



## Mathematics

### Northline Campus

Math 0106: Basic Mathematics

CRN (59069) – SPRING / 2018

Class Room 213/ Tue & Thu 11:00 - 12:50 pm

1 hour lecture course / 16 hours per semester/ 4 weeks

Textbook: None.

**Instructor:** Charles Gabi

**Instructor Contact Information:** [Charles.gabi@hccs.edu](mailto:Charles.gabi@hccs.edu) / 713-718-2435

**Office location and hours:** Northline Room 321. By Appointment

10 to 11 Mon, Wed

2:00 to 3:00 pm Tue, Thur

2:00 to 2:30 pm Mon, Wed

MyMathTest Program ID: **XL2X-D1M9-801Y-4EV2**

Access Code: **WSSMT-GIGLI-CIVIC-OSMAN-CANTO-JADES**

Log into MyMathTest [www.mymathtest.com](http://www.mymathtest.com)

1. Use the **Program ID** provided by your instructor. Your **Student Access Code** is free:  
**WSSMT-GIGLI-CIVIC-OSMAN-CANTO-JADES**
2. Start by taking a Diagnostic Test
  1. Take a Test
  2. [Intermediate Algebra Extender Program Pretest #2](#)
  3. I'm Ready to Start
3. Work in the Study Plan
  1. Study Plan
  2. View Progress
    - a. The Study Plan has 61 objectives. You need to complete at least 55 objectives
  3. The following Study Plan shows total student progress. Students should work until each rectangle is shaded in completely. The purple pins indicate recommendations. Partial shading indicates that either objectives were mastered or completed within that section. Select a section to begin.

**Catalog Description:** Topics include fundamental operations fractions and decimals, percents, ratios, and proportions. All students who enroll in this course are expected to complete MATH 0409 in the following consecutive semester before attempting either MATH 0312 or MATH 1332. A comprehensive Departmental Final Exam will be given in this course.

**Prerequisites:** TSIA ABE Levels 3–4 TSIA Math Score 323 – 335 or TSIA Math Score 336 – 347 with Elementary Algebra Score 0–4.

**Audience:** This course is for students who require state mandated remediation.

### **Course Goal**

This course provides students with the basic arithmetical skills enabling them to proceed to the next level mathematics course. It is also designed to strengthen many of the skills that an individual must demonstrate or master in order to achieve college readiness. It is also intended for those students who are reasonably adept at performing the simple mathematical operations needed in every day affairs, but become quite confused when confronted with the same operations in the context of a mathematics class.

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

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 outcomes**

Students will:

- 1.1 solve problems by estimating and rounding.
- 1.2 find the least common multiples of two or more whole numbers.
- 1.3 add, subtract, multiply and divide fractions.
- 1.4 add, subtract, multiply and divide with decimals and percent.
- 2.1 solve problems involving ratio and proportion.

### **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.

## COURSE OUTLINE:

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<b>CONTENTS (SECTION NUMBERS)</b>	<b>TOPICS(<i>Approximate Time</i>)</b>
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<b>1 FRACTIONAL NOTATION: MULTIPLICATION AND DIVISION</b>	<i>(4 hours)</i>
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This unit addresses multiples of a number, divisibility tests for 2,3,5,6,9,10; factors of whole numbers; prime numbers from 1 to 100; prime factorization of composite numbers; identification of numerator and denominator; simplifying fractions; problem solving using fractional multiplication and division; determining whether two fractions are equivalent.

- 1.1 Multiples and Divisibility**
- 1.2 Factorizations**
- 1.3 Fractions and Fraction Notation**
- 1.4 Multiplication of Fractions**
- 1.5 Simplifying**
- 1.6 Multiplying, Simplifying, and More with Area**
- 1.7 Reciprocals and Division**

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<b>RECOMMEND QUIZ 1: COVERS SECTION 1</b>	<i>(0.5 hours)</i>
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<b>2 FRACTIONAL NOTATION: ADDITION AND SUBTRACTION</b>	<i>(2 hours)</i>
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This unit consists of finding the LCM of two or more numbers; converting from mixed numerals to fraction notation; converting from fractional notation to mixed numerals; addition and subtraction of fractions; using fractions in problem solving situations.

- 2.1 Least Common Multiples**
- 2.2 Addition, Order and Applications**
- 2.3 Subtraction, Equations, and Applications**

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<b>RECOMMEND QUIZ 2: COVERS SECTION 2</b>	<i>(0.5 hours)</i>
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<b>3 DECIMAL NOTATION</b>	<i>(4 hours)</i>
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This unit provides coverage of writing word names for decimal notation; conversion between fraction notation and decimal notation; ordering decimal numbers; rounding and estimating decimals; addition, subtraction, multiplication and division of decimals. The unit concludes with problem solving involving decimal operations.

- 3.1 Decimal Notation, Order and Rounding**
- 3.2 Addition and Subtraction of Decimals**
- 3.3 Multiplication of Decimals**

- 3.4 Division of Decimals
- 3.5 Using Fractional Notation with Decimal Notation
- 3.6 Estimating
- 3.7 Applications and Problem Solving

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**RECOMMEND QUIZ 3: COVERS SECTION 3** *(0.5 hours)*

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**4 PERCENT NOTATION** *(6 hours)*

Concepts covered in Unit 4 include writing ratios in fractional notation; writing the rate of two different measures as a fraction; determining whether two ratios are proportional; solving proportions; solving applications involving ratios; conversions between percent form, fraction form, and decimal form of a number; translating percent applications to percent equations; solving basic percent applications; solving applied problems involving percent of increase or decrease.

- 4.1 Ratio and Proportion
- 4.2 Percent Notation
- 4.3 Percent and Fraction Notation
- 4.4 Solving Percent Problems Using Proportions
- 4.5 Applications of Percent

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**RECOMMEND QUIZ 4: COVERS SECTION 4** *(0.5 hours)*

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**REVIEW FOR FINAL EXAMINATION: COVERS SECTIONS 1 – 4** *(1 to 1.5 hours)*

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**COMPREHENSIVE FINAL EXAMINATION: COVERS SECTIONS 1 – 4** *(1 to 1.5 hours)*

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**CALENDAR**

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|--------|--|
| JAN 22 | Day of Record (Attendance)             |
| JAN 25 | Quiz 1                                 |
| JAN 30 | Quiz 2                                 |
| JAN 31 | Last day for Administrative withdrawal |
| FEB 6  | Quiz 3                                 |
| FEB 8  | Final Exam (Comprehensive)             |

**Instructional Methods**

The instructor will strive to facilitate an effective learning environment through lectures, classroom practice activities, discussions, and review sessions.

### **Instructor Requirements**

All students are required to register into MyMathtest and complete all the objectives. You have to score at least 70 on a Quiz to be eligible to take the next Quiz.

### **Classroom Behavior**

Be respectful of all people all the time.

### **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:** No calculators allowed on any Quiz or exam.

### **Student's Assessments; Grading Criteria**

#### **Grade Scale:**

Objectives	20%
Quizzes	30%
Final	50%

### **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 0106 for the 1<sup>st</sup> time. The "F" grade will be awarded to those students who are repeating Math 0106.

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.

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.

**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/>

**Classroom attendance is required and coming to class after the first 20 minutes or leaving 20 minutes early will be considered as an absence for that day.**

**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 Math 0409 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](mailto: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: [www.hccs.edu/findatutor](http://www.hccs.edu/findatutor) for times and locations. For more information about tutoring at HCC, visit [www.hccs.edu/district/students/tutoring](http://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.

**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 [www.hccs.edu/EGLS3](http://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
- Secretary	Tiffany Pham	SW Campus	713-718-7770	Stafford, Scarcella, N108
Math Assoc. Chair	Clen Vance	CE Campus	713-718-6421	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	Susan Fife	SE Campus	713-718-7241	Felix Morales Building, Rm 124
- Secretary	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
Technical Support Spec	Hien Nguyen	NE Campus	713-718-2440	Northline Building, Rm 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.

If further administrative contact is necessary, then contact the appropriate Department Chair.