MATH 1301 STUDENT SYLLABUS

Course: MATH 1301 (College Algebra) [3-3-0]

Prerequisite: A grade of C or better in MATH 1300, TSI MATH score 350, TSI MATH complete, or TSI MATH exempt. If you do not meet this prerequisite, you may be dropped from the course without prior notification at your own expense. Please see your instructor immediately if you do not meet this prerequisite, so you can be enrolled in the appropriate MATH course.

TEXTBOOK: *College Algebra with Modeling and Visualization*, Sixth Edition, by G. Rockswold, Pearson, 2018 (Book bundled with MyMathLab)

Where to Find Course Resources: The first place to seek assistance and resources is from your instructor, both inside and outside of class. Your instructor will provide the times and locations where he or she is available for office hours to work with you outside of class. Next, students enrolled in MATH 1301 at UHD have access to the Center for Math & Statistics (formerly called the Math Lab) in the Academic Support Center (N925) where they may get additional tutoring with understanding concepts or improving their skills. The Center is staffed with mathematics faculty and student assistants, and offers tutorial help, videos, calculators, and computer access on a walk-in basis. The Center for Math & Statistics maintains extensive hours which are published each semester. You are encouraged to visit the Center for Math & Statistics throughout the semester whenever you feel you need extra help. It is also an excellent place to study the textbook and work on homework problems, so that you can receive immediate answers to your questions as necessary.

Goals/objectives: At the end of the course, a student should be able to: (1) write complex numbers in standard form and perform the four elementary operations with complex numbers; (2) solve quadratic equations in one variable by the methods of factoring, extraction of roots, completing the square, and the Quadratic Formula; (3) properly use function notation and inverse function notation and interpret its meaning in context; (4) recognize the equation of a straight line and determine the equation of a line from information such as: given two points on the line, or, one point on the line and the slope of the line; (5) state and apply the definition of a function, determine the domain and range of a function, evaluate expressions involving functional notation, simplify expressions involving the algebra of functions, and given a function find its inverse, if it exists; (6) solve problems involving direct and inverse variation; (7) graph linear functions and quadratic functions by hand; (8) recognize the important features of graphs of polynomial functions and piecewise-defined functions; (9) find the vertex and intercepts of a parabola; (10) state the fundamental properties of polynomial functions; (11) solve quadratic inequalities, state the solution using interval notation and graph the solution; (12) state the inverse relationship between exponential and logarithmic functions, graph both types, use properties of logarithms to rewrite expressions, and solve exponential and logarithmic equations; (13) solve absolute value equations and inequalities; (14) solve systems of equations in three variables by algebraic techniques; (15) state and use the relationship between the slopes of parallel and perpendicular lines; (16) interpret the meaning of the slope of a line in context; (17) interpret the meaning of function intercepts in context; (18) compute midpoints and apply the Midpoint Formula to interpolate and extrapolate.

Department Grading Policy: The final exam for this course is comprehensive, proctored (even for online and hybrid courses), and counts 1/3 of your course average. Your instructor will provide complete information as to how your course average will be computed. Your final course average will be used to assign your final course grade according to the standard college formula shown here.

90-100	"A"
80-89	"B"
70-79	"C"
60-69	"D"
0-59	"F"
The following case is an exception:	
If your final exam score is less than 50, you will receive an "F" for the course regardless of your average.	

Please be aware of the last day to withdraw with a course grade of "W." This date is published in the semester class schedule. If you do not complete the course requirements and do not officially withdraw, you will receive a course grade of "F." This is university policy over which your instructor has no control. You cannot receive the grade "I" (Incomplete) unless you have a documented personal emergency that prevents you from completing the last fraction of the course, such as the last test and/or the final exam. You must have a passing average based on the work you have already completed to receive an "I".

Calculator Policy: Each student is expected to purchase or otherwise have access to a <u>scientific</u> calculator throughout the semester and will be allowed to use a <u>scientific</u> calculator on the final exam. A scientific calculator is one that includes "ln" and "log" keys. Your instructor may require a <u>graphing</u> calculator. If so, he or she will provide information regarding this requirement.

Excess Course Attempts: In accordance with state law, effective Fall 2004 the University of Houston-Downtown is charging an additional fee per semester credit hour for any course that is repeated for the third time, beginning with the Fall 2002 semester. If a course has been previously attempted twice, the third enrollment will result in the additional charge. An attempt is defined as an enrollment that results in any letter grade (including "F" and "W").

GENERAL UNIVERSITY POLICIES: All students are subject to UH-Downtown's Academic Honesty Policy and to all other university-wide policies and procedures as they are set forth in the UH-Downtown University Catalog and Student Handbook.

STATEMENT ON REASONABLE ACCOMMODATIONS: UH-Downtown complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students with a disability. In accordance with Section 504 and ADA guidelines, UHD strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a documented disability requiring academic adjustments/auxiliary aids, please contact the Office of Disability Services, One Main St., GSB314, Houston, TX 77002. (Office) 713-221-5078 (Website) www.uhd.edu/disability/ (Email) disabilityservices@uhd.edu

Using MyMathLab: To supplement what is done in class, your instructor will require an online resource called MyMathLab. In order to use MyMathLab, you must purchase a Student Access Code from the UHD Bookstore (bundled with new textbook or sold separately) or purchase it online at http://www.mymathlab.com. If you purchased a MyMathLab code for MATH 1301 last semester (i.e. you are repeating the class), you DO NOT need to purchase a new code this semester. Your account will still be active, but you will need to enroll in a new section. You can use MyMathLab on any computer that has Internet access. If you do not have a computer at home with Internet access, you can log into MyMathLab from a UHD computer, print out the MyMathLab assignment, work through the exercises on paper, and then enter the answers in MyMathLab when you are next on campus. To register with MyMathLab, you will also need a valid email address – use one that you regularly check. You must register with MyMathLab at http://www.mymathlab.com only the first time that you use it. (1) The course ID number will be given to you by your instructor. (2) The zip code for UHD is 77002. (3) You will then create a Login Name and Password which you will use to log in whenever you use MyMathLab at http://www.mymathlab.com. Make sure to record your exact login name and password for future logins. *Note:* The computers in the Center for Math & Statistics (formerly called the Math Lab) in N925, the Academic Computing Labs (S800, C300, B200), the PLTL (Peer Led Team Learning) Lab (S738), and the SI Lab (S405) can be used to access MyMathLab.

In MyMathLab you can:

- Complete and submit homework assignments online;
- Check out your MyMathLab homework grades and other course grades in the Gradebook;
- View a complete online version of the textbook and look at multimedia sources such as online video clips that accompany the textbook, and much more.

Be sure to register with MyMathLab during the first week of the semester, so you can begin to use it right away.

Course Content: The course covers the following sections of the textbook. In some cases, not all pages from a section are covered.

Chapters	Sections
Chapter 1	1.1 Numbers, Data, and Problem Solving 1.2 Visualizing and Graphing Data 1.3 Functions and Their Representations 1.4 Types of Functions and Their Rates of Change
Chapter 2	2.1 Equations of Lines 2.2 Linear Equations 2.3 Linear Inequalities 2.4 More Modeling with Functions 2.5 Absolute Value Equations and Inequalities
Chapter 3	3.1 Quadratic Functions and Models 3.2 Quadratic Equations and Problem Solving 3.3 Complex Numbers 3.4 Quadratic Inequalities
Chapter 4	4.1 More Nonlinear Functions and Their Graphs 4.2 Polynomial Functions and Models 4.5 The Fundamental Theorem of Algebra 4.6 Rational Functions and Models 4.7 More Equations and Inequalities
Chapter 5	5.1 Combining Functions 5.2 Inverse Functions and Their Representations 5.3 Exponential Functions and Models 5.4 Logarithmic Functions and Models 5.5 Properties of Logarithms 5.6 Exponential and Logarithmic Equations and Inequalities

Tips for Becoming a Successful College Student:

1. Come to class.
2. Read your book.
3. Do your homework.
4. Listen and ask questions.
5. Contribute to classroom discussions.
6. Use any tutoring resources that are available.
7. Interact with your teachers, either face to face or using the phone or email.
8. Form study groups with your classmates.
9. Meet with your advisor.
10. Get involved in campus activities.
11. Share new ideas with your friends and family.

VISIT THE UHD ALGEBRA STUDENT WEB PAGE FOR MORE INFORMATION:

http://cms.uhd.edu/qep/algebra