

Undergraduate Course Syllabus

MAT 050: Fundamentals of Algebra

Center: Online

Course Prerequisites

None

Course Description

This course includes a review of basic arithmetic and an introduction to elementary algebra. Topics may include: prealgebra review; real numbers; algebraic expressions; linear equations/inequalities; quadratic equations; graphing; systems of equations; exponents, polynomials and rational expressions. (Credits awarded for this course count toward a student's GPA, but they do not count toward the 120 credits required for graduation; or institutional requirements, such as the General Education requirements.)

Course Outcomes

- Display a positive attitude about learning and using mathematics
- Simplify and evaluate algebraic expressions
- Solve linear, exponential, and logarithmic equations
- Organize and interpret graphs of linear equations
- Perform operations with real number, exponents, polynomials and rational expressions
- Apply algebra concepts and skills to real world scenarios
- Apply calculator technology to problem solving situations

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, <u>MBS Direct</u>, rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

Access code for MyMathLab, which includes the following e-book: Introductory Algebra Through Applications

Southern New Hampshire University

Pearson Custom

2013

2013

ISBN: 978-1-269-21019-5

Optional Materials

Introductory Algebra Through Applications (Binder) (CUSTOM) (physical textbook) Southern New Hampshire University Prentice Hall, Inc.

2013

ISBN: 978-1-256-70368-6

Technology Requirements/Recommendation

Scientific calculator highly recommended

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions forum in Blackboard so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours.

Grade Distribution

| Assignment Category | Number of Graded Items | Point Value per Item | Total Points |
|------------------------|---------------------------|-------------------------|--------------|
| Discussions | 7 | 15 | 105 |
| Wikis | 6 | 10 | 60 |
| MyMathLab Problem Sets | 8 | 100 | 800 |
| MyMathLab Final Exam | 1 | 250 | 250 |
| | | Total Course Points: | 1,215 |

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

| | 7 | Total Points. | 1,215 | |
|--------------|-----------------------|---------------|-------------------|-------|
| <u>Grade</u> | Numerical Equivalent | Points | Points Equivalent | |
| | | | Lower | Upper |
| Α | 93-100 | 4 | 930 | 1000 |
| A- | 90-92 | 3.67 | 900 | 929 |
| B+ | 87-89 | 3.33 | 870 | 899 |
| В | 83-86 | 3 | 830 | 869 |
| B- | 80-82 | 2.67 | 800 | 829 |
| C+ | 77-79 | 2.33 | 770 | 799 |
| С | 73-76 | 2 | 730 | 769 |
| C- | 70-72 | 1.67 | 700 | 729 |
| D+ | 67-69 | 1.33 | 670 | 699 |
| D | 60-66 | 1 | 600 | 669 |
| F | 0-59 | 0 | 0 | 599 |
| 1 | Incomplete | | | |
| IF | Incomplete/Failure* | | | |
| IP | In Progress (past end | | | |
| w | of term) Withdrawn | | | |

^{*}Please refer to the <u>policy page</u> for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. Assignments and discussion board posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

| Module | Topics and Assignments |
|--------|--|
| 1 | Orientation and Pre-Algebra Review |
| | Reading: Introductory Algebra Through Applications, Chapter R and Chapter 6, Section 6.1 |
| | 1-1 Discussion: Getting Started |
| | 1-2 Discussion: Questions |
| | 1-3 Exploration: MyMathLab Orientation |
| | 1-4 Problem Set: MyMathLab |
| 2 | Real Numbers and Algebraic Expressions |
| | Reading: Introductory Algebra Through Applications, Chapter 1 |
| | 2-1 Discussion: Order of Operations |
| | 2-2 Discussion: Questions |
| | 2-3 Wiki: How to Solve |
| | 2-4 Problem Set: MyMathLab |

| 3 | Solving Linear Equations and Inequalities |
|---|---|
| | Reading: Introductory Algebra Through Applications, Chapter 2, Sections 2.1–2.3, 2.5, and 2.6 |
| | 3-1 Discussion: Individual Research |
| | 3-2 Discussion: Questions |
| | 3-3 Wiki: How to Solve |
| | 3-4 Problem Set: MyMathLab |
| 4 | Graphing Linear Equations |
| | Reading: Introductory Algebra Through Applications, Chapter 3 |
| | 4-1 Discussion: Applications of Graphing |
| | 4-2 Discussion: Questions |
| | 4-3 Wiki: How to Solve |
| | 4-4 Problem Set: MyMathLab |
| 5 | Systems of Linear Equations |
| | Reading: Introductory Algebra Through Applications, Chapter 4 |
| | 5-1 Discussion: Methods to Solving a System of Equations |
| | 5-2 Discussion: Questions |
| | 5-3 Wiki: How to Solve |
| | 5-4 Problem Set: MyMathLab |
| 6 | Exponents and Polynomials |
| | Reading: Introductory Algebra Through Applications, Chapter 5 |
| | 6-1 Discussion: Scientific Notation |
| | 6-2 Discussion: Questions |
| | 6-3 Wiki: How to Solve |
| | 6-4 Problem Set: MyMathLab |
| 7 | Factoring Polynomials |
| | Reading: Introductory Algebra Through Applications, Chapter 6, Sections 6.1–6.4 |
| | 7-1 Discussion: Factoring Methods |
| | 7-2 Discussion: Questions |
| | 7-3 Wiki: How to Solve |
| | 7-4 Problem Set: MyMathLab |
| 8 | Quadratic Equations |
| | Reading: Introductory Algebra Through Applications, Chapter 6, Section 6.5 and Chapter 9, Sections 9.1, |
| | 9.3, and 9.4 |
| | 8-1 Discussion: Questions |
| | 8-2 Problem Set: MyMathLab |
| | 8-3 Final Exam: MyMathLab |

Attendance Policy

Online students are required to submit a graded assignment/discussion to Blackboard during the first week of class. If a student does not submit a posting to the graded assignment/discussion during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the <u>full attendance policy</u>.

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review

the full late assignment policy.

SNHU College of Online and Continuing Education Student Handbook

Review the student handbook.

ADA/504 Compliance Statement

Southern New Hampshire University is dedicated to providing equal access to individuals with disabilities, including

intellectual disabilities, in accordance with Section 504 of the Rehabilitation Act of 1973, Title III of the Americans

with Disabilities Act (ADA) of 1990, and the ADA Amendments Act of 2008. The university prohibits unlawful

discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable

accommodations to eligible individuals with disabilities.

As soon as you become aware of a disability, we encourage you to contact the Online Accessibility Center (OAC) to

discuss accommodations for which you may be qualified. Reasonable accommodations are established through an

interactive process between the student and the OAC. Note that accommodations are not retroactive and that

disability accommodations are not provided until an accommodation letter has been processed.

Contact Information:

Online Accessibility Center

Phone: 866-305-9430

Email: oac@snhu.edu

For questions concerning support services, documentation guidelines, or general disability issues, visit the Online

Accessibility Center website.

If you feel you have been denied appropriate disability-related accommodations, including appropriate auxiliary

aids and services, you may file a grievance as described in the ADA/504 Grievance Policy found on the Disability

Services webpage.

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic

work. Activities such as plagiarism and cheating are not condoned by the university. Review the full academic

honesty policy.

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United

States Code). Any person who infringes the copyright law is liable. Review the full copyright policy.

SNHU College of Online and Continuing Education Withdrawal Policy

Review the full withdrawal policy.

Southern New Hampshire University Policies

More information about SNHU policies can be found on the policy page.

Assessment Calibration and Student Work Samples

For the purpose of continuous improvement of our educational training, Southern New Hampshire University's College of Online and Continuing Education may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you have any questions or concerns, contact your advisor. If you would like to withdraw permission for use of your work, please contact the assessment calibration administrator at assessmentcalibration@snhu.edu. See this document for more information.