

Syllabus Schedule

Course Description

Course Overview

Math 108 explores contemporary topics such as logic, problem solving, finance math, linear and exponential modeling, probability and statistical reasoning. It will satisfy the BYU-Idaho Foundations quantitative reasoning requirement but will not serve as a prerequisite for college algebra, trigonometry or any calculus-based courses. Math 108 is structured around four key units listed below.

Unit I - Problem Solving and Logic

Unit II - Financial Mathematics

Unit III - Statistical Literacy

Unit IV - Basic Probability

Course Outcomes

Math 108 (Mathematical Tools for the Real World) will enable students to develop quantitative reasoning skills that will benefit them in their subsequent course work, careers, and daily lives. The following six objectives comprise the key elements of the course:

1. *Develop the basic arithmetic and algebraic skills to succeed in daily life.*
2. *Learn to competently evaluate logical arguments and resolve real-life problems that require quantitative reasoning.*
3. *Explore the use of mathematical models in describing and making predictions about real-world phenomena.*
4. *Understand the dangers of debt, the power of compound interest, and the impacts of various financial choices.*
5. *Analyze and critique real-world issues that incorporate statistics.*
6. *Analyze and critique real-world issues that incorporate probability.*

These six objectives are outlined in greater detail, with their corresponding measurable outcomes of the course, in the linked [pdf document](#). You are encouraged to refer to these outcomes throughout the semester especially as you prepare for your unit exams.

Learning Model Architecture

The course follows a weekly cycle of Prepare, Teach One Another, and Ponder and Prove activities. Students prepare by reading the assigned sections of the text and practicing problem sets in MyMathLab. Group homework assignments provide the foundation for teach one another activities. Quick Quizzes, individual MyMathLab homework, spreadsheet and group projects allow students to ponder and prove their learning.

The course is not an independent study course. The group teaching and learning activities require students to cover material at the same time and at the same pace.

This course will cover the same material with approximately the same time commitment as the on-campus course.

Prerequisites

Successful completion of MATH 100B or one successful year of high school algebra, as well as a score of **14** out of 20 or higher on the placement exam. (See the Introduction Lesson for details.)

Required Materials

Textbook:

Access to MyMathLab, which includes the electronic version of the text *Using and Understanding Mathematics: A Quantitative Reasoning Approach* (4th Edition) by Jeffrey Bennett and William Briggs copyright 2008 - ISBN 0-321-45820-6.

Option 1: Purchase access to the MyMathLab/e-book package from the [University Store](#) at BYU-Idaho (\$63.50).

Option 2: Purchase access to the MyMathLab/e-book package from www.coursecompass.com (\$70). Note: you will need to click on the Register button underneath Students and have the course ID# and access code given to you by your FDMAT 108 online instructor.

Although Math 108 online only requires access to the MyMathLab/e-book package (detailed above), some students may wish to also purchase an optional printed copy of the text. The hardcopy purchased from the University Store will cost approximately \$131 new or \$104 used. You can also purchase a used hard copy elsewhere online. Note: even if you purchase a hard copy of the text, you still must have access to the MyMathLab/e-book package in order to take this course.

Technology:

Scientific Calculator (www.ecalc.com is free but requires a download; also, some may find a graphing calculator useful for the course but it is not essential because of your access to Excel)

Microsoft Excel spreadsheet software (the academic edition is fine)

Microphone for online discussions (a headset or ear phones along with the microphone is preferred)

Grading Policies

EXAMS (50%) The four unit exams and team comprehensive final are 100 points each. The unit exams have both a MyMathLab and an I-Learn component. Access to calculator and spreadsheet technology is allowed on each of the exams during the course. Other than the team comprehensive final, all exams must be taken on an independent basis and you are expected to live the honor code with integrity as you approach each unit assessment of Math 108.

SPREADSHEET PROJECTS (20%) There are four unique projects with varying points: Family Budget Action Plan, Annuity Spreadsheet, Home Amortization Spreadsheet, and Book of Mormon Analysis.

HOMEWORK (20%) Roughly half of the points will come from the homework using MyMathLab software and half from the Team Homework Supplements using I-Learn.

QUIZZES (5%) 24 section quizzes from the E-book reading (10 points each).

OUTSIDE READING/VIEWING (5%) Points will vary from video clips, an outside article, a case study, and their corresponding assessments.

***Note: The deadlines for all assignment submissions are due according to Mountain Time; please adjust your own submission schedules accordingly to your respective time-zones.**

Help Desk

If you have any technical difficulties while working through the course contact the Help Desk before contacting the instructor:

Help Desk: <http://www.byui.edu/helpdesk>
(208) 496-3550 OR
(866) 237-5195 (toll free)
helpdesk@byui.edu

University Policies

Student Honor

Student Honor is following the path of discipleship and learning to be more like Christ--learning to think, to feel, and to act more as He does. ***Living a life of honor:***

- Begins as we learn and live the baseline standards of the Honor Code, understand their purposes, and are true to the promises we have made.
- Continues as we heed the promptings of the Spirit to raise our personal bar of righteousness and foster a spirit of integrity, sacrifice, consecration, love, service and willing obedience as students and throughout our lives.
- Prepares our hearts for devoted discipleship in the family, church, work, and community.

[Honor Code](#) | [Academic Honesty](#) | [Dress and Grooming Standards](#)

Students with Disabilities

BYU-Idaho is committed to providing a working and learning atmosphere which reasonably accommodates qualified persons with disabilities. If you have any disability which may impair your ability to complete this course successfully, please contact the Services for Students with Disabilities Office at 208.496.1158. Reasonable academic accommodations are reviewed for all students who have qualified documented disabilities. Services are coordinated with the student and instructor by this office. If you need assistance or feel you have been unlawfully discriminated on the basis of disability, you may seek resolution through established policy and procedures. Contact the Personnel Office at 208.496.1130.

Sexual Harassment

Title IX of the Education Amendments of 1972 prohibits sex discrimination against any participant in an educational program which receives federal funds, including federal loans and grants. Title IX also covers student-to-student sexual harassment. If you encounter unlawful sexual harassment or gender-based discrimination, please contact the Personnel Office at 208-496-1130.

Disclaimers