

## MATH 1300 STUDENT SYLLABUS

**Course:** MATH 1300 (Intermediate Algebra)

**PREREQUISITE:** *A grade of C or better in MATH 0300 or TSI MATH score 336-349.* 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 MATH 0300.

**Textbook:** *Beginning and Intermediate Algebra with Applications and Visualization*, Fourth Edition, by Gary Rockswold and Terry Krieger, Pearson Education, 2018, ISBN 9780134474304 (Loose-leaf textbook is bundled with the required MyMathLab access pack). **OPTIONAL TEXT:** *Math Study Skills*, by Alan Bass, Pearson Education, Inc., 75 Arlington Street, Suite 300, Boston, MA 02116

**Why You Are In This Course:** Like many students at UHD, your placement test results indicate that your arithmetic and algebra skills are not sufficiently developed for you to pass College Algebra (MATH 1301). MATH 1300 is a developmental course intended to help build your mathematical skills up to the college level. If you feel that the material in MATH 1300 is too advanced for you and you were misplaced, please see your instructor immediately, so that you can be enrolled in MATH 0300. Remember, it is better to drop back than drop out.

**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. Students enrolled in MATH 1300 at UHD have access to the Center for Math & Statistics in the Academic Support Center (N925) where they may obtain additional tutoring with understanding concepts or improving their skills. The Center is staffed with mathematics faculty and student assistants, and offers tutorial help, calculators, and computer access on a walk-in basis. The Center maintains extensive hours which are published each semester. You are encouraged to visit the center throughout the semester whenever you feel you have time to work there - no appointment required. It is an excellent place to study the textbook and work on homework problems, so that you can receive immediate answers to your questions as necessary. The accompanying online homework component, MyMathLab (<http://www.mymathlab.com>) provides numerous help resources such as chapter pretests, exercise examples, and self-quizzes. The multimedia online library contains section lecture videos, animation examples, PowerPoint slides, test prep videos corresponding to each textbook chapter test, and a multimedia textbook.

**Goals/Objectives:** At the completion of this course, a student should be able to:

- (1) Perform multiplication and division with polynomials
- (2) Factor-out the greatest common factor from polynomials
- (3) Factor binomials and trinomials using several techniques
- (4) Solve quadratic equations in one variable by the methods of factoring and the Zero-Product Property, complete-the-square and apply the Square-Root Property, and the Quadratic formula
- (5) Graph basic transformations of quadratic functions
- (6) Evaluate, simplify, and solve rational expressions and equations
- (7) Simplify complex fractions
- (8) Evaluate and simplify square-roots, cube roots, and compute  $n^{\text{th}}$  roots
- (9) Write radicals using rational exponents and vice-versa
- (10) Simplify and combine radical expressions, and rationalize denominators
- (11) Solve radical equations and apply the distance formula
- (12) Identify, define, recognize, and evaluate functions and their representations

**Developmental Education Objectives:**

- A) Develop positive mathematical attitude and success study skills such as effective use of mathematical textbooks, test preparation and taking strategies, and class time management.
- B) Acquire the ability to read, write, listen to, and speak mathematics in order to effectively translate mathematical sentence, phrases, and relationships between two quantities into mathematical statements and algebraic expressions.
- C) Engage in substantial mathematical problem solving, reason appropriately from mathematical models to draw conclusions, and judge the reasonableness of results.
- D) Utilize multiple-approaches such as numerical, graphical, symbolic, and verbal reasoning to solve mathematical problems.
- E) Prepare students for College Algebra and develop the view that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines.

**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 assign your final course grade according to the formula shown here.

Note: Since MATH 1300 is considered a pre-college course, this grade will appear on your transcript but will not be calculated into your GPA.

90-100	"A"
80-89	"B"
70-79	"C"
0-69	"IP" [not a passing grade]

**The following cases are exceptions:**

1. If your final exam score is less than 50, you will receive a "F" or "IP" for the course regardless of your average.
2. If you violate the MATH 1300 Attendance Policy (see item below), you will receive a "F" for the course regardless of your average.
3. If you are attending class but are not making a genuine effort to pass (as evidenced by not handing assignments, not participating in class, not seeking help outside of class, etc.), you will receive an "F" for the course regardless of your average.
4. You may only request a W for this course if you (a) withdraw from the university, or (b) if you have a compelling reason.

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".

**Excess Course Attempts:** In accordance with state law, effective Fall 2004 the University of Houston-Downtown is charging an additional fee for each credit hour for enrollment in a developmental course, after 18 hours of developmental work has already been attempted. Once 18 attempted hours of developmental course work has been accumulated, registration in a developmental course will result in the additional charge. An attempt is defined as an enrollment that results in a letter grade (including "S", "U", "IP", and "W"). A developmental course is defined as MATH 0300, MATH 1300, ENG 1300, ENG 130A, and RDG 1300.

**Satisfactory Progress Policy:** Students are required to demonstrate satisfactory progress toward completing their developmental course requirements. MATH 1300 is a developmental course. See the separate sheet [Satisfactory Progress Policy for Developmental Courses](#) for details.

**MATH 1300 Attendance Policy:** An attendance policy is enforced for this course. See the separate sheet [MATH 1300 Attendance Policy](#) for details.

**Calculator Policy:** Each student may purchase or otherwise have access to a scientific calculator throughout the semester and will be allowed to use a scientific calculator on the final exam. Students are allowed to use scientific calculators on the final exam, although no problem on the final exam requires the use of a calculator. Your instructor will give you more specific information about the use of calculators in your class.

**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/](http://www.uhd.edu/disability/) (Email) [disabilityservices@uhd.edu](mailto: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 0300 or MATH 1300 last semester, 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. 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. See your instructor for more information regarding MyMathLab.

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

<i>Chapters</i>	<i>Sections</i>
Chapter 5 <b>Polynomials and Exponents</b>	5.4 Special Products 5.5 Integer Exponents and the Quotient Rule 5.6 Division of Polynomials
Chapter 6 <b>Factoring Polynomials and Solving Equations</b>	6.1 Introduction to Factoring 6.2 Factoring Trinomials I ( $x^2 + bx + c$ ) 6.3 Factoring Trinomials II ( $ax^2 + bx + c$ ) 6.4 Special Types of Factoring 6.5 Summary of Factoring 6.6 Solving Equations by Factoring I (Quadratic)
Chapter 7 <b>Rational Expressions</b>	7.1 Introduction to Rational Expressions 7.5 Complex Fractions 7.6 Rational Equations and Formulas
Chapter 10 <b>Radical Expressions and Functions</b>	10.1 Radical Expressions and Functions 10.2 Rational Exponents 10.3 Simplifying Radical Expressions 10.4 Operations on Radical Expressions 10.5 More Radical Functions 10.6 Equations Involving Radical Expressions
Chapter 11 <b>Quadratic Functions and Equations</b>	11.1 Quadratic Functions and Their Graphs 11.2 Transformations and Translations of Parabolas 11.3 Quadratic Equations 11.4 The Quadratic Formula
Chapter 8 <b>Introduction to Functions</b> <i>(optional-time permitting)</i>	8.1 Functions and Their Representations

### **Important 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. Interact with your teachers, either face to face or using the phone or email.
7. Form study groups with your classmates.
8. Meet with your advisor.
9. Get involved in campus activities.
10. Share new ideas with your friends and family.

VISIT THE UHD ALGEBRA STUDENT WEB PAGE FOR MORE INFORMATION:

<http://cms.dt.uh.edu/qep/algebra>