

Syllabus for Mathematics 122, Section H01, Spring 2015

TIME AND PLACE: MWF 1:10–2:00pm 202 Callcott Social Sciences Center
INSTRUCTOR: Ralph Howard OFFICE: LC 352 PHONE: 777-7471
OFFICE HOURS: TWTH 2:30–3:30pm and by appointment.
TEXT: *Applied Calculus* (7th ed) Hughes-Hallet, Gleason, Lock, Faith, et al., Wiley, 2022

Homework and quizzes: Homework will be assigned each class period and there will be a quiz at the end of each class based on the homework. Sometimes problems will be collected, but you will be told which ones at the time they are assigned.

Grading: There will be three hour exams of 100 points each. Homework and quizzes will count for 100 points. The Final will count for 150 points. There will be in class quizzes that will be included as part of the homework grade. There will also be points for doing problems at the board in class.

Three midterms @100 points each	300 points
Final	150 points
Homework (includes quizzes)	100 points
Total	550 point

The grade will be based on the total number of points out of the 550 points. *Note that the homework and quizzes count as much as a test so it is important to spend time on the homework.* Letter grades will be assigned to all the tests. The last day to drop without a WF is Monday, March 30 and you should have a good idea of where you stand by then.

There will be no make up exams. If you miss a test, then your score on that exam is 90% of the average of your other test scores (including the final). As an example suppose you get 96 on the first two tests and 144 on the final but missed the third exam. Your average is then

$$\frac{96 + 96 + 144}{3.5} = 96.$$

So the score on the third exam is 90% of 96 which is 86.4. Assume your quiz average is 90% and 90% of 100 is 90. Then the total for the class is

$$96 + 96 + 86.4 + 144 + 90 = 512.4 \quad \text{out of 550}$$

So the average is

$$= 93.1\%$$

and you still get an A. If you miss a second exam then the score on it is zero.

This can work to your advantage even if you do not miss an exam. Suppose you had test scores of 96, 96, 65 on the midterms and 144 on the final. In this case you would have been better off just not taking the third exam. In this case I would replace the 65 with 90% of your average on the other exams and the 65 would get replaced with 86.4.

Likewise **no late homework will be accepted.**

The exams will be on the following days:

Test 1 Wednesday, February 12
Test 2 Wednesday, March 19
Test 3 Monday, April 21
Final Friday, May 2 12:30pm

Learning Outcomes:

- Recall basic mathematical terms related to elementary algebraic, exponential, and logarithmic functions, and derivatives and integrals of such functions and express these terms in correct context.
- Apply the methods of calculus to solve applications involving maxima, minima, rates of change, motion, work, and area under a curve.
- Verbally interpret data given as graphs, tables, and equations and put into words the relationship between a function and its derivative or integral given in these forms as well.
- Utilize a graphing calculator to solve problems, locate maxima and minima of a function, and analyze change in a function.