

COLLEGEWIDE COURSE OUTLINE OF RECORD

MAT 050, BASIC ALGEBRA

COURSE TITLE: Basic Algebra

COURSE NUMBER: MAT 050

PREREQUISITES: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 044, Mathematics

DIVISION: General Education

PROGRAM: Academic Skills Advancement

CREDIT HOURS: 3

CONTACT HOURS: Lecture: 3

DATE OF LAST REVISION: Spring, 2005

EFFECTIVE DATE OF THIS REVISION: Fall, 2005

CATALOG DESCRIPTION: Reviews signed numbers and basic linear equations. Concentrates on integer exponents, scientific notation, linear equations and inequalities, literal equations, polynomial operations, polynomial factoring, graphing linear equations, and applications. A developmental algebra course.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Use order of operations with signed numbers.
2. Use properties of integer exponents, square roots, and scientific notation.
3. Simplify and evaluate algebraic expressions.
4. Solve linear and literal equations.
5. Graph linear equations.
6. Understand and use the concept of slope.
7. Solve and graph linear inequalities in one variable.
8. Perform basic operations with polynomials.
9. Factor polynomial expressions and use factoring to solve simple quadratic equations.
10. Use relevant mathematical terminology, laws, and notation.
11. Solve a variety of application problems in the above areas.
12. Use a scientific and/or graphing calculator proficiently as related to coursework.
13. Use computer technology, which may include the Internet, the Web, email, or computer tutorials to enhance the course objectives.

COURSE CONTENT: Topical areas of study include -

Signed numbers

Linear equations

Integer exponents and scientific notation

Linear inequalities

Literal equations

Polynomial operations

Polynomial factoring

Graphs of linear equations

Applications

SUGGESTED TEXT/CURRICULUM MATERIALS: (latest edition)

Bittinger and Beecher. *Introductory and Intermediate Algebra*. Addison-Wesley.
ISBN 0-201-77341-4

ACADEMIC HONESTY STATEMENT:

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

ADA STATEMENT:

Ivy Tech State College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services.

If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.

SYLLABUS FOR MAT 050, BASIC ALGEBRA

The instructor will provide students with a course syllabus on the first scheduled class meeting. The syllabus should communicate clear and concise information to help the student understand the scope of the course and expectation for successful completion. The following information will appear on the syllabus and be identical to information on the Course Outline of Record (COR):

Required Syllabus Information from (COR)

- Course title
- Course prefix and number
- Prerequisite(s)
- Corequisite(s)
- Program
- Division
- Credit hours
- Contact hours
- Catalog description
- Major course learning objectives
- Course content
- Academic honesty statement
- ADA statement

Additional Required Syllabus Information

The syllabus must also contain the following additional information. The instructor may determine the content of this information.

- Instructor
- Course section number
- Additional course learning objectives (if required)
- Required text, or other instructional materials
- Required consumable materials and equipment supplied by student
- Instructor phone number
- Instructor e-mail address
- Instructor office location and hours
- Method(s) of instructional delivery
- Method(s) of evaluation
- Grading scale
- Make-up policy
- Attendance policy
- Activities schedule, including calendar of topics, assignment, test, etc.

- Last date to drop course without grade
- The name and location of the Disability Service Coordinator
- Right of revision statement

Optional Syllabus Information

Faculty are encouraged to provide additional information that will help the student understand in more detail how the class will be conducted.

- Extra credit work, if applicable
- Class/lab relationship
- References or reading that are optional but recommended
- Format for papers, projects, or other assignments
- Computer room/lab rules if applicable
- Withdrawal process and responsibility
- Other