

Foundations of Mathematics I

OVERVIEW OF COURSE

These sections (along with the corresponding spring sections) will prepare students to successfully complete the College Algebra course (which is a prerequisite for many other math courses). It will include a review of arithmetic and beginning algebra, the development of study skills, and many review sessions.

At the end of the fall semester, 3 credits will be awarded to students who successfully complete the course. A grade for the semester's work will also be given. It is required that each student sign up for the course in the following spring semester. Note, this course continues in the text Beginning and Intermediate Algebra, and each student earning a passing grade will again be awarded 3 credits for that semester's work.

ENROLLMENT REQUIREMENTS

PRQ: Satisfactory performance on the Mathematics Placement.

REQUIRED MATERIALS

Text: Beginning and Intermediate Algebra, Sixth Edition by Lial, Hornsby, and McGinnis

Software: MyMathLab access code

Calculator: A device that was purchased as solely a calculator, except a TI-Nspire. No calculators may be used until after the Basic Skills Test is taken. Ask you instructor about specific details. Your section may be a "No Calculator" section.

GRADES

A maximum of 710 points may be earned in this course, distributed as follows:

Attendance ($\frac{1}{2}$ point per day, max 20)	20
Homework (30 highest scores, 3 points each)	90
Quizzes (10 highest scores, 10 points each)	100
Exams (3 exams, 100 points each)	300
Final Exam	200
Sum	710

The final is a departmental, comprehensive exam. This mass final is given to all students at the same time in a room different from your regular classroom. These room assignments are made after exam 2.

MML Bonus: For every perfect score after 30, you will earn a bonus of 3 points. For instance, if you have 32 perfect scores, your Homework point total will be 96 out of 90 points, 6 points extra credit.

TENTATIVE GRADING SCALE

Your grade will be based on your total out of 710 points. The cutoffs will be no higher than:

A: 639 (90%)

B: 568 (80%)

C: 461 (65%)

D: 390 (55%)

Your instructor may use the plus/minus grading system.

ACADEMIC MISCONDUCT

Academic honesty and mutual respect (student with student and instructor with student) are expected in this course. Mutual respect means being on time for class and not leaving early, being prepared to give full attention to class work, not reading newspapers or other material in class, not using cell phones or pagers during class time, and not looking at another student's work during exams or quizzes. Academic misconduct, as defined by the Student Code of Conduct, will not be treated lightly.

Failure to abide by the following will result in a zero score!

- PDA's, cell phones and graphing calculators shall be stowed and not be visible during exams.
- Talking or other communication between students is not permitted during exams.

MAKEUPS

The official course policy is that there are no makeup quizzes. Your instructor may modify THIS policy. Make-up exams will be given ONLY for an excused absence, a documented illness or serious emergency. It is YOUR responsibility to contact your instructor before the scheduled date of the exam for an excused absence. Documentation may be requested by your instructor. If there is a documented illness or serious emergency, inform your instructor via email within 48 hours. Speak with your instructor in their office the next day to talk about the absence and arrange a time to take the makeup exam. No one is entitled to a makeup exam.

*****BASIC SKILLS TEST*****

You will take the Basic Skills Test (BST) on Monday of the sixth week of the course. This will assess your basic skills and knowledge of operations with whole numbers, fractions, mixed numbers, decimals, and percents. A minimum score of 70% on the BST is required for a C grade or above in this course. An excellent resource for review is in MyMathLab. Your grade on the BST is NOT be included as part of the course grade. You may retake the BST at most once a day. Consult your instructor for further details.

EXPECTATIONS

It is impossible to overemphasize the importance of your active participation in this class. Every student is expected to:

1. Be present and on time for every class meeting. Attendance will be taken every day.
2. Check your NIU e-mail regularly for important announcements throughout the semester.
3. Notify the instructor of any absence, preferably in advance, ESPECIALLY, for a Friday.
4. Read the text.
5. Review the previous lesson and do the MyMathLab (MML) homework assignments after each class. (Expect to spend at least 2 hours daily on math.) The assignments are due midnights on Tuesdays, Thursdays, and Sundays.
6. Check your syllabus and preview the new material before coming to class. This will help you to better understand the lecture.
7. Bring your calculator to class every day starting in the middle of Week #6.
8. Complete the MyMathLab assignments ahead of time (midnight).
9. Ask questions in class or after class of the instructor.

10. Get help when you need it—not just before an exam. Here are your primary sources for help:

Instructor

SI Leader

Other Students

ACCESS tutors and help sessions

Tutoring Centers (Grant South, New Residence Hall, Library)

PROMISE Scholar

NOTICE FOR STUDENTS WITH DISABILITIES

NIU abides by Section 504 of the Rehabilitation Act of 1973 which mandates reasonable accommodations be provided for qualified students with disabilities. If you have a disability and may require some type of instructional and/or examination accommodation, please contact your instructor early in the semester so that we can provide or facilitate in providing accommodations you may need.

If you have not already done so, you will need to register with the [Disability Resource Center \(DRC\)](#), the designated office on campus to provide services and administer exams with accommodations for students with disabilities. The DRC office is located on the 4th floor of the University Health Services building (815 753-1303). Your instructor is looking forward to talking with you soon to learn how s/he may be helpful in enhancing your academic success in this course.

SCHEDULE

Schedule/Pace

WEEK	DATES	SECTIONS	TOPICS
1	August 22	Introduction, R.1	Overview of the Course, Fractions
	24	R.1, Worksheet #1	Real Numbers
	26	R.1	Fractions
2	August 29	R.1, Worksheet #2	
	31	R.2, Worksheet #3	Decimals and Percents
	September 2	R.2, Worksheet #4	
3	September 5	OFF	
	7	1.1, 1.2	Exponents, Order of Operations, and Inequality
	9	1.2	Variables, Expressions, and Equations
4	September 12	1.3	Real Numbers and the Number Line
	14	Review	
	16	Exam 1	
5	September 19	1.4, Worksheet #5	Adding and Subtracting Real Numbers
	21	1.5, Worksheet #6	Multiplying and Dividing Real Numbers
	23	1.6/Practice BST	Properties of Real Numbers/Practice BST

WEEK	DATES	SECTIONS	TOPICS
	September 26	Basic Skills Test, 1.6	Basic Skills Test
6	28	1.7	Simplifying Expressions
	30	2.1	The Addition Property of Equality
	October 3	2.2	The Multiplication Property of Equality
7	5	2.3	More on Solving Linear Equations
	7	2.4	Applications of Linear Equations
	October 10	2.4	
8	12	2.5	Formulas from Geometry
	14	2.5	Additional Applications from Geometry
	October 17	2.6	Ratio, Proportion, and Percent
9	19	Review	
	21	Exam 2	
	October 24	2.7	Further Applications of Linear Equations
10	26	2.7	
	28	2.8, Worksheet #7	Solving Linear Inequalities
	October 31	2.8	
11	November 2	3.1	Linear Equations and Rectangular Coordinates
	4	3.2	Graphing Linear Equations in Two Variables
	November 7	3.3	The Slope of a Line
12	9	3.3	
	11	3.4	Slope-Intercept Form of a Linear Equation
	November 14	3.5	Point-Slope Form of a Linear Equation
13	16	Review	
	18	Exam 3	
	November 21	7.3/7.4	Solving Systems of Linear Equations by Graphing
14	23	OFF	Solving Systems of Linear Equations by Substitution
	25	OFF	
	November 28	7.4/7.5	Solving Systems of Linear Equations by Elimination
15	30	Review for the Final	
	December 2	Review for the Final	

FINAL EXAM – TUESDAY, December 6, 8:00-9:50 a.m.