH 1342, withdrawing from MATH 0310 will necessitate withdrawal from MATH 1324 and/or MATH 1342 as well. Please carefully read and consider the repeater policy in the <u>HCCS Student Handbook</u>.



Eagle Online Canvas Learning Management System

This section of MATH 0310 has associated with it a course in <u>Eagle Online Canvas</u> (<u>https://eagleonline.hccs.edu</u>) HCCS Open Lab locations may be used to access the Internet and Eagle Online Canvas. It is recommended that you **USE** <u>FIREFOX</u> **OR** <u>CHROME</u> **AS YOUR BROWSER**.

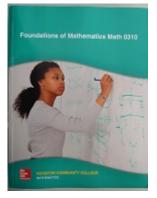
Any schedule change and class communication will be posted in Canvas announcement. Students are expected to obtain pre- and post- lecture assignments from Canvas.

Review Guides, Supplemental Material, etc.

Look in Eagle Online Canvas for information to assist you in the course. <u>https://eagleonline.hccs.edu/login/ldap</u>

Instructional Materials

Textbook Information



The textbook listed below is **required** for this course. **Foundations of Mathematics Math 0310** (Custom edition by McGraw Hill Publishing). ISBN: 978-1-26-08493-18 (textbook and access code) ISBN: 978-1-26-08492-33 (access code with e-book)

Temporary Free Access to E-Book

This course has associated with it a Connect Math course. Students can practice homework assignments using questions from the textbook or in Connect Math.

To access the Connect Math course, including temporary free access to the online eBook, go to <u>www.connectmath.com</u> and register using the Connect Math Course ID: DJRQP-VVXK9.

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 <u>HCC Tutoring</u> <u>Services</u> 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 peerassisted 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

Math 0310: Basic Concepts for Business Math and Statistics is a developmental math course whose topics include real numbers, order of operations, proportions and percent, percent of increase/decrease, simple interest, introduction to probability and statistics, integer exponents, polynomials, linear equations and inequalities in one variable, linear equations and inequalities in two variables, systems of linear equations, matrices, linear functions and

an introduction to other topics which may include exponential, quadratic functions, quadratic equations, and set operations. A departmental final examination must be passed with a score of 60% or more in order to pass the course.

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 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

Program Student Learning Outcomes (PSLOs)

During courses in the developmental math program students 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. Learn the foundational mathematical skills that will enable a student to successfully complete a college level math course.

Course Student Learning Outcomes (CSLOs)

Upon completion of MATH 0310, the student will be able to:

- 1. Identify and apply properties of real numbers and perform accurate arithmetic operations with numbers in various formats.
- 2. Find the probability of a simple event, and understand elementary counting techniques.
- 3. Recognize, read, interpret statistical graphs and find measures of central tendency of data.
- 4. Demonstrate the ability to manipulate/simplify algebraic expressions, & classify/solve algebraic equations and inequalities with appropriate techniques.
- 5. Solve problems including ratios, rates, proportion, and percent.
- 6. Demonstrate the use of elementary graphing techniques and perform matrix operations.
- 7. Recognize, interpret and manipulate polynomial functions along with linear, quadratic, and exponential models.

Learning Objectives

Upon completion of MATH 0310, the student will be able to:

- 1. add, subtract, multiply and divide real numbers and manipulate certain expressions
- 2. find the probability of a simple event,
- 3. read and interpret bar graphs, circle graphs, line graphs, pictorial graphs and find the central of tendency of data
- 4. simplify algebraic expressions
- 5. solve problems using equations and inequalities
- 6. plot ordered pairs and graph linear equations
- 7. graph linear inequalities
- 8. solve systems of linear equations
- 9. perform operations on matrices
- 10.find the rate of change of a line & write its equation
- 11.use the rules for integer exponents
- 12.use rules for exponents and operations on polynomials
- 13.use function notation and evaluate functions
- 14.model situations with linear, quadratic, or exponential 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. Math cannot be learned by merely reading or hearing about it, you must spend the time to practice. 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
- Completing assignments
- Participating in class

There is no short cut for success in this course; it requires time and dedication.

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 make up
- Provide the course outline and class calendar which 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
- Participate actively by reviewing course material, practicing the material, 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
- Attain a raw score of at least 60% on the departmental final exam

• Be aware of and comply with academic honesty policies in the <u>HCCS Student Handbook</u>

Assignments, Exams, and Activities

Exams

In addition to the departmental midterm and final exams (described below), there are two additional in-class exams. These exams consist of open ended questions where you have to demonstrate your steps. No calculator or electronic device allowed.

In-Class Activities

From time to time, there will be pop quizzes at the start of the class period. The purpose of the activity is to reward students who are diligent with their homework assignments. Scores from quizzes could help improve your final grade. There is no time extension for late arrival or make-up for quizzes.

Midterm and Final Exams

All students will be required to take a cumulative departmental midterm exam consisting of 25 multiple choice questions and a cumulative departmental final exam consisting of 33 multiple-choice questions. Students must provide their own Scantron forms. You must get at least 60% (20 of 33) of the items correct on the final to pass the course (departmental decision).

Grading Formula

Exam 1	100 points
Midterm	100 points
Exam 3	100 points
In-Class quizzes	Various
Pre-Class Canvas exercises	Various
Final Exam	200 points

At the end of the semester, your final percentage grade is calculated by adding all the points from graded activities above, and then divide by 5. Your final letter grade is assigned according to the table below.

Your final grade will be determined exactly as stated. The percentage grade in Canvas or Connect Math do not reflect your current grade.

Grade	Percent
А	90% +
В	80% - 89%
С	70% - 79%
F/IP	0% - 69%

Note: Any student that has failed this course for the first time is eligible to receive an IP. Any subsequent failures will receive an F.

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

Course Calendar

Week 1	1.1 Fractions		
	1.2 Intro to Algebra		
	1.3 Exponent, Square Roots and Order of Operations		
	1.4 Addition of Real Numbers		
	1.5 Subtraction of Real Numbers		
	1.6 Multiplication and Division of Real Numbers		
	1.7 Properties of Real Numbers and Simplifying Expressions		
Week 2	2.1 Intro to Set Theory		
	2.2 Subset and Set Operations		
	2.3 Table, Bar, Pictographs and Line Graphs		
	2.4 Circle Graphs		
	2.5 Introduction to Probability		
	2.6 Mean Median and Mode		
Week 3	3.1 Linear Equations		
	3.3 Linear Inequalities		
	3.4 Compound Inequalities		
	3.6 Absolute Value Inequalities		
	Test 1 over chapters 1 and 2 No calculator		
	4.1 Proportions		
	4.2 Percents, Fractions and Decimals		
	4.4 Percent Equations and Applications		
	4.5 Applications of Sales Tax		
	4.6 Simple and Compound Interest		
Week 4	Midterm exam review		
	5.1 Linear Equations		
	5.2 Slope and Rate of Change		
	5.3 Equations of a Line		
	5.4 Linear Inequalities		
	Midterm over chapters 1 – 4 Basic calculator is allowed		
Week 5	6.1 Systems of Equations by Graphing		
	6.2 Systems of Equations by Substitution		
	6.3 Systems of Equations by Addition Method		
	6.6 Matrix Operations		
	7.1 Properties of Integer Exponents		
	7.2 Add and Subtract Polynomials		
	7.3 Multiply Polynomials		
-	7.4 Divide Polynomials		
Week 6	Test 3 over chapters 5-7 No calculator		
Week 7	8.2 Intro to Functions		
	8.3 Graphs of Functions		
	8.4 Intro to Modeling		
Week 8	Final exam review		
	Comprehensive final exam Basic calculator is allowed		

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

Missed Assignments

No time extention for pre-class Canvas exercies, and no make-up for in-class quizzes.

If you miss a test, you must explain why, provide proof and request a make-up test in writing through HCC email or Canvas. Makeup test are given only in cases of documented illness, legal cases, or other extenuating situations (such as tow truck receipt with the day of the test). You must initiate contact within 2 days to excuse your absence. Once the permission to make-up a test is granted, you have a week or before the last regular class period – whichever comes first – to complete the make-up test or receive 0 point.

Academic Integrity

Any student caught cheating during a test will receive 0 point. Cheating includes attempt to share a calculator or information with another student, using unauthorized electronic devices (cell phone, watch, graphing calculator etc).

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

Class attendance will be recorded during every class period. If you miss a class, including the first week, you are responsible to make up all material missed.

A student earned fewer than 350 points and missed in excess of six hours of instruction (2 lectures) may receive FX as your final grade, if you have taken the class before. Otherwise, you will receive IP as your final grade.

The last day to withdraw from this course is February 19, 2019.

Student Conduct

It is every student's responsibility to self-govern and foster a productive learning atmosphere in the classroom. To demonstrate your professionalism as a good student, there will be no private conversation, no potentially noise-making gadget and no activities that may cause distractions.

Instructor's Course-Specific Information

Begin the semester with the end in mind. If your degree plan requires a particular minimum grade to transfer, then plan your time and effort accordingly. Do not expect the grading policy to change for your benefit. There is no curving of grades, no dropping the lowest test score, and no additional extra credit beyond that were allot for the entire class.

I expect every students to be very active in this course by doing all the assigned reading, practice homework exercises, and bring questions to class on timely manner. Any student who attempts to monopolize time for private lesson will be directed to a tutoring center.

Since homework assignments are designed to prepare you for tests, therefore students should not expect a separate review session prior to a major exam.

To help students avoid having to withdraw from the class, your academic advisor/counselor will be notified after a failed exam. If you receive an email, make an appointment to visit with me or a counselor to learn about what can to be done to improve your performance.

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 purposes other than student learning is strickly prohibited unless authorized as an appropriate ADA accommodation from the ADA Counselor.

Per department policy, Math 0310 students will be allowed the use of a basic calculator during the departmental midterm exam and the departmental final exam. Students should provide their own basic calculator, scientific calculators and graphing calculators are prohibited on the departmental midterm and departmental final.

The use of any calculator during any exam other than the departmental midterm exam and departmental final exam is prohibited and will be considered cheating (see academic integrity section above).

Developmental Math Program Information

For more information on the developmental math program visit: https://learning.hccs.edu/programs/developmental-mathematics

HCC Policies

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

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

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 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 <u>Institutional.Equity@hccs.edu</u> 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/studentcomplaints/speak-with-the-dean-of-students/

Department Chair Contact Information

Susan Fife - Chair of Mathematics	SW Campus	713-718-7241	Stafford, Scarcella, N108
Jaime Hernandez - Associate Chair	CE Campus	713-718-7772	San Jacinto Building, Rm 369
Ernest Lowery - Associate Chair	NW Campus	713-718-5512	Katy Campus Building, Rm 112
Mahmoud Basharat - Associate Chair	NE Campus	713-718-2438	Codwell Hall Rm 105
Tiffany Pham - Admin. Assistant	SW Campus	713-718-7770	Stafford, Scarcella, N108
Christopher Cochran - Admin. Assistant	SW Campus	713-718-2477	Stafford, Scarcella, N108

College Level Math Courses

Developmental Math Courses

Marisol Montemayor - Chair of Dev Math	SE Campus	713-718-7153	Felix Morales Building, Rm 124
Hien Nguyen - Associate Chair	SE Campus	713-718-2440	Felix Morales Building, Rm 124
Jack Hatton - Associate Chair	NE Campus	713-718-2434	Northline Building, Room 321
Carmen Vasquez - Admin. Assistant	SE Campus	713-718-7056	Felix Morales Building, Rm 124

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

If you need to contact departmental administration, contact the appropriate Associate Chair. If further administrative contact is necessary, contact the appropriate Department Chair.

Your Class Code is: DJRQP-VVXK9 Your Financial Aid Access Code is: 2CBA9-05D1C-876B7-3A951

The Financial Aid Access Code <u>does not</u> add an additional two weeks to your account.

NOTE: This code gives you temporary access to Connect Math for a two-week period. Once the code expires, you will be locked out of your Connect Math account until you purchase a regular Student Access Code. **It is highly recommended that you purchase the Student Access Code BEFORE the two weeks expire** to prevent interruptions with your Connect Math account.

- 1. To sign up to Connect Math using the Financial Aid Access Code, go to: <u>https://www-awn.connectmath.com</u>
- 2. Click on the "Sign up now!" link located under "NEW USER?"
- 3. Enter your "Class Code" and press "Continue".
- 4. Verify that you are registering for the correct class and click on "Confirm."
- 5. Continue with the registration process until your account has been set up successfully.
- 6. On the Apply Access page, enter the 20 character Financial Aid Access Code and click "Continue."
- 7. Next you will see a page with the date your temporary access expires, click "Continue."
- 8. You will arrive at the My Classes page.
- 9. You can extend your Connect Math account at any time by selecting "Extend access" from the class tile menu and enter your new access code. You do NOT need to create a new Connect Math account to continue your class.

Enjoy your class.

If you require technical assistance, please contact Connect Math Support at https://www.connectmath.com/support/form

Thank you,

The Connect Math Team

Add a free preparatory course to help you brush up on basic math skills. Add Class Code: TFYKW-GRV6Y