MATH 106 day time room term, year

Instructor: name
Office: office number, building
Email: email@uoregon.edu
(Please include *Math 106* and your discussion leader's name in the subject line when emailing me, e.g. *Math 106-Michelle.*)

Office Hours:
day: time, day: time, day: time
or by appointment (email me)

Discussions on Thursdays:

time	CRN	room, building	name1	email1@uoregon.edu
time	CRN	room, building	name2	email2@uoregon.edu
time	CRN	room, building	name3	email3@uoregon.edu
time	CRN	room, building	name4	email4@uoregon.edu
time	CRN	room, building	name5	email5@uoregon.edu

Anonymous Feedback: All students are encouraged to give me anonymous feedback about the course or my teaching during the term. Go to *www.gmail.com*, log in with the user name *anonymousinstructorfeedback* , use the password *isn'tmathfun?* and send me a message containing any constructive feedback you would like to give.

Prerequisites: The prerequisite for this course is successful completion of Math 95 or an acceptable score on the placement test.

Calculator: A scientific calculator is required for tests and homework. You may **not** use a cellphone calculator during any exams.

Textbook: *Mathematics: A Practical Odyssey, 7th Edition. Johnson and Mowry* **or** *University Math 1 and II, Math 105/106, 3rd ed.*The are the same textbook. Note that there is a copy of the book in the Knight Library or in the Mathematics Library (218 Fenton Hall).

Attendance: Attendance is crucial to your success, since the most important material, concepts, vocabulary, and examples, will be emphasized in class.

Academic Honesty is taken very seriously. The integrity of your degree depends on it. All instances of academic dishonesty will be reported to the Office of the Dean of Students.

- On homework, you are allowed (and encouraged) to work with other students, but the work you submit must be your own. In other words, figure out problems together, but write solutions separately. For those who get help from tutors, if you are shown how to do a problem, you should still write a solution that is your own. Getting solutions from online sources is also considered cheating.
- On tests, any cheating, in particular copying from others, or allowing others to copy you, will result in failure of the course.

Course Goals: The course is a survey of three topics that require mathematics and are relevant to our lives.

The first topic is Finance. By the end, the students should be able to:

- Distinguish between simple and compound interest
- Compute simple and compound interest
- Distinguish between simple and compound interest
- Describe what is an annuity
- Compute annuities
- Compute and distinguish between present and future values of an investment
- Compute amortized loans and payout annuities
- Use the formulas associated to interest and loan computations
- Be able to determine which formula is relevant to a question

The second topic is Exponential and Logarithmic functions. By the end, the students should be able to:

- Use properties of exponential functions to simplify a given exponential function
- Explain the relationship between exponentials and logarithms
- Use properties of logarithms to simplify or a given logarithm
- Use exponential functions to model grow or decay in a variety of applications
- Use logarithmic scales to solve problems regarding decibel levels or Richter scales

The third topic is Geometry. By the end, the students should be able to:

- Compute the area and perimeter of circles, rectangles, triangles, and regions built out of circles, rectangles, and triangles
- Use the Pythagorean theorem to compute side-lengths of a right triangle
- Use similar triangles to determine side lengths of triangles
- Use trigonometry to determine side lengths of right triangles, given one side length and then angle
- Use trigonometry to determine angles of right triangles, given two side lengths

Canvas: You can use our Canvas website to see syllabus, schedule, homework assignments, your grades and more. To access our class canvas site go to:
http://canvas.uoregon.edu/

Accessibility: The University of Oregon is working to create inclusive learning environments. Please notify me as soon as possible if there are aspects of the instruction or design of this course that result in disability-related barriers to our participation. You may also wish to contact Disability Services in 164 Oregon Hall at 346-1155 or disabsrv@uoregon.edu

Homework: Homework will be collected weekly in your discussion section. Homework questions should be addressed during your TA's or instructor's office hours. Not all of the assigned problems will be graded. Each week, several problems will be chosen to be graded for accuracy. *You must show your work to get credit.* Marks may be docked if your homework is not neat.

Quizzes: Thursday discussion classes will consist of a 20 minute quiz, and then a discussion about the solutions to the quiz. The quizzes are graded for effort only, not accuracy; in other words, if you show up to every discussion section and make a genuine effort on every quiz, you will receive full marks.

Grading:

Quizzes – 10% (every Thursday in your discussion section, graded for effort only)

Homework – 15% (due every Thursday in your discussion section, the lowest HW score will be dropped)

Exam #1 – 25% (day, week 5, in class)

Exam #2 – 25% (day, week 8, in class)

Exam #3 – 25% (day, week 11, time, location)

NOTE (on all homework, quizzes, and exams): No late work will be accepted. Make-up quizzes or exams will not be offered. If there are documented, extenuating circumstances, the work will be excused.

Grading Breakdown: A: 90% or better, B: 80% -89%, C: 70%-79%,
D: 60%-69%, F: below 60%. Plus grades will be awarded when the last digit is 8 or higher (98%-100% is an A+). Minus grades will be given if the last digit is either a 0 or 1. Your final percentage will be rounded to the nearest whole number. You must get at least 70% to receive a pass (P) grade (if you are taking this course with the Pass/No Pass option).

Math 106 Term Year Tentative Class Schedule:

Week	Sections Covered	Discussion
1	5.1, 5.2	Quiz #1
2	5.3, 5.4	Quiz #2
3	5.4, 5.5	Quiz #3
4	5.6, 10.0A	Quiz #4
5	Exam #1 (on chapter 5), 10.0B,	Quiz #5
6	10.1, 10.2	Quiz #6
7	10.3, 8.1	Quiz #8
8	Exam #2 (on chapter 10), 8.2	Quiz #8
9	8.4. 8.5	Quiz #9
10	8.7, Review	Quiz #10
11	Exam #3 (on chapter 8)	

Important Dates:

- Monday of the 2nd week – last day to drop without a 'W'
- Wednesday of the 2nd week – last day to add a class
- Sunday at the end of the 7th week – last day to drop the course or change your grading option to P/N.
- Thursday, November 25th and Friday, November 26th are holiday in the Fall (week 9); Monday January 17th is a holiday in the Winter (week 3); Monday May 30th is a holiday in the Spring (week 9)

Tips for Success:

- attend every class
- read the section of the textbook before we discuss the material in class. Even reading the first page or two helps
- begin assignments as soon as they are posted
- spend time on this course every day: reading ahead, reviewing notes or quizzes, completing assignments, etc.

Extra Help: If you think you'll need extra help, get a tutor right away. Try: **https://engage.uoregon.edu/tutoring/**. The math department offers free tutoring in the math library, Fenton 218.

Expectations I expect you to:

- submit work on time
- arrive on time, and to minimize the disturbance if you arrive late
- ask questions
- provide feedback about the course (anonymously or otherwise)
- participate in class
- be respectful and courteous towards you classmates (eg., chatting during class distracts other students, and will not be tolerated)
- come to class prepared (eg., reviewed content from last class, attempted the homework, etc)
- spend approximately two hours outside of class on homework, review, etc for every one hour spent in class
- take responsibility for any course content covered when you miss a class
- attend office hours or make an appointment with me if you would like help

You can expect me to:

- arrive on time to class
- be enthusiastic about the material and about mathematics in general
- be available to provide help, support, and advice
- reply to email in less than 24 hours (typically *much less* than 24 hours)
- consider and respond to all feedback about the course
- return work no more than one week after it has been submitted
- make adjustments to the classroom environment through-out the term according to the needs of the class

Regarding Sexual Violence: The UO is committed to providing an environment **free** of all forms of discrimination and sexual harassment, including sexual assault, domestic and dating violence and gender-based stalking. If you (or someone you know) has experienced or experiences gender-based violence (intimate partner violence, attempted or completed sexual assault, harassment, coercion, stalking, etc.), know that you are **not alone.** UO has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.

Please be aware that all UO employees are required reporters. This means that if you tell me about a situation, I may have to report the information to my supervisor or the Office of Affirmative Action and Equal Opportunity. Although I have to report the situation, you will still have options about how your case will be handled, including whether or not you wish to pursue a formal complaint. Our goal is to make sure you are aware of the range of options available to you and have access to the resources you need.

If you wish to speak to someone confidentially, you can call 541-346-SAFE, UO's 24- hour hotline, to be connected to a confidential counselor to discuss your options. You can also visit the SAFE website at safe.uoregon.edu.

Notes for the Instructor: (mostly copied from Mike Price, with many thanks)

- The course coordinator is David C Steinberg: dcstein@uoregon.edu feel free to contact me with any questions, comments, suggestions, or concerns.
- There are a variety of syllabi online (http://math.uoregon.edu/syllabi/), which are definitely worth checking out
- The course is modular, with geometry/trigonometry and exponential models distinct from the main narrative of the course: finance. It would be reasonable to give three separate "chapter" exams, and if you plan it carefully, administer the third non-cumulative exam on the last day of class as opposed to during the scheduled final exam time. Do this only if the exam is non-cumulative and if the exam is identified on your syllabus as being given during week 10. It is against UO policy to administer a final exam under any guise during week 10.
- I provide students with a formula sheet for all exams. I'm not so concerned with them memorizing the formulas for volume, annuities and loans; I'd like to see them applied and interpreted successfully. (I do **not** recommend allowing them to bring cheat sheets, as they often just being solutions to homework problems with the hope of generalizing for the exam, which exhibits no learning.)
- Consider having homework due twice per week, it works out to almost exactly one section per turn-in that way.
- The remainder of Chapter 8: 8.3, 8.6, 8.8, and 8.10 are all optional sections. Don't add more than three of these sections to your course content.
- This course is well-suited to including a financial project as part of the course grade. Consider devising your own, or contacting the course coordinator for information about projects used in the recent past.