

**Division of College Readiness**

**Developmental Mathematics Department**

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

# Math 0106: Basic Mathematics | #21449

Fall 2020 | 4 Weeks (8.24.2020-9.20.2020)

Online | Tu-Th 10 a.m.-11:50 a.m.

1 Credit Hour | 16 hours per semester

## Instructor Contact Information

Instructor: Haitham Abdelmoaty, Ph.D. Office Phone: 713-718-0000

Office: Central, Room 384 Office Hours: By appointment

HCC Email: [Haitham.abdelmoaty@hccs.edu](mailto:Haitham.abdelmoaty@hccs.edu) Office Location: Central, SanJAC Building

HCC is offering four ways to learn during the Fall 2020 Semester. Descriptions of each type of courses can be found at: : <https://www.hccs.edu/campaigns/college-your-way/>

Online on a Schedule

Students enrolled in this class take classes online at the scheduled class time that they select when enrolling. Students never come to campus, but log into their class on the scheduled dates and times. Look for the code WS when reviewing the updated schedule.

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 has been designed to allow you to focus on the most practical material and skills that you will need to get you ready for any math class that you might take. 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 extend a personal welcome to all my students. The main goal of this class is to help you achieve a clear understanding of the material and successfully complete this course.

## Prerequisites

MATH 0106 requires either a TSIA Math score 310-335 and ABEMD Levels 3−4 **OR** TSIA Math Score 317 – 335 with no ABEMD score.

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## Eagle Online Canvas Learning Management System

This section of MATH 0106 has associated with it a course in [Eagle Online Canvas](https://eagleonline.hccs.edu/login/ldap) (<https://eagleonline.hccs.edu>) HCCS Open Lab locations may be used to access the Internet and Eagle Online Canvas. It is recommended that you **USE** [**FIREFOX**](https://www.mozilla.org/en-US/firefox/new/) **OR** [**CHROME**](https://www.google.com/chrome/browser/desktop/index.html) **AS YOUR BROWSER**.

# Instructional Materials

**Textbook Information**

There is no textbook for this course. Download a free copy from the learning web under Math 0106 or in canvas.

## 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](http://www.hccs.edu/resources-for/current-students/tutoring/) 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](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 helps students with basic math concepts required to be successful in MATH 1314. Topics include factoring, linear equations, distance and midpoint formulas, quadratic equations and applications, complex numbers, other types of equations, linear inequalities in one variable, and other types of inequalities, linear equations in two variables, functions, analyzing graphs of functions, a library of Parent functions, transformations of functions, combinations of functions, quadratic functions and models, polynomial functions of higher degree, zeros of polynomial functions, rational functions, and inequalities, inverse functions, exponential functions and their graphs, logarithmic functions and their graphs, properties of logarithm and exponential and logarithmic equations, linear and nonlinear systems of equations, two variable linear systems, solving system of equations using matrices, operations with matrices.

## 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)

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 0106, the student will be able to:

1. Correctly choose and apply the four basic arithmetic operations with decimals and fractions to estimate and solve application problems.
2. Apply “Proportional Reasoning” to solve related problems including ratios, rates, proportion, and percent.

## Learning Objectives

Upon completion of MATH 0106, the student will be able to:

1. Solve problems by estimating and rounding.
2. Find the least common multiples of two or more whole numbers.
3. Add, subtract, multiply and divide fractions.
4. Add, subtract, multiply and divide with decimals and percent
5. Solve problems involving ratio and proportion.

# 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:

* 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 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
* Attain a raw score of at least 60% on the departmental final exam
* Be aware of and comply with academic honesty policies in the [HCCS Student Handbook](http://www.hccs.edu/resources-for/current-students/student-handbook/)

# Assignments, Exams, and Activities

## Unit Tests

The Developmental Math Department is requiring the remote proctoring of examinations (including the Final Exam) to ensure the integrity of the assessment process and to prevent acts of academic dishonesty. In this course, in addition to a reliable internet connection, you will be required to have hardware that meets the following minimal requirements:

a) A functioning webcam and microphone, and  
b) A computer with operating system that is capable of running the Respondus LockDown Browser and Respondus Monitor.

If you are unable to obtain the hardware listed above, please speak with the class instructor.

## College Level Final Exam Review Test

All students will be required to take 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 13% of your grade

Exam 2 13% of your grade

Exam 3 13% of your grade

Homework 11% of your grade

Final Exam 50% of your grade

At the end of the semester, your overall grade will be computed as follows:

Class Grade=.13\*(Exam 1 Grade)+ .13(Exam 2 Grade)+.13(Exam 3 Grade)+.11\*(Homework Grade)+.5\*(Final Exam Grade).

|  |  |
| --- | --- |
| **Grade** | **Percent** |
| A | 90% + |
| B | 80% - 89% |
| C | 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/**](http://www.hccs.edu/resources-for/current-students/student-handbook/)

# Course Calendar

|  |  |  |
| --- | --- | --- |
| Week | Dates | Topic/What’s due |
| 1 | Week 08/24/2020 | * Multiples and Divisibility. * Factorizations. |
| 2 | Week 08/31/2020 | * Factorizations (continued). * Fractions and Fraction Notation. |
| 3 | Week 09/07/2020 | * Multiplication and Division of Fractions.   Addition and Subtractions of Fractions. |
| 4 | Week 09/14/2020 | * Simplifying. * Ratios and proportions. |

## 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

Any missed assignments with valid excuse may be granted at the professor’s discursion.

## Academic Integrity

Scholastic Dishonesty will result in a referral to the Dean of Student Services. See the link below for details.

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

Students not showing attendance by consensus date will be automatically dropped. This date will be provided to the student the first day of class in canvas.

## Student Conduct

Any repeated disruptive behavior that affects the learning progress of the class will result in disciplinary action.

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

# Developmental Mathematics 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 <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](http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/)) 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](http://www.hccs.edu/resources-for/current-students/student-e-maileagle-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/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 [Institutional.Equity@hccs.edu](mailto:Institutional.Equity@hccs.edu)

<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/student-complaints/speak-with-the-dean-of-students/>

## Department Chair Contact Information

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| **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 | 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.