

MATH 1050 Flex, Syllabus

MATH 1050, College Algebra, QL, 4 credits. Functions: graphs, transformations, combinations and inverses. Polynomial, rational, exponential, logarithmic functions and applications. Systems of equations and matrices. Graphing calculator required. Prerequisite: C or better in MATH 1010, or Math ACT score of at least 23 or satisfactory score on Math Placement Exam within the Math prerequisite acceptability time limit.

Instructors:

Robert Heal, Professor
Department of Mathematics and Statistics
Utah State University
Logan, Utah 84322-3900
e-mail: bob@math.usu.edu
Phone: 435-797-2853
Fax: 435-797-1822

Gregory Wheeler, Assistant Professor
Department of Mathematics and Statistics
Utah State University, Uintah Basin
987 E. Lagoon St. 124-9
Roosevelt, Utah 84066
e-mail: greg.wheeler@usu.edu
Phone: 435-722-1714

Electronic Resources and Textbook:

If you logon to the course via USU Canvas, you will be directed to the Online 1050 homepage which is http://www.math.usu.edu/rheal/math_1050.

Of course you must have a computer with an internet connection. A graphing calculator is also required. If you already own a graphing calculator then use that one. The Texas Instruments **TI-83 Plus** model is recommended. Here is a [TI-83 Plus Guidebook](#). When you are on-line, you may choose to use the [online graphing tool](#).

The textbook is ***Precalculus with Software*** by Paul Sisson and is published by Hawkes Learning Systems. If you haven't already purchased the materials from a USU bookstore, then go to

<http://hawkespublishing.stores.yahoo.net/precalculus.html>

Choose one the following two options:

Option 1. Purchase the Precalculus Software and Hardcover textbook. With this option the textbook will be mailed to you along with the software CD and license number. The lesson instruction can be viewed via the textbook or electronically via the software.

Option 2. Save time and money by purchasing only the Precalculus Software. With this option, you first purchase an access code online and then download the software and install it on your computer using your unique access code. Be careful to purchase the ***Precalculus Software*** and keep a copy of the access code. With this option, the lesson instruction is viewed electronically via the software.

Note: Do **NOT** buy the *College Algebra Software*.

Hawkes Software Installation:

Once you have either the access code or CD, follow the installation and set-up instructions which can be viewed at <http://www.hawkeslearning.com/Support/InstallationInstructions.htm>

The Hawkes Course ID is

USUPRC

Be certain to choose the correct section. For Math 1050 Flex, the section is

Online Math 1050 Flex

[Student Get Started Video](#)

[Student Manual \(PDF\)](#)

Once you work through the first few lessons, you will become very comfortable with the instructional software.

Lessons and Homework Assignments:

There are a total of 42 lessons in the Hawkes Learning System that you are required to complete. Completion of all of the lessons and certifying at the mastery level will earn a total of 100 points (one-sixth) out of the 600 total possible points upon which your grade is determined. The courseware for each lesson consists of three modes:

1. **Instruct** is a multimedia presentation of each topic. The Instruct mode provides definitions, rules and properties, along with example problems, important hints, and helpful notes to enhance students' learning experience. Narration, videos and 'Your Turns' are available for an interactive presentation of the material.
2. **Practice** teaches problem-solving skills. Problems in each lesson are algorithmically generated to allow unlimited practice. Intelligent feedback is provided on incorrect answers, and you have access to the *Interactive Tutor* for help with every problem.
3. **Certify** is where you do the homework. Each lesson contains a homework assignment with algorithmically generated problems. No two students receive the same assignment! Each certification is based on mastery-level learning, allowing you to work at your own pace. Once you achieve mastery-level learning for a lesson, you are allowed to continue to the next lesson.

The required lessons for Online Math 1050 are indicated in the table below. These are the *only* lessons that you complete; ignore the others. This is an online course and in order to provide maximum flexibility for all students the only absolute due date for all lessons and exams is the last day of the semester. To keep you on a realistic schedule, see the recommended due dates in the table below.

	Lessons Covered	Recommended Due Date
Midterm 1	1.1ab, 1.2abcd, 1.3, 1.4, 1.5ab, 1.6, 1.7ab, 1.8ab	End of 5th week
Midterm 2	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.5, 3.6, 3.7	End of 10th week
Midterm 3	4.1, 4.2, 4.3, 4.4, 4.5ab, 5.1, 5.2, 5.3, 5.4, 5.5, 10.1, 10.2, 10.8	Last week
Final Test	Comprehensive	Last week

All homework will be done using the Hawkes Learning Systems software. You can practice homework for each section as many times as you want. To complete the homework assignment for a lesson, you must CERTIFY by correctly answering approximately 80% of the problems for that section. If you fail to answer enough problems correctly then you will have the opportunity to learn what mistakes you made as well as receive feedback on why you made the mistakes and how to avoid making them again. You will be able to try and certify again when you are ready. There is no limit on the number of

attempts to certify. You will receive full credit for all assignments for which you have certified. The software automatically generates a notification to the instructor and posts the results in the Gradebook.

Video and PDF Tutorials:

Click on the **Video Tutorials** link to access the list of tutorials that can be downloaded for your use. Many of these video (mp4) tutorials have a PDF version that can be printed. Each lesson also has a video tutorial provided by Hawkes Learning System.

Tests:

Your tests will be completed using WebTest, a state-of-the-art, online testing system that creates unique tests, and homework assignments for each student. The tests are randomly generated using a variety of problem types and parameters. They are based on the same problem types that are used to build your homework assignments. Practice exams are also available. Before you take an exam, you must certify in those lessons required for that exam.

There are three midterms, each worth 100 points and a final test that is comprehensive and worth 200 points.

	Lessons Covered	Recommended Due Date
Midterm 1	1.1ab, 1.2abcd, 1.3, 1.4, 1.5ab, 1.6, 1.7ab, 1.8ab	End of 5th week
Midterm 2	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.5, 3.6, 3.7	End of 10th week
Midterm 3	4.1, 4.2, 4.3, 4.4, 4.5ab, 5.1, 5.2, 5.3, 5.4, 5.5, 10.1, 10.2, 10.8	Last week
Final Test	Comprehensive	Last week

All exams are proctored. To schedule and take an exam, just click on the **Test** link and follow the instructions. The exams are not open-book; however, you may use your graphing calculator and a single 3 x 5 index card for formulas and definitions. The recommended exam due dates are given in the table above; as with any math class, it is imperative that you do not fall behind in the schedule. There is no penalty for taking tests beyond the recommended due dates but all exams **must** be completed by the last day of test week. Test results are automatically recorded in the Gradebook; results and feedback are immediately available.

Grading Policy:

Your grade will be determined by the total of all your scores on the three midterms, the homework, and the final test. There are 600 points possible. Grades will be assigned according to the following table:

A	560-600	B+	520-539	C+	465-479	D+	350-359
A-	540-559	B	500-519	C	375-464	D	330-349
		B-	480-499	C-	360-374	F	0-329

USU Incomplete Grade Policy: <http://www.usu.edu/policies/pdf/Incomplete-Grade.pdf>

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances. The term "extenuating" circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter course schedule to secure employment, (4) change in work schedule as required by employer, (5) judicial obligations, or (6) other emergencies deemed appropriate by the instructor.

The student may petition the instructor for time beyond the end of the semester to finish the work. If the instructor agrees, two grades will be given, an *I* and a letter grade for the course computed as if the missing work were zero. An *Incomplete Grade Documentation Form* must be filed by the instructor in the departmental office. Students may not be given an incomplete grade due to poor performance or in order to retain financial aid.

Special Needs:

If you have a disability that will likely require accommodation for this course (relating to pedagogy, exams, alternate format, large print, audio, diskette, Braille, etc.), contact Greg Wheeler or Dr. Robert Heal immediately (first week of class) AND you must document the disability through the Disability Resource Center. All such requests must be discussed with and approved by Greg Wheeler or Robert Heal.

Dr. E Robert Heal, Professor
Department of Mathematics and Statistics
Faculty Website
Robert.Heal@usu.edu

Gregory Wheeler
Department of Mathematics and Statistics
USU Uinta Basin Campus
Greg.Wheeler@usu.edu