

Math 104 - Quantitative Methods for Business

Spring 2014

Basic Info:

Instructor: Dr. Nathan Reff
Email: reff@alfred.edu
Office: Myers Hall 109C
Phone: 607.871.2818
Course Web Page: <http://people.alfred.edu/~reff/MATH104/>
Course Meetings: MTWF 2:20-3:10 in Myers Hall 227
Text: *Mathematical Methods for Business and Economics*
by Edward T. Dowling (ISBN: 978-0-07-163532-5)



Course Goals: In this course we will study several mathematical concepts which are essential to Business and Economics. After completing this course students should be able to:

- Solve a variety of algebra problems using rules of exponents, fractions, radicals and other basic operations.
- Perform basic polynomial operations and solve appropriate equations.
- Graph and interpret a variety of functions.
- Solve quadratic equations and linear systems.
- Apply these techniques to solve problems in Business and Economics.
- Use exponential and logarithmic functions to understand compounding interest and growth rates.

Technology: A calculator is required for this course. Please bring your calculator to every class. You must have your own calculator.

Grade Distribution: Your final grade will be determined as follows:

Classwork and Participation	8%
Homework	15%
Quizzes	15%
Test 1	10%
Test 2	10%
Test 3	10%
Test 4	10%
Comprehensive Final Exam	22%

Participation points can be earned by answering questions, asking relevant questions, working well with your group, etc. Coming to class is expected and will not get you these participation points alone. I would like everyone to be a part of the classroom discussions.

Borderline cases can be adjusted up or down based on your attendance, class participation, homework, and trends. For example, a pattern of steady improvement is good,

but a weak final exam is bad.

Grade Conversion:

A	93–100	C	73–76
A–	90–92	C–	70–72
B+	87–89	D+	67–69
B	83–86	D	63–66
B–	80–82	F	0–62
C+	77–79		

Homework: Homework problems will be assigned daily/weekly and posted

on the course website: <http://people.alfred.edu/~reff/MATH104/>.

Homework problems will come in 2 forms:

1) **Book problems:** These problems will come right out of your text. You must complete these problems and bring your solutions to the next class day. Every week you will turn in these problems to be graded. The purpose of the book problems is to make sure you are writing out clear step-by-step solutions to prepare you for answering questions on quizzes and tests.

2) **Additional problems:** I will write and assign problems which will generally be more challenging. These problems will be collected with the book problems.

No late homework will be accepted!

Please make sure your homework is *neat* (legible, not torn out of a spiral bound notebook, etc.) and *stapled* when you turn it in. Treat your homework as if it is a professional document that you would submit in a future workplace. It is *very* important that you keep working on problems throughout the course. There is an old saying that “math is not a spectator sport” and there is definitely a lot of truth to this. I recommend working individually and also with other classmates (but make sure you are turning in your own work!). If you are working on a problem and get stuck, make a note of it, bring your work and ask questions. I encourage *everyone* to come to office hours!

Other than assigned problems you should be reading the text every day and keeping up with the pace of the course. Keep in mind that it your responsibility to read each section before an exam.

Quizzes: There will at least one quiz each week (except when there is an exam). Quizzes will usually cover lecture material and homework problems. The questions may even be taken directly from the homework set, or minor perturbations of the homework problems. Quizzes may be announced or unannounced. There will be no make up quizzes. The lowest two quizzes will be dropped if you are present and attempt every quiz.

Class Work: Occasionally worksheets and other classwork will be assigned. Generally these assignments will carry the same weight as a homework or quiz for the course.

Tests: There will be 4 tests and a comprehensive final exam during the semester. The tentative tests dates are as follows:

Test 1	February 7.
Test 2	February 28.
Test 3	April 4.
Test 4	April 25.
Final Exam	May 10.

Please see the course website for more details. Tests will be more challenging than the quizzes so you need to study accordingly. However doing the homework and reviewing the quizzes is the best way to prepare yourself.

Quiz/Test/Final Exam Policy: Only your approved calculator may be used (when allowed). Hence, no cell phones, computers, mp3 players, slide rules, abaci, Addiators, Napier's bones, Difference/Analytical Engines, Pascalinas, Antikythera mechanisms, etc. may be used. In other words I want you to only use your brain, calculator and the hard work you put into this course to earn your grade. You may not talk to each other in the classroom while other students are working, even if you are done. Please keep your eyes on your own paper. Do not look at notes, books, etc. while working. Work through the problem on your own and you will do fine (and save us both a lot of trouble).

Cheating and Academic Dishonesty: Academic dishonesty of any kind will not be tolerated. It is disrespectful to the University, your classmates and to me. Any form of academic dishonesty will be dealt with severely. Alfred University's policies on Academic Dishonesty (Unethical Practices) (see Policy 700) can be found at http://my.alfred.edu/index.cfm/fuseaction/academic_policies.academic_regulation_ug.cfm.

Attendance Policy: You are expected to attend and be a part of every class meeting. I will keep a record of your attendance, participation and preparation. Excessive absences will noticeably affect your final grade. This course will move rather quickly so I suggest you only miss class for a good reason (meaning an excused absence). If you must miss a class it is your responsibility to learn the missed material quickly to keep up with the course.

Excused Absences: If you cannot attend one of the exams you should submit a written reason for your absence **in advance** of the exam date. I would appreciate knowing at least 3 days in advance if you are going to miss a class. In emergency situations please send me an email or leave me a voice message. The decision to allow make-up exams will be made on a case by case basis, but proper documentation is always necessary. No make-up exams will be given without advance notice. If you miss a quiz, exam or final with an unexcused absence, you will receive a 0 for that particular assignment.

Students with Disabilities: Alfred University is committed to upholding and maintaining all aspects of the Federal Americans with Disabilities Act of 1990 (ADA) and

Section 504 of the Rehabilitation Act of 1973. If you are a student with a disability and wish to request accommodations, please contact Dr. Aubrey Elmore at the Office of Special Academic Services located in Crandall Hall, or call (607) 871-2148. Any information regarding your disability will remain confidential. Many accommodations require early planning, therefore requests for accommodations should be made as early as possible. Any requests for accommodations will be reviewed in a timely manner to determine their appropriateness to this setting.

Tutor Services/Requests: Please take advantage of office hours or email me if you have any questions. I am more than happy to help out!

The Division of Mathematics has drop in help sessions for most math courses during the week. The final schedule will be posted on our course website as soon as it is complete.

The office of Special Academic Services (sas@alfred.edu) in Crandall Hall offers personalized help in the form of individual and group tutoring. If you would like to request a tutor for a class, you may fill out the tutor request form found at <http://my.alfred.edu/index.cfm/fuseaction/sas.tutoring.cfm> and then submit it to tutorus@alfred.edu. You may also contact Beth Niles (nilesb@alfred.edu or (607) 871-2148) for more information. Be aware that getting a tutor can take some time, so please contact me for additional support as mentioned above.

Extra Credit: I will not be giving anyone individual extra credit. This way everyone has the same advantage in the course.

Tentative Schedule:

MONDAY	TUESDAY	WEDNESDAY	FRIDAY
Jan 20th No Classes	21st	22nd 1	24th 2
27th 3	28th 4	29th 5	31st 6
Feb 3rd 7	4th 8	5th 9	7th 10 TEST 1
10th 11	11th 12	12th 13	14th 14
17th 15	18th 16	19th 17	21st 18
24th 19	25th 20	26th 21	28th 22 TEST 2
Mar 3rd 23	4th 24	5th 25	7th 26

MONDAY	TUESDAY	WEDNESDAY	FRIDAY
10th No Classes	11th No Classes	12th No Classes	14th No Classes
17th 27	18th 28	19th 29	21st 30
24th 31 Withdraw Deadline	25th 32	26th 33	28th 34
31st 35	Apr 1st 36	2nd 37	4th 38 TEST 3
7th 39	8th 40	9th 41	11th 42
14th 43	15th 44	16th 45	18th 46
21st 47	22nd 48	23rd 49	25th 50 TEST 4
28th 51	29th 52	30th 53	May 2nd 54
5th 55	6th	7th	9th

Final Exam: Saturday May 10, 1:15PM-3:10PM in
Meyers Hall 227.

Disclaimer: I reserve the right to make changes to this syllabus without prior notice.