



SOUTHWEST COLLEGE
Department of Mathematics

COURSE SYLLABUS

MATH 0306: Fundamentals of Math I

Spring 2011 / CRN # 64962 / Saturdays & 9:00am-12:00pm / Alief

INSTRUCTOR:	Tamseela Ulhaque
CONTACT INFORMATION:	tamseela.ulhaque@hccs.edu
MYMATHLAB COURSE ID:	ulhaque107791

(The Mymathlab access code is included in the book package at the bookstores. It can also be purchased separately online or at the bookstore.)

Office location and hours

Please feel free to contact me concerning any problems that you are experiencing in this course. You do not need to wait until you have received a poor grade before asking for my assistance. Your performance in my class is very important to me. I am available to hear your concerns and just to discuss course topics. Feel free to come by my office anytime during these hours.

Course Description

Topics include fundamental operations in whole numbers, fractions and decimals, percents, ratios, and proportion, descriptive statistics, and an introduction to the real numbers. All students who enroll in this course are expected to complete Math 0308, and Math 0312 in the following consecutive semesters before attempting their first college-level mathematics course (usually Math 1314 College Algebra).

A departmental final examination will be given in this course.

Prerequisites

Must be placed into MATH 0306 (or higher).

Course Goal

This course is designed to provide students with the basic arithmetical skills enabling them to proceed to the next level mathematics course.

Student Learning Outcomes	Course Objectives
1. Correctly choose and apply the four basic arithmetic operations with whole numbers, decimals, fractions and signed numbers to estimate and solve application problems.	1.1 Add, subtract, multiply and divide whole numbers, understand the order of operations, and solve problems involving exponential notations. 1.2 Solve problems by estimating and rounding. 1.3 Add, subtract, multiply and divide integers. 1.4 Find the least common multiples of two or more integers. 1.5 Add, subtract, multiply and divide fractions. 1.6 Add, subtract, multiply and divide with decimals and percent.
2. Apply “Proportional Reasoning” to solve related problems including ratios, rates, proportion, percent and conversions of units.	2.1 Solve problems involving ratio and proportion.
3. Interpret data from tables, pictographs, bar graphs, line graphs, and circle graphs.	3.1 Read and interpret data from tables, pictographs, bar graphs, line graphs, and circle graphs.
4. Simplify algebraic expressions.	4.1 Simplify algebraic expressions.

16 WEEK CALENDAR

Week 1	The Order of Operations Agreement - Whole Number Expressions
Week 2	Translating Verbal Expressions into Variable Expressions
Week 3	Adding and Subtracting Integers
Week 4	Order of Operations - Integers
Week 5	Simplifying Variable Expressions & Properties of Real Numbers (Distributive)
Week 7	Introduction to Solving Linear Equations - Addition Property and Multiplication Property of Equations
Week 8	Solving Linear Equations of the Form $ax + b = c$
Week 9	Solving Linear Equations in One Variable
Week 10	Translating Sentences into Equations
Week 11	Solving Word Problems with Linear Equations
Week 12	Addition and Subtraction of Signed Fractions
Week 13	Exponents, Complex Fractions, and The Order of Operations Agreement

Week 14	Addition and Subtraction of Mixed Numbers
Week 15	Converting Percent/Fractions/Decimals, the Basic Percent Equation
Week 16	The Final Exam

Instructional Methods

MATH 0306 is a prerequisite course for many students.

As an instructor, I want my students to be successful. I feel that it is my responsibility to provide you with knowledge concerning the field of mathematics, modeling good analytical problem solving strategies, and organizing and monitoring the success of each student with homework that allows you to connect the information that you learn in this course to applications in other course work and life in the real world.

As a student wanting to learn about the field of mathematics, it is your responsibility to read the textbook, submit assignments on the due dates, study for the exams, participate in classroom activities, attend class, and enjoy yourself while experiencing the real world of mathematics.

As I believe that engaging the students in the learning is essential for teaching to be effective, you will spend a portion of class time involved in problem solving activities. You will be involved in discussions with your classmates and your instructor. As you will want to contribute to these discussions, you will need to come to class prepared to discuss, analyze and evaluate information from your text and other assigned readings.

Student Assignments

Assignments have been developed that will enhance your learning. To better understand a topic, you will be given assignments on key information that you will need to remember for your success in your career. Students will be required to successfully complete the following:

Mathematics Homework and Quizzes

All homework and quizzes assigned for this class must be completed online using MYMATHLAB. The MyMathLab Course ID to be used for registration purposes is **ulhaque107791**, and the school zip code is 77477. To register for MyMathLab and to access the homework, go to www.coursecompass.com.

Exam Policy:

There will be 3 major exams, and a final departmental exam. All exams will be graded and returned to students within a week. If you perform below your expectations or fail any test, please set-up a conference with me as soon as possible. Do not wait until the class is almost over to set up a meeting.

Make-up

There will be no make-up exams. If you miss one exam, your final exam grade will be substituted for the missed exam. If you miss another exam, then the grade for that exam will be zero.

Final Examination:

The final examination is departmental and consists of 40-50 multiple-choice problems. The problems cover all the material required in the course.

Instructional Materials

Textbook:

Prealgebra and Introductory Algebra
by Bittinger & Ellenbogen
Publisher: Addison Wesley
Pub. Date: December 2006
ISBN-13: 9780321331892



HCC Policy Statement - ADA

Services to Students with Disabilities

Students who require reasonable accommodations for disabilities are encouraged to report to Dr. Becky Hauri at 713-718-7910 to make necessary arrangements. Faculty is only authorized to provide accommodations by the Disability Support Service Office

HCC Policy Statement: Academic Honesty

A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the HCC's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty": includes, but is not limited to, cheating on a test, plagiarism, and collusion.

Cheating on a test includes:

- Copying from another students' test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test that has not been administered;
- Bribing another person to obtain a test that is to be administered.

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

HCC Policy Statements

Class Attendance - It is important that you come to class! Attending class regularly is the best way to succeed in this class. Research has shown that the single most important factor in student success is attendance. Simply put, going to class greatly increases your ability to succeed. You are expected to attend all lecture and labs regularly. You are responsible for materials covered during your absences. Class attendance is checked daily. Although it is your responsibility to drop a course for nonattendance, the instructor has the authority to drop you for excessive absences.

If you are not attending class, you are not learning the information. As the information that is discussed in class is important for your career, students may be dropped from a 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.

You may decide NOT to come to class for whatever reason. As an adult making the decision not to attend, you do not have to notify the instructor prior to missing a class. However, if this happens too many times, you may suddenly find that you have “lost” the class.

Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, you are responsible for all material missed. It is a good idea to find a friend or a buddy in class who would be willing to share class notes or discussion or be able to hand in paper if you unavoidably miss a class. Class attendance equals class success.

HCC Course Withdrawal Policy

If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of withdrawal. Before, you withdraw from your course; please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor *may* “alert” you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

If you plan on withdrawing from your class, you **MUST** contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done **PRIOR** to the withdrawal deadline to receive a “W” on your transcript. **Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars,

HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. **Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline.** If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.

Repeat Course Fee

The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

Classroom Behavior

As your instructor and as a student in this class, it is our shared responsibility to develop and maintain a positive learning environment for everyone. Your instructor takes this responsibility very seriously and will inform members of the class if their behavior makes it difficult for him/her to carry out this task. As a fellow learner, you are asked to respect the learning needs of your classmates and assist your instructor achieve this critical goal.

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

Instructor Requirements

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 class activities, discussions, and lectures
- 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

To be successful in this class, it is the student's responsibility to:

- Attend class and participate in class discussions and activities
- Read and comprehend the textbook
- Complete the required assignments and exams:
 - Chapter Exams, MyMathLab Homework, Final Exam
- Ask for help when there is a question or problem

Keep copies of all paperwork, including this syllabus, handouts and all assignments

Chapters and Sections

Chapter 1 WHOLE NUMBERS

- 1.1 Standard Notation
- 1.2 Addition
- 1.3 Subtraction
- 1.4 Rounding and Estimating; Order
- 1.5 Multiplication and Area
- 1.6 Division
- 1.7 Solving Equations
- 1.8 Applications and Problem Solving
- 1.9 Exponential Notation and Order of Operations

Chapter 2 INTRODUCTION TO INTEGERS & ALGEBRAIC EXPRESSIONS

- 2.1 Integers and the Number Line
- 2.2 Addition of Integers
- 2.3 Subtraction of Integers
- 2.4 Multiplication of Integers
- 2.5 Division of Integers and Order of Operations
- 2.6 Introduction to Algebra and Expressions
- 2.7 Like Terms and Perimeter
- 2.8 Solving Equations

Chapter 3 FRACTION NOTATION: MULTIPLICATION & DIVISION

- 3.1 Multiples and Divisibility
- 3.2 Factorizations
- 3.3 Fractions and Fraction Notation
- 3.4 Multiplication of Fractions
- 3.5 Simplifying
- 3.6 Multiplying, Simplifying, and More with Area
- 3.7 Reciprocals and Division
- 3.8 Solving Equations: The Multiplication Principle

Chapter 4 FRACTION NOTATION: ADDITION, SUBTRACTION, AND MIXED NUMBERS

- 4.1 Least Common Multiples
- 4.2 Addition, Order, and Applications
- 4.3 Subtraction, Equations, and Applications
- 4.4 Solving Equations: Using the Principles Together
- 4.5 Mixed Numerals
- 4.6 Addition and Subtraction of Mixed Numerals; Applications
- 4.7 Multiplication and Division of Mixed Numerals; Applications

Chapter 5 DECIMAL NOTATION

- 5.1 Decimal Notation
- 5.2 Addition and Subtraction of Decimals
- 5.3 Multiplication of Decimals
- 5.4 Division of Decimals
- 5.5 More with Fraction Notation and Decimal Notation
- 5.6 Estimating
- 5.7 Solving Equations
- 5.8 Applications and Problem Solving

Chapter 6 PERCENT NOTATION

- 6.1 Ratio and Proportion
- 6.2 Percent Notation
- 6.3 Percent and Fraction Notation
- 6.4 Solving Percent Problems Using Percent Equations
- 6.5 Solving Percent Problems Using Proportions
- 6.6 Applications of Percent
- 6.7 Sales Tax, Commission, Discount, and Interest

Chapter 7 DATA, GRAPHS, AND STATISTICS

- 7.1 Averages, Medians, and Modes
- 7.2 Tables and Pictographs
- 7.3 Bar Graphs and Line Graphs

Test Schedule:

Please come prepared. You must have a scantron and a #2 Pencil for the exams.

Test	Chapters Covered on Test	Date
Test #1	Chapters 1-2	TBA
Test #2	Chapters 3-4	TBA
Test #3	Chapters 5, 6, and 7	TBA
Final Exam (2 hours)	Chapters 1 - 7	Saturday May 14, 2011 9:00am – 11:00am

Important Dates:

Drop Deadline: *4/14/2011 before 4:30 pm*

Grading

Your instructor will conduct exams, and monitor your progress on homework assignments to determine how successful you are at achieving the course learning outcomes (mastery of course content and skills) outlined in the syllabus. If you find you are not mastering the material and skills, you are encouraged to reflect on how you study and prepare for each class. Your instructor welcomes a dialogue on what you discover and may be able to assist you in finding resources on campus that will improve your performance.

Grading Scale

90 - 100 = A

80 - 89 = B

70 - 79 = C

60 - 69 = D

Below 60 = F

Final Average = (T1+T2+T3+Homework+Final)/5