

## Syllabus (Tentative) Math 0310: Math for Business and Stats

# CRN 17756 - Spring 2019

## SPRING BRANCH CAMPUS

6:00 – 7:50 PM (T & TH) Room C425

# Feb 11 – May 12, 2019 Textbook: Foundations of Mathematics (Math 0310) Custom Edition for Houston Community College (McGraw-Hill)

**Instructor**: Abate T. Wolde-Kirkos

Instructor Contact Information: abate.woldekirkos@hccs.edu

Office location and hours: By Appointment

Preferred Method of Contact: e-mail

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  $\overrightarrow{ABE}$  level 5 or 6; TSIA Math Score 336 – 349 with Intermediate Algebra Diagnostic Score 0 – 3; Math 0106: Pass with "C" or better

**Co-requisite:** 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.

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. Co-requisite courses may be taken during the same semester. If a course has a prerequisite, the prerequisite must be successfully completed (C or better) before taking the next course.

## 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 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.

## **Course Student Learning Outcomes (SLO)**

- 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

Students will:

- 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.

## CALENDAR

## TO BE ANNOUNCED AT LEAST A WEEK BEFORE of major assessments (in class exams and the final)

#### **Instructional Methods**

Lecture and on-hand class works and/or assignments.

#### Instructor Requirements

Attendance and class participation is key to success in any subject including this course.

## **Classroom Behavior**

Courtesy and genuine desire to succeed often go together. Questions related to the course are greatly encouraged too.

## 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: Refer Below Information

#### **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 0409 for the 1<sup>st</sup> time. The "F" grade will be awarded to those students who are repeating Math 0312.

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:

Break down of grade calculation by points or percentage.

Grading policy:	
Exam 1	10%
Midterm(Exam 2)	15%
Exam 3	10%
Homework/Class Participation	30%
Final Exam	35%

NOTES: At least 3 class assessments is planned to be given. If more exams are given, the best three are taken (including Exam 2). Students can only receive the grades of A, B, C, F or IP. (No "D" grades allowed). The grade of "IP" can be given only once in the course.

HCC Grading Scale:

A = 100 – 90	4 points per semester hour
B = 89 - 80	3 points per semester hour
C = 79 - 70	2 points per semester hour
69 and below = F or IP	0 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.

<u>Note</u>: 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: <u>http://www.hccs.edu/district/students/student-handbook/</u>

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/

**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 <a href="http://www.hccs.edu/district/departments/police/campus-carry/">http://www.hccs.edu/district/departments/police/campus-carry/</a>.

**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 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: <u>www.hccs.edu/findatutor</u> for times and locations. For more information about tutoring at HCC, visit <u>www.hccs.edu/district/students/tutoring</u>.

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 <u>https://hccs.upswing.io/</u>. 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

## EGLS<sub>3</sub> -- 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 <u>www.hccs.edu/EGLS3</u> for more information.