

BRONX COMMUNITY COLLEGE
of the City University of New York
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

MATH 01 Fundamental Concepts and Skills in Arithmetic and Algebra

4 hours, 0 credits; Corequisite: RDL 01 if required.

Text: Arithmetic: a Textbook for Math 01, third ed., by Anthony Weaver, available online at <http://fsw01.bcc.cuny.edu/mathdepartment/Courses/Math/MTH01/allmath01.pdf>

Learning Objectives: Proficiency in the arithmetic of signed numbers, fractions, mixed numbers and decimals. Proficiency in the use and application of percents, ratios and proportions. Ability to solve simple linear equations.

Pace: There are 56 total class hours. The suggested allocation of class hours to chapter topics below leaves 10 hours free for quizzes, tests, and review.

Homework: The text contains 54 exercise sections; it is recommended that students be assigned four to five exercise sections per week as homework.

A **supplementary work book** containing many practice problems, prepared by Prof. Uma Iyer, is available online at

<http://fsw01.bcc.cuny.edu/mathdepartment/Courses/Math/MTH01/iyer-workbook01.pdf>

Topics with homework exercise sections

1. **Ch. 1: Whole Numbers** (8 hours). Exercise sections: 1.0.1, 1.1.3, 1.2.5, 1.3.3, 1.4.2, 1.4.4, 1.5.3, 1.6.1, 1.7.1, 1.8.1.
2. **Ch. 2: Fractions and Mixed Numbers** (16 hours). Exercise sections: 2.2.2, 2.3.2, 2.3.4, 2.4.1, 2.5.2, 2.6.1, 2.6.3, 2.6.5, 2.7.1, 2.8.1, 2.8.4, 2.8.6, 2.9.1, 2.10.2, 2.10.4, 2.11.2, 2.11.4, 2.12.1.
3. **Ch. 3: Decimals and Percents** (8 hours). Exercise sections: 3.1.1, 3.3.1, 3.4.1, 3.5.1, 3.6.1, 3.7.1, 3.8.1, 3.9.1, 3.10.1, 3.11.1.
4. **Ch. 4: Ratio and Proportion** (4 hours). Exercise sections: 4.1.1, 4.2.3, 4.3.1, 4.4.1, 4.5.1.
5. **Ch. 5: Signed Numbers** (10 hours) Exercise sections: 5.1.1, 5.1.3, 5.1.5, 5.2.1, 5.3.1, 5.4.2, 5.5.1, 5.6.1, 5.7.1, 5.8.1, 5.9.2.