Stony Brook University
Mathematics Department
Thomas Rico

Fundamentals of Arithmetic and Algebra
MAP 101.01
Fall 2023

Syllabus

Course Description: Arithmetic: fractions, decimals, and percent. Algebra: signed numbers, monomials, linear equations in one unknown, and word problems. This course is intended for students who have never studied algebra. Does not satisfy the entry skill in mathematics requirement or the D.E.C. category C requirement. Students who have otherwise satisfied D.E.C. category C may not register for this course. Overqualified students as determined by a placement test may be deregistered and directed to transfer to another course. Does not count toward graduation. A through C/Unsatisfactory grading only. The Pass/No Credit option may not be used.

Credits: 3

Meeting Times: Tuesdays and Thursdays from 5:30 PM to 6:50 PM in Harriman Hall 112.

MLC and Office Hours: You can find the office hours and contact info for your professor by clicking here.

E-mail: thomas.rico@stonybrook.edu

When sending me an email, please use your official Stony Brook address and state that you are a student of MAP 101.

Grading Scheme:

20%: Test 1 Thursday 10/5 in class

20%: Test 2 Thursday 11/9 in class

35%: Cumulative Final Exam Tuesday 12/19 5:30 PM - 8:00 PM

15%: Bounded Homework Sample

10%: Delta Math Concept Checks

Grading Scale: A 90-100, A- 85-89, B+ 80-84, B 75-79, B- 70-74, C+ 65-69, C 60-64, U 0-59

*NOTE: These letter grades are threshold scores only. Actual final scores needed to earn a certain letter grade may be lowered if warranted based on the difficulty of the exams. In other words, if your overall course percentage at the end of the course is 86%, you will not earn less than an A-; however, the threshold for a A- may be lower. Do not falsely conflate "difficulty of exams" with "low exam averages" to mean the same thing.

There will be no extensions for (or exemptions from) any HW, Quiz, or Exam unless your absence is based on a well-documented extenuating circumstance. There will be no extra credit given to any student on an individual basis.

Academic Calendar: All Registrar deadlines can be found here.

Brightspace: This will be our main resource for sharing information regarding grades, announcements, and course materials so please check it regularly.

Bounded Homework Sample: Throughout the semester, I will be posting problems for you to work on. I am asking that you chronologically compile your work into a binder (or notebook) which is separate from your notes. I will collect your samples when you sit for the Final Exam on 12/19 and will be grading your work based on effort, accuracy, and organization.

Delta Math Concept Checks: Every Sunday, there will be a short assignment posted to Delta Math. Think of these assignments as drills to keep you sharp throughout the semester. Registration instructions can be found on Brightspace.

MAP 103 Practice Problems: On Brightspace I have posted practice problems from MAP 103 which is the next level of algebra above this course. One of your goals in this course is to potentially skip MAP 103 next semester and place right into MAT 122/123. I will be posting practice problems for you to look at periodically. **These practice problems aren't graded and will not be part of your Bounded Homework Sample.**

Calculators: Will not be permitted during any quiz or test. It is also strongly encouraged that you stay away from them while you work through your homework.

Textbook: There is no textbook or online homework software that you need to worry about purchasing. I will be generating all the materials for this course for you.

Tutoring and Self-Study Resources

Math Learning Center (MLC): Is a place where you can get free tutoring help with any of your math concerns. No appointment is required, just come in and ask for help. The MLC is located in the basement of the Mathematics Tower and virtually through Zoom. For more information, visit: http://www.math.stonybrook.edu/mlc/center-hours.html

Math Department Course Video Archive: Here you can find recordings of topics taught from previous semesters. This resource is not a viable substitute for attending class. Topics may be ordered differently than how they are ordered in your current class. You can find the video archive by clicking here.

Academic Success and Tutoring Center (ASTC): Free academic support services including one-on-one and small group course-based tutoring, one-on-one skill-based tutoring, peer assisted learning (Supplemental Instruction), and other academic success services are available for undergraduate students. Learn more about these services by visiting http://www.stonybrook.edu/tutoring.

Standard University Syllabi Statements

Student Accessibility Support Center (SASC) Statement: If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, Stony Brook Union Suite 107, (631) 632-6748, or at sasc@Stonybrook.edu. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and the Student Accessibility Support Center. For procedures and information go to the following website: https://ehs.stonybrook.edu//programs/fire-safety/emergency-evacuation/evacuation-guide-disabilities and search Fire Safety and Evacuation and Disabilities.

Academic Integrity Statement: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

Critical Incident Management: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Student Conduct and Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

Anticipated Weekly Schedule

Week 1 (8/28 - 9/1)

- HW 1 and Delta 1 Posted Sunday 8/27
- Numbers
- Order of Operations

Week 2 (9/4 - 9/8): No classes Monday 9/4 (Labor Day)

- HW 2 and Delta 2 Posted Sunday 9/3
- Order of Operations Continued
- Intro to Fractions

Week 3 (9/11 - 9/15)

- HW 3 and Delta 3 Posted Sunday 9/10
- Operations with Fractions
- Intro to Exponents

Week 4 (9/18 - 9/22)

- HW 4 and Delta 4 Posted Sunday 9/17
- Exponent Rules
- Short Multiplication
- Difference of Two Square Factoring

Week 5 (9/25 - 9/29)

- HW 5 and Delta 5 Posted Sunday 9/24
- Simplifying Complex Exponential Expressions
- Simplifying by Collecting Like Terms

Week 6/Exam Week (10/2 - 10/6)

- Review for Test 1
- Test 1: Thursday 10/5 in class (covering topics from Weeks 1-5)

Week 7 (10/9 - 10/13): No classes Monday 10/9 and Tuesday 10/10 (Fall Break)

- HW 6 and Delta 6 Posted Sunday 10/8
- Polynomial Multiplication

Week 8 (10/16 - 10/20)

- HW 7 and Delta 7 Posted Sunday 10/15
- Rational Expressions
- Operations with Rational Expressions

Week 9 (10/23 - 10/27)

- HW 8 and Delta 8 Posted Sunday 10/22
- Operations with Rational Expressions Continued
- Solving Linear Equations

Week 10 (10/30 - 11/3)

- HW 9 and Delta 9 Posted Sunday 10/29
- Special Cases for Linear Equations
- Inequalities
- Absolute Value Equations

Week 11/Exam Week (11/6 - 11/10)

- Review for Test 2
- Test 2: Thursday 11/9 in class (covering topics from Weeks 6-10)

Week 12 (11/13 - 11/17)

- HW 10 and Delta 10 Posted Sunday 11/12
- Slope and Other Graphical Features of a Line
- Graphing Linear Equations

Week 13 (11/20 - 11/24): No classes Wednesday 11/22 - Friday 11/24 (Thanksgiving)

- HW 11 and Delta 11 Posted Sunday 11/19
- Forms of Linear Equations

Week 14 (11/27 - 12/1)

- HW 12 and Delta 12 Posted Sunday 11/26
- Radicals

Week 15 (12/4 - 12/8)

- HW 13 and Delta 13 Posted Sunday 12/3
- Radicals Continued
- Solving Quadratic Equations

Cumulative Final Exam Tuesday 12/19 5:30 PM - 8:00 PM