Math 111 Exam 1 Statistics


Quartile 143 86\% about a 3.4
Median $38 \quad 76 \%$ about a 2.8
Quartile $3 \quad 32$ 64\% about a 1.9

Math 111 Current Grade Stats


Quartile 1
3.4

Median 2.9
Quartile $3 \quad 2.1$

## Comments:

General Grade Stuff: The word "median" means the middle. If there were 400 students, then the median would be the $200{ }^{\text {th }}$ best score in the class.
The median for a class like this is supposed to be about 2.9. So the gradescale will be based partially on the performance of the class as a whole (students would say that grades are "curved").
Thus, if you want above a 2.9 in the class, then you need to score above the median on the exams and homework.
The lowest grade we can give is a 0.7 (which is typically what you get for earning only $50 \%$ of the points in a class) anything below this is a 0.0 .
If you want to get above 2.0 in this class, then you typically need to be averaging above $70 \%$ on the exams.
More information on grades and gradescales can be found on my course website and in the syllabus.

1. Exam Grading Complaints: If you have grading questions (about partial credit), first review the solutions and do the online survey. Then if you still have questions, bring them to me at the beginning or end of lecture or during office hours and I will ask you to indicate the problem in question and I will take your exam and review it at a later time. Remember that the grading was consistent, the same TA graded page 1 for all students, the same TA graded page 2 for all students, the same TA graded page 3 for all students, and I graded page 4 for all students. So you were graded the same way everyone else was graded. The TA's grade using my detailed instructions and from what I have seen the TA's were quite lenient within the instructions I gave them. In very rare cases, a grader sometimes miss-tallies or misses seeing some work. In these rare cases, I definitely want you to come to me and l'll take a look at it. But don't just come to me asking for more points, remember you were graded the same as everyone else.
2. Worried about your grade: If you are unhappy or distraught about your current grade, then do better on the other exams and your grade will go up. There are a lots of points left and I do take improvement into account. For example:

If you have a 0.0 now, you still can get above a 3.0. If you have a 2.0 now, you still can get above 3.5.
So if you did very poorly on exam 1, is it possible for you to still get a good grade? YES, but you must do better on the other exams.
Most often students get similar scores on all three exams. If you don't want this to happen, then you will need to dramatically change how you approach the course and the exams.
3. How do I study: Reread my advice about studying if you are unsure how to do better. I gave a handout the first day of class. I also gave a handout in the two lectures before the exam about what to study. And I have been giving advice in my weekly newsletters (with practice exam problems to look at each week). So I already have given you everything you need to know to succeed. Revisit those resources now and perhaps they will mean more to you. In brief:
a. Treat each homework problem like an exam problem. I notice that only about $25 \%$ of the class actually reviewed the homework the week before the test (I can see this on Webassign). Everyone should be reviewing the homework the week before the exam.
b. Once a week, look at the old exam problems I mention in my newsletters to check in on your understanding.
c. At least one week before the test work through 3-4 old exams (and show me or your TA your work). Time yourself on the problems.
d. Leading up to the exam, review homework and look through more old exams.
4. Exam Review: Every quarter, some students come to me or email me and say "the exam wasn't like those in the archive, it wasn't fair." I already got several such responses on the notecards last week. There actually were more notecards (about 30) that said the exam was easier than expected, but there still were about 10 notecards that said the exam was harder than those in the archive (one notecard said that studying the exam archive was a complete waste of time; I cannot disagree with this statement more). This thinking is not constructive and will not help you in this course. This exam was easier (had better statistics) than several other exams in the exam archive when those exams were given. It just simply is not true that this exam was harder than old exams. It isn't about the exam. You took the same exam as all your classmates and your grade is partially based on the median for the class, so whether the exam was easy or hard is irrelevant. We have to get rid of excuses, don't blame the exam or the time or other distractions, instead prepare well and ace the next test. See the next page for an exam review.

Here is a brief run through of the test so you can see how we make exams for this class:
Page 1: Given TC and VC. The question asks about BEP, TR, MC and AC. These are the biggest key concepts we discussed. This is nearly identical to homework and every old exam. There should have been no surprises; I intended this to be a very fast page. At least 5 different times in lecture, I said outright that you would have compute marginal cost on the exam and that you would be given a price so you could draw total revenue. If you didn't catch those huge hints from class, then you weren't coming to class or weren't paying attention. But you see that I kept my promise that these were on the test.

Page $\mathbf{2}$ was IDENTICAL to homework from Supplement 5. It was the same graph and same notation! I was hoping this would make the problem faster for you. The last two parts were word-for-word the same as homework. I promised that I would take a few problems directly from homework as a reward for those that reviewed the homework and took the homework seriously. This problem also tested the key concepts of notation and rates.

## Page 3:

$1^{\text {st }}$ problem: An increment graph. You need to read off individual dots correctly. We did many such problems in review, in class and in the homework. A couple students told me they thought this was tricky, but I was not trying to be tricky, there is nothing tricky here. You had many incremental graphs in homework and you will see many incremental graphs in old exams.
$2^{\text {nd }}$ problem: Very similar to many old exams and homework. Basic algebra skills like we did in 1.1, 1.2, 1.3, and 1.6 were needed. This should not have been a surprise. Every old exam has a problem that requires algebra like this.

## Page 4:

$1^{\text {st }}$ problem: Given MC, AC, AVC graph. We talked about this a lot in lecture, in old exams and in homework. The one hard part might have been finding FC, but you did an identical thing on the homework, so you had seen it before.
$2^{\text {nd }}$ problem: IDENTICAL nearly word-for-word from a homework problem in 1.1. We also did something similar in lecture. A few students said the wording confused them. That is why I took the wording directly from homework so there wouldn't be confusion.

## Observation and Closing Notes:

As you hopefully see, if you organize the material and practice with homework and old exams, then you definitely would have seen all these concepts many, many times in your studying. In this class, the exam problems will be just like the homework problems, there won't be surprises (unlike the regular Math 124/5/6 calculus series where students are often asked to adapt the concepts to a new scenario on the test). So everyone can and should do well on the exams in this class. But you must prepare, you must study.

Again, I noticed that only about $25 \%$ of the class re-opened the homework when they were studying and I only had a handful of students come to my extended extra office hours on the Friday and Monday before the exams (only 5 came to my extended office hours on Friday afternoon before the test). You can't tell me now that your grade is really important to you if you weren't even willing to open the homework to study or come to office hours to ask questions. If you were worried about your grade, then you should have been studying and coming to these extra office hours!

That all being said. No one is doomed to a bad grade. Some students just need to take an exam before they understand what needs to be done. And some students have a weak background in math, so they will have to work extra hard. But everyone can do well in this class. But you have to study. Let's get these numbers up, more of you should be reviewing homework and more of you should be reviewing old exams and homework. I want everyone to get $100 \%$ on the next test and I'll do everything I can to get you there, but you'll have to put in some hard work to meet me halfway.

