

MAT 108: Finite Math
Sections 07 & 11
John Jay College
Fall 2009

Meeting info:

07: MW 5-6:15 PM (period 7), N2512

11: MW 6:25-7:40 PM (period 8), W116

Instructor: John Bryk (jbryk@jjay.cuny.edu)

Office: I don't have one yet! You can find me wandering about the math department (4th floor, North Hall) for the time being.

Office hours: For the beginning of the semester, let's do TuTh 2:30-3:30 PM; once we all settle into our schedules, I'll raise the issue of office hours again, and we can switch things around if need be.

Text: *Finite Mathematics*, 10th Edition (ISBN 978-0470-12863-3) by Michael Sullivan, published by John Wiley & Sons, Inc., 2008

Website:

Course: <http://jjcweb.jjay.cuny.edu/jbryk/mat108/f09/>

Personal: <http://jjcweb.jjay.cuny.edu/jbryk/>

Warning: This is my first semester at John Jay! I am excited to be here, but I am still getting used to the peculiarities of the school. I will do my best to guarantee that the policies I detail here do not change, although I cannot guarantee this should my policies contradict those of the department or school. Of course, I will let you all know should anything change.

Grading scheme: The breakdown of your grade appears to the right. The numbers in the second column are percentages.

Quizzes: After the first week, there will be a ten-minute, two- or three-question quiz each Monday unless stated otherwise. *Calculators are not allowed on any quiz.* The quiz will cover the material presented during the previous two lecture meetings. Each quiz will be weighted equally to determine your quiz grade. Your lowest quiz grade will be dropped.

Homework: Homework will be assigned most lectures. The homework will be on the material covered that day. All homework assigned during a given week will be due the following Monday. The lowest homework grade will be dropped.

Some weeks I might feel like switching things up a bit, and I may have us do some group work in class which I want written up. This will be graded like regular homework, and I'll explain in detail what I expect.

For the time being, homework will be written. However, I am in the process of setting up a WileyPLUS account for our class. Once this is up and running, I'll give you the details on how this works.

Exams: There will be two seventy-five-minute midterm exams and one (I believe) two-hour final exam. *Calculators are not allowed on my exams, but they may be allowed on the final--I have to check with the department.*

□ I have not yet decided on the dates for each of the two exams. I will let you know the exact date at least 3 weeks in advance, and I will let you know the exact material is covered at least 1 week in advance.

The final exam will be cumulative. *There is a departmental requirement that a student must earn a grade of 40% or greater in order to pass the course: in other words, you must have a passing grade*

Homework	15
Quizzes	15
Midterm I	20
Midterm II	20
Exam	30

OVERALL and at least a 40% on the final to pass. The time and location will be determined later in the semester; I will inform you as soon as I have this information.

Makeup policy: Except in extreme circumstances, I do not accept late work, nor do I give make up quizzes. If you think you qualify for “extreme circumstances”, talk to me or otherwise contact me *prior to or on the day of the quiz/the day the work is due/whatever*; I will not be so forgiving if you contact me the next day or later. If you know you are going to be missing a lecture, recitation period, or, most importantly, an exam, *let me know 2 weeks in advance and we can work something out*. If you have regular obligations that may affect your work in this class, *let me know now!* If you wait, I will not be willing to compromise.

Academic integrity: None of you are going to cheat in this class, so this is superfluous, but please be aware of CUNY’s policies on academic dishonesty (<http://web.cuny.edu/academics/info-central/policies/academic-integrity.pdf>). I don’t mind if and in fact encourage you to work on homework together, but when it comes to quizzes and exams, you’re on your own.

Course description: We will cover three broad topics in this course. In all cases, we’ll cover many applications in order to see how these ideas can be used in the real world.

1. *Linear Programming:* Linear equations model a surprising number of real world phenomena, and we have very systematic ways of dealing with these equations, so it’s often useful to reduce a problem to linear equations and use the techniques we will cover here. Specifically, linear programming seeks to maximize or minimize a quantity with respect to some constraints. We’ll see that there’s a nice geometric way of solving these problems.
2. *Probability:* Probability allows us to quantitatively describe the likelihood that an event will occur. We will learn how to calculate probabilities for a wide variety of scenarios using powerful counting techniques.
3. *Statistics:* Find some poll results in a newspaper, and you’ll often see something called a “margin of error”. What exactly does this mean? We’ll explore some of the basic notions of statistics and explore a few different statistical models which are commonly used in the real world.

Possible syllabus:

8/31	1.1	9/30	6.3	11/2	7.4	11/30	9.4
9/1	1.2, 1.3	10/5	6.4	11/4	7.5	12/2	9.5
9/9	2.1	10/7	Midterm I	11/9	8.1	12/7	9.6
9/14	3.1	10/14	6.5	11/11	8.2	12/9	Review/Catchup
9/16	3.2	10/19	6.6	11/16	Midterm II		
9/21	3.2	10/21	7.1	11/18	8.3, 8.4		
9/23	6.1	10/26	7.2	11/23	9.1, 9.2		
9/29	6.2	10/28	7.3	11/25	9.3		