



Mathematics Southeast College

Math 0310: Basic Concepts for Business Math and Statistics
CRN 19831 – Fall/2018

Eastside Campus Angela Morales Building Rm 304 | 9:30am – 10:50am | Tue and Thu
3 hours lecture course / 48 hours per semester/ 16 weeks

Textbook: Introductory and Intermediate Algebra for Houston Community College; Margaret Lial;
Pearson Custom Publishing: 2019
ISBN 13: 978-0-13-533201-6

Instructor: Sherry Liu

Instructor Contact Information: Sherry.Liu@hccs.edu 713-718-6913

Office location and hours: Eastside Campus, Felix Morales Building Room 124-E

Monday	10:00AM – 11:00AM	
Tuesday	9:00AM – 9:30 AM	12:20PM – 1:00 PM
Wednesday	10:00AM – 11:00AM	
Thursday	9:00AM – 9:30 AM	12:20PM – 1:00 PM

Preferred Method of Contact: The most reliable way to reach me is by e-mail. I read and respond regularly during the day and almost every evening until about 8:30pm. If you sent me an e-mail and do not hear from me within 3-4 hours during a workday, resend your message.

Class Cancellation: The department secretary will call the students in case of cancellation.

Course Description

Basic Concepts for Business Math and Statistics: 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 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.

Prerequisites

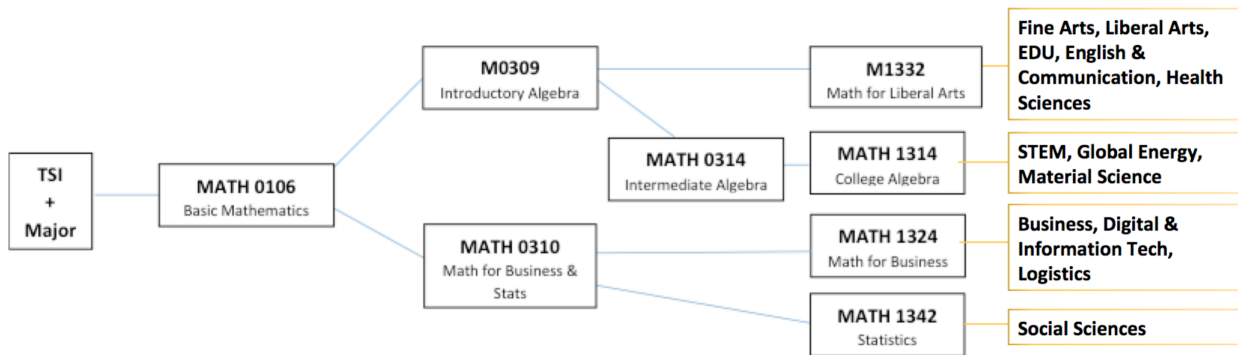
TSIA ABE level 5 or 6; TSIA Math Score 336 – 349 with Intermediate Algebra Diagnostic Score 0 – 3; Math 0106: Pass with “C” or better

Course Goal

This course is intended for students who have either never been exposed to algebra or who have been away from the subject for quite some time. In particular, this course is intended to prepare students for the study of Math 1324 or Math 1342. Be sure that you are enrolled in the correct math class. If you are a STEM Major or have a Liberal Arts major, it is likely that you need MATH 0309 instead of MATH 0310. Notify your teacher and/or advisor as soon as possible.

HCC MATH PATHWAYS

Math 0309 is a co-requisite to MATH 1332. MATH 0310 is a co-requisite to with MATH 1324 and MATH 1342. MATH 0309 is a prerequisite to MATH 0314 and MATH 0314 is a prerequisite to MATH 1314.



Course Student Learning Outcomes (SLO)

What will I be able to demonstrate after completing this course?

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

Learning objectives

Upon completion of this course, I should be able to:

1. add, subtract, multiply and divide real numbers and manipulate certain expressions
2. use the rules for integer exponents
3. simplify algebraic expressions
4. solve problems using equations and inequalities
5. plot ordered pairs and graph linear equations
6. solve systems of linear equations
7. operations on matrices and determinant
8. graph linear inequalities
9. find the rate of change of a line & write its equation
10. use rules for exponents and operations on polynomials
11. use function notation and evaluate functions
12. model situations with linear, quadratic, or exponential functions
13. find the probability of a simple event, find the central of tendency of data
14. read and interpret bar graphs, circle graphs, line graphs, pictorial graphs

Core Objectives

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

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

Communication Skills: to include effective development, interpretation and expression of ideas through written, oral and visual communication.

Empirical and Quantitative Skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

TENTATIVE CALENDAR

(I will use the calendar to plan and make sure that I devote the time needed to be successful in this course.)

Week 1	1.1 Introduction to Algebra
	1.2 The real number and the number line
	1.3 Addition and subtraction of real numbers
	1.4 Multiplication and division of real numbers
	1.5 Properties of real numbers
	1.6 Simplifying expressions; order of operations
Week 2	2.1 Sets and set operations
	2.2 The counting techniques
	2.3 Introduction to probability
Week 3	2.4 Organizing data
	2.5 Circle graphs and pictographs
	2.6 Bar graphs and broken-line graphs
	2.7 Statistical measures
Week 4	Test 1 – Chapters 1 and 2
	3.1 Solve linear equations
	3.2 Translating sentences to equations
	3.3 Applications of linear equations
Week 5	3.4 Linear inequalities
	3.5 Compound and absolute value inequalities
Week 6	4.1 Proportions
	4.2 Percent and basic percent equations
	4.3 Percent of increase and decrease
Week 7	4.4 Markup, discount, sales
	4.5 Simple interest
Week 8	Midterm – Chapters 1 to 4
	5.1 The rectangular coordinate system
	5.2 Graphs of linear equations
	5.3 The slope of a line and x-, y- intercepts
Week 9	5.4 Finding equations of lines
	5.5 Inequalities in two variables
Week 10	6.1 Solving systems of linear equations by graphing
	6.2 Solving systems of linear equations by substitution method
Week 11	6.3 Solving systems of linear equations by addition method
	6.4 Introduction to matrices and operations
Week 12	7.1 Intro to polynomials and integer exponents
	7.2 Addition and subtraction of polynomials
	7.3 Multiplication and division of polynomials
Week 13	Test 3 – Chapters 5 to 7
Week 14	8.1 Functions
	8.2 Linear functions and models
	8.3 Basic quadratic functions and models
	8.4 Basic exponential functions and models
Week 15	Final exam review
Week 16	Final exam

Instructional Methods

I don't enter the classroom expecting students to fail. In fact, every student starts with a clean slate and I expect everyone has the capacity to learn and succeed.

This is a lecture-based math class. However, if you are the type of person who needs to talk about everything in every chapter of our text... then you will be frustrated by this course! We simply cannot cover everything and still practice our skills. So, here is the plan:

Partner with a classmate (or two) and take 10-15 minutes after each class to review your notes and fill-in any gap.

Practice the assigned homework before the next class.

Be at the school on time and take 5-10 minutes before class to look over the material we are covering that day.
Participate in class. Listen, practice and help each other.
Avoid missing any class.

Instructor Requirements

I expect every student to be very active in this course by doing all homework exercises and bring questions to class on timely manner. There are plentiful opportunities for questions during every class period. Thus, any student who attempts to monopolize time or expects instructions prior to an exam will be directed to a tutoring center. Homework assignments are designed to prepare you for exams, therefore students should not expect a test review session prior to a major exam.

Classroom Behavior

It is every student's responsibility to self-govern and fosters 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 gadgets and no activity that may cause distractions.

Use of Camera and/or Recording Devices

As a student active in the learning community of this course, it is your responsibility to be respectful of the learning atmosphere in your classroom. To show respect of your fellow students and instructor, you will turn off your phone and other electronic devices and will not use these devices in the classroom unless you receive permission from the instructor.

Use of recording devices, including camera phones and tape recorders, is prohibited in classrooms, laboratories, faculty offices, and other locations where instruction, tutoring, or testing occurs. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information regarding reasonable accommodations

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 below).

Calculator Policy: As with all developmental mathematics courses at HCC, **the use of a calculator during any exam, including the final exam, is prohibited** and will be considered cheating (see academic honesty section below).

Student's Assessments:

From time to time, we might have a pop quiz at the beginning of a class period. The purpose of this activity is to reward those who are on top of their homework exercises. Scores from quizzes wouldn't penalize you but could definitely help improve your final grade. This is a bonus for good student behavior, so there will be no time extension for late arrivals or make-up for absentees under any circumstance.

There are two tests, a departmental midterm exam and a departmental comprehensive final exam. Students should study and practice homework assignments to prepare. Since exam questions are similar to those in the homework assignments, there may not be a separate test review.

If you miss a test, you must explain why, provide proof and request a make-up test in writing, through the Canvas Inbox or HCC e-mail. Makeup tests are given only in cases of documented illness, legal cases, or other extenuating circumstances (such as tow truck receipt with the date of the test). You must initiate contact within 2 days to excuse your absence due to extenuating circumstances. Once the permission to make-up an exam is granted, you have a week or before the last regular class period – whichever comes first - to take the make-up test. Failure to meet any of the dead line will result 0 point for the test.

Final Exam Policy in Developmental Mathematics:

The following policy was adopted by Houston Community College regarding the system-wide Final Examinations in developmental mathematics courses:

- a. Students who score less than 60% on the Final Examination or who have an overall course average less than 70% will be awarded a grade of "IP" or "F." The "IP" grade will be awarded to those students who took Math 0310 for the 1st time. The "F" grade will be awarded to those students who are repeating.
- b. Students who score 60% or higher on the Final Examination and whose overall course average is equal to or greater than

70%, will have their grades averaged and awarded a grade based upon the standard 10-point scale.

Instructor’s Grading Criteria:

If you are not attending class, you are not learning the information. Students may be dropped from the 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.

If you are not doing homework, you are not practicing skills required to pass. After failing one test and averaging less than 60% on MML assignments, student academic advisors will be notified via the Eagle Early Alert system. 25 points extra credit will be rewarded to students who achieve an average of 70% on all MML assignments.

Begin the semester with the end in mind. You need a minimum of C from this course. Dropping this course most likely will negatively impact your ability to receive financial aids. Plan your study time and effort accordingly. Do not expect the grading policy to change for your benefit. There will be no curving of grades or dropping the lowest exam score.

Test 1	100 points
Test 2 (Midterm)	100 points
Test 3	100 points
Final Exam	200 points

Your percentage grade = Sum of all the points from graded activities (tests, quizzes etc.) / 5

HCC Grading Scale:

A = 100 – 904 points per semester hour
B = 89 – 803 points per semester hour
C = 79 – 702 points per semester hour
69 and below = F or IP0 points per semester hour
IP (In Progress)0 points per semester hour
W (Withdrawn)0 points per semester hour
I (Incomplete)0 points per semester hour
AUD (Audit)0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses. To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades “IP,” “COM” and “I” do not affect GPA.

Note: The grade of “FX” is given when a student fails due to lack of attendance. A grade of “W” may be given on or before the official withdrawal date but not at the time of final grade submission.

HCC Policy Statement – ADA, Academic Honesty, Student Attendance, 3-peaters, Withdrawal Deadline

Access Student Services Policies on their Web site: <http://www.hccs.edu/district/students/student-handbook/>

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/>

The last day to withdraw is Friday November 2nd, 2018 in order to receive a W.

Campus Carry Policy: 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/>.”

Resource Materials: In addition, this course has an associated CANVAS Model course. Course materials are available within the CANVAS Course Management System. Any student enrolled in a developmental math course at HCC has access to the Learning Resource Center (LRC) where they may get additional help in understanding the theory or in improving their skills. The LRC is staffed with mathematics faculty and/or student assistants, and offers tutorial help, videos and computer-assisted drills.

HCC Policy Statement: Sexual Misconduct

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

David Cross
 Director EEO/Compliance
 Office of Institutional Equity & Diversity
 3100 Main
 Houston, TX 77266-7517 or Institutional.Equity@hccs.edu

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 academic support to our diverse student population by creating an open atmosphere of learning for all students enrolled at HCC. Using a variety of tutoring techniques, we assist students across academic disciplines, addressing their individual needs in a constructive, safe, and welcoming environment. Our emphasis is on maximizing academic potential while promoting student success and retention. We are committed to helping students achieve their educational, personal, and career goals by empowering them to become confident, independent, lifelong learners.

Tutoring for individual subjects is offered at specific times throughout the week on various campuses. There is no need to make an appointment. If you need a tutor, please refer to our website: www.hccs.edu/findatutor for times and locations. For more information about tutoring at HCC, please go to 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.

Any student that faces challenges securing their food or housing and believes this may affect their performance in the course are urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable us to provide any resources that HCC may possess

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	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	Ernest Lowery	NW Campus	713-718-5512	Katy Campus Building, Rm 112
Math Assoc. Chair	Mahmoud Basharat	NE Campus	713-718-2438	Codwell Hall Rm 105

Developmental Math Courses

Chair of Dev. Math	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	NE Campus	713-718-2434	Northline Building, Room 321
Technical Support Specialist	Douglas Bump	SE Campus	713-718-7317	Angela Morales Building, Rm 101

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.

Student Registration Instructions

To register for **FA18 0310-19831 T930** :

1. Go to www.pearson.com/mylab .
2. Under Register, select **Student** .
3. Confirm you have the information needed, then select **OK! Register now** .
4. Enter your instructor's course ID: **liu64069** , and **Continue** .
5. Enter your existing Pearson account **username** and **password** to **Sign In** .
You have an account if you have ever used a MyLab or Mastering product.
 - » If you don't have an account, select **Create** and complete the required fields.
6. Select an access option.
 - » Enter the access code that came with your textbook or that you purchased separately from the bookstore.
 - » If available for your course,
 - Buy access using a credit card or PayPal.
 - Get temporary access.
7. From the You're Done! page, select **Go To My Courses** .
8. On the My Courses page, select the course name **FA18 0310-19831 T930** to start your work.

To sign in later:

1. Go to www.pearson.com/mylab .
2. Select **Sign In** .
3. Enter your Pearson account **username** and **password**, and **Sign In** .
4. Select the course name **FA18 0310-19831 T930** to start your work.

To upgrade temporary access to full access:

1. Go to www.pearson.com/mylab .
2. Select **Sign In** .
3. Enter your Pearson account **username** and **password**, and **Sign In** .
4. Select **Upgrade access** for **FA18 0310-19831 T930** .
5. Enter an access code or buy access with a credit card or PayPal.