



ALBANY STATE UNIVERSITY
College of Arts and Sciences
Mathematics Department

Course: MATH 1001
Course Title: Quantitative Reasoning
CRN: 29104
Credit Hours: 3 semester hours

Instructor: Anthony Smith
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Office Location: West Campus, Room B – 116

Prerequisites: MATH 0099, MATH 0987, MATH 0989 or satisfactory math scores to place into co-requisite remediation or higher.

Co-requisites: None / MATH 0997 based on math placement score

Office Hours: MWF 2 p.m. – 5 p.m. TTh 3:30 p.m. – 4 p.m.

Class Meeting Times: MWF 5 p.m. – 5:50 p.m.

Class Meeting Location: B-220

Course Requirements: TI 83 or 84 graphing calculator

Textbook: [Math in Society](#) by David Lippman. This is a free, open textbook

Course Description: This course is an alternative in Area A of the Core Curriculum and is not intended to supply sufficient algebraic background for students who intend to take Precalculus, Trigonometry, or the Calculus sequence for mathematics and science majors. This course places quantitative skills and reasoning in the context of experiences that students will likely encounter. It emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. A graphing calculator is required. [MATH 1001](#) is a math course for non-science majors and may be used as a prerequisite to MATH 2205 and/or MATH 1145. Students receiving credit for [MATH 1001](#) cannot receive credit for [MATH 1111](#).

Institutional Student Learning Outcomes (ISLOs)

1. Students will be able to effectively communicate mathematical concepts and explain solutions to problems encountered in the course. [ISLO: Communication]
2. Students will be able to accurately solve mathematical equations and evaluate mathematical functions using appropriate techniques. [ISLO: Problem Solving]
3. Students will be able to apply mathematical techniques and concepts to real world applications. [ISLO: Critical Thinking]

Expected Student Learner Outcomes (SLOs)

1. Problem Solving Skills
2. Critical Thinking Skills
3. Probability and Statistics Skills
4. Math Money Skills

Course Learning Objectives

1. Problem Solving Skills: As a result of this course students will be able to
 - a. [Differentiate between inductive and deductive reasoning](#)
 - b. [Identify sequential patterns through inductive reasoning](#)
 - c. [Interpret information given on a graph](#)
 - d. [Solve applications using Polya's four step procedure](#)
2. Critical Thinking Skills: As a result of this course students will be able to
 - a. [Organize, combine and compare sets](#)
 - b. [Utilize Venn diagrams to solve problems involving sets](#)
 - c. [Identify, organize and analyze logical arguments using formal logic](#)
 - d. [Utilize quantifiers and truth tables to analyze statements](#)
 - e. [Solve problems involving ratios, proportions and variation](#)
 - f. [Perform applications involving linear, quadratic, and exponential functions](#)
3. Probability and Statistics Skills: As a result of this course students will be able to
 - a. [Utilize basic probability rules](#)
 - b. [Compute combinations and permutations](#)
 - c. [Use elementary level statistical terminology to interpret statistical information](#)
 - d. [Interpret statistical information presented graphically](#)
 - e. [Organize data from samples to be used for statistical calculations](#)
 - f. [Compute measures of central tendency, variation, and position](#)
 - g. [Model information through linear regression](#)
4. Math Money Skills: As a result of this course students will be able to
 - a. [Calculate percentages](#)
 - b. [Use simple interest formulas to determine interest earned and future value of a simple interest investment.](#)
 - c. [Use compound interest formulas determine future value of a compound interesting investment.](#)

Course Activity Components

- *Course Exams, Homeworks/Quizzes, Final Exam*

I. Course Tentative Exam Schedule/Course Assessment Components (*May be modified with notice)

Date	Assignments		
	Exam	Exam Topics: Aligned with Student Learning Outcomes	Exam Homework: Aligned with SLOs
Jan. 30 th	1	1a – 1d [ISLO: Problem Solving, Critical Thinking]	1a – 1d (SLO 1)
Feb. 20 th	2	2a – 2d [ISLO: Communication, Critical Thinking]	2a – 2d (SLO 2)
March 8 th	3	2e – 2f, 4a – 4c [ISLO: Problem Solving, Critical Thinking]	2e – 2f, 4a – 4c (SLOs 2 and 4)
April 5 th	4	3a – 3d [ISLO: Communication, Critical Thinking]	3a – 3d (SLO 3)
April 26 th	5	3e – 3g [ISLO: Problem Solving, Critical Thinking]	3e – 3g (SLO 3)

II. Method of Student Evaluation

A. Course Grading Policy and Assessment

Semester Grade Breakdown		Percentage of Final Grade
1	Homework/Quizzes	25%
2	Exams	60%
3	Final Exam	15%
Total		100%

B. COURSE GRADES The final letter grade in the course is defined as follows:

Semester Letter Grade	Semester Grade Percentage
A	100 – 90
B	89 – 80
C	79 – 70
D	69 – 60
F	60 and below

III. Course Policies

A. Course Information and Instructor Expectations

Homework/Quizzes: Course learning outcomes are portioned into lessons containing up to five skill objectives and will be accompanied by a graded homework assignment. The point values for the assignments vary by skill objectives covered. Homework is due at the start of the following scheduled class period of MATH 1001. Supplemental quizzes may be assigned to provide additional assessment; such quizzes may be announced or unannounced. Homework assignments are due at the start of the following MATH 1001 class period; completion of assigned homework is necessary to stay current in the course material. Late homework may still be submitted for reduced credit, a penalty not to exceed 5% of the total assignment grade per class period late. The lowest two percentage homework/quiz grades will be dropped for the calculation of the semester grade.

Study Time: Students should expect and plan on two – three hours of out of class study and work for each hour of class time.

Course Exams: Course exams assess student knowledge of all skill objectives for the respective lessons. Students are expected to attend all scheduled course exams. There are no retakes for any course or final exams; students are expected to be prepared for the exam by the scheduled exam time. Exams will be graded and returned during the class period one week following the scheduled exam date.

Makeup Exam Policy: Make-up exams for extenuating circumstances must be approved by the instructor prior to the originally scheduled exam date. Please note that being unprepared does NOT constitute an extenuating circumstance; students are expected to be prepared for all scheduled exams. Should an exam day be canceled for any reason, the exam will be held on the next regularly scheduled class period. ****Makeup exam requests will not be granted after graded exams have been returned to the class****

Phones/Electronic Devices: Students are expected to turn phones and other electronic devices off or to silent mode. Electronic earpieces are not to be worn within the classroom and students should not be listening to music through “ear buds” during class time.

Student Tardiness: Students are responsible for all work discussed or completed since the instructor will not be required to repeat any work or assignments given prior to the tardiness. In addition, late students should come in quietly without disturbing the class. Many instructors may deny entry to students who are more than ten minutes late to class. Moreover, if there are students who must leave before the class or laboratory period is up, they should do so as quietly as possible; however, they are still responsible for

making up their work. **BEING MARKED PRESENT:** If students are not in class when the roll is taken, they must inform the instructor of their presence at the end of the class period. Otherwise, they may be counted absent.

Late Registration: Any student registering late for a class will be held responsible for getting any work he or she may have missed prior to his or her entry into the class. The instructor will assist the student in cases of administrative changes, conflicts and special problems.

Working Materials: Students are expected to bring appropriate materials to class. These include a writing utensil, paper/notebook, calculator and all course handouts.

B. Academic Honesty/Integrity

Cheating and plagiarism are non-academic grounds for expulsion from Albany State University. No student shall give or receive any assistance not authorized by the professor in the preparation of any assignment, report, project, or examination to be submitted as a requirement for academic credit.

The consequence for a first violation of the Academic Honesty Code a grade of zero for the assignment and/or referral to the division chair. Subsequent violations will be referred to Academic Affairs and may result in penalties up to and including expulsion from Albany State University.

C. Students with Disabilities

- a. Please refer to the following link for Counseling and Disability Services:

<https://www.asurasm.edu-student-affairs/counseling-disability-services/>

Students with Disabilities:

If you are a student with a disability, you should consult the Testing & Disability Services, New Student Center – Green Zone 2-141, 903-3610 or 3611, to identify which accommodations might be needed for this course. Please contact the course instructor as soon as possible to discuss your needs.

D. Campus Carry Information

- a. Please refer to the following link for Campus Safety Information: <https://www.asurams.edu/police-policy-procedures/>

E. Sexual Misconduct Policy (Harassment Policy)

- a. Please refer to the following link for Title IX: Sexual Misconduct Policy: <https://www.asurams.edu/adminstration/title-ix/sexual-misconduct-policy/>

F. University Math and Writing Centers Reinforcement Policy

- a. Support for math and writing is available at the various math and writing centers across campus. Please ask your instructor for help locating the most convenient one for you.
- b. Writing Center Information: <https://www.asurams.edu/academic-affairs/learning-centers/east-writing-center/> OR <https://www.asurams.edu/academic-affairs/learning-centers/west-writing-center/>
- c. Math Center Information: <https://www.asurams.edu/academic-affairs/learning-centers/east-math-center/> OR <https://www.asurams.edu/academic-affairs/learning-centers/west-math-center/>
- d. SmartThinking is available through GA VIEW. Please sign into GA VIEW and find the tutoring opportunities on the toolbar.

G. Integration of Technology

The use of technology is integral to the course design. You should have access to a computer (e.g., computer lab, library, home, or work), a general knowledge of the operation/care of a computer and basic troubleshooting techniques. You should also have some basic understanding of how to use the Internet to seek, find, and retrieve information. Should you experience technology difficulties, please consult Information Technology Services, <https://www.asurams.edu/Technology/> , <https://www.asurams.edu/Technology/getting-started-students/> OR <https://www.asurams.edu/Technology/?s=student+support> for assistance with common issues.

All students should have a workable (functioning) ASU e-mail account, know how to send and retrieve e-mail messages with and without an attached file, know how to attach a file to an e-mail message, and how to download and open attached files. To ensure that you receive timely communications, it is your responsibility to notify the professor immediately of any changes to your e-mail address. All students should also know how to access the course in D2L and should visit the course page often for updates.

***NOTE: “ASU RAMmail account is the university’s official means of electronic communication with students. Students are required to use the ASU website (www.asurams.edu) and RAMmail for important university’s official information on financial aid, current class schedule, registration holds, account balances, etc. In order to communicate with students by other means as needed, each student is required to provide the university with his/her current telephone number(s) and mailing address via BannerWeb.”**

H. Course Attendance Policy

Student Class Attendance - Students are expected to attend all scheduled classes, laboratories, or clinic sessions when reasonably possible. Absences in excess of 10% of the sessions scheduled may reduce the grade for the course. A student is expected to account for absences, preferably in advance, to the instructor of the course and, at the discretion of the instructor, to promptly make up the work missed. Albany State University has implemented a No Show/Faculty Withdrawal Policy.

The policy states the following:

1. During the one-week period immediately following the first day of class, each faculty member notifies the Office of Registrar of those students on the class roster who have never attended class or actively participated in their online course. The students will be dropped, and the course will not appear on the students’ permanent academic records.
2. Up until midterm or “last day to drop without academic penalty,” the faculty member may withdraw any student who has ceased to attend/participate actively in a class, and the student will receive a grade of “W” on their academic record.
3. After midterm or “last day to drop without academic penalty,” faculty can continue to withdraw any student who has ceased to attend/participate actively in a class; however, the student will receive a grade of “WF” on their academic record.
4. The Registrar’s office notifies students of faculty/withdrawal actions; the Financial Aid Office is also notified. The student is responsible for understanding a withdrawal or faculty withdrawal may result in loss of financial aid and that failing to properly withdraw from a course may result in receiving a failing grade of “F” for the course.

I. Class Cancellation Policy

If a class is cancelled for any reason, students will be notified by administration. Plans for that class will be given, and students should complete written assignments (if any) and return them on the day that the class re-convenes.

J. Important University Dates

- a. Please refer to the online calendar for additional information:
<https://www.asurams.edu/academic-affairs/academic-services-registrar/academic-calendar/>

K. Mandatory Evaluation of Faculty by Students: Student evaluations of faculty are mandatory. You have not completed your course until you have completed your course evaluation. Course evaluations are important for accreditation purposes; course and curriculum improvement; and instructor evaluation. The faculty and administration appreciate your taking the time to fill these out. The evaluation system has been designed so that no identifying information can be connected to a specific evaluation form. In order to ensure that all students have participated in the evaluation process, CourseEval is able to track student compliance but individual student comments or evaluations are not viewable. This process exists to keep a record of students who have completed evaluations. You will receive additional information from your RAMmail and D2L account concerning the evaluation process.