S08

MA 220 – EXAM 2 INFORMATION

Exam 2 is an evening exam on Tuesday, February 26, at 8:30 p.m. in the Elliott Hall of Music. Your instructor will assign seats for your class and only he/she will know your assigned seat. (The course web page only shows the section where your class will be sitting.) If you arrive more than 30 minutes late, you will not be allowed to take the exam. Rather, you will have to get an alternate exam form from your instructor and will receive a 20 point penalty on the alternate exam (unless a documented emergency prevented you from arriving on time).

The exam consists of 13 multiple-choice questions, and "None of the above" is not used as a choice. There are no formulas provided on the exam. You will have one hour and fifteen minutes to complete your work. **Only the scantron answer sheet will be graded**, so be very careful in coding your answer choices. No regrades will be allowed for miscoded/uncoded answer sheets.

Late the following Thursday (or Friday), your exam score will be available via a link on the course web page (not on Blackboard). Letter grade estimates will be announced in class and will also be available via a link on the course web page.

To request an alternate exam, you must see your instructor as soon as you know you will miss the exam, or have missed the exam. Do not wait to contact your instructor. If you will miss the exam due to a class or exam conflict, you will need to provide your schedule/exam date information. If you miss the exam due to serious personal illness or family emergency, you will need to provide documentation. If you miss the exam for another reason, you may be allowed to take an alternate, but it will be with a 20 point penalty.

The alternate exam will take place on Wednesday, March 5, at 6:00 p.m. You must obtain an alternate exam form (blue slip) from your instructor **and** take it to MATH 242 to sign up for the alternate.

Your instructor will provide a set of review problems. Be sure that you also study all of the homework problems and the in-class examples. A sample exam from last semester is available online for practice. However, keep in mind that the exam may not cover exactly the same material as this semester's exam (exam dates vary from semester to semester) and that the difficulty level may differ slightly. You should also be aware that one or two problems on the exam may not be exactly like a homework problem. These problems are intended to see if you can apply what you have learned to a situation that is slightly different from what you have seen.

Class on Friday, February 22, is not optional. However, class on Monday, February 25, is optional to compensate for the evening exam.

MA 220 – Topics List

I. Finding the slope/equation of a line
   - Given the slope and/or a point(s)
   - In word problems

II. Evaluating a function when the input is not numeric
- For example: $\dfrac{f(x+\Delta x)-f(x)}{\Delta x}$

III. Composition of functions

IV. Finding limits
- Using a table
- From a graph
- By direct substitution
- By factoring and canceling
- In the definition of derivative (limit of a difference quotient)

V. Finding values where function is not differentiable
- Using a graph

VI. Using derivative rules
- Power rule
- Product rule
- Quotient rule

VII. Applications using the derivative
- Finding the slope/equation of a tangent line; finding point(s) where slope of a tangent line has a given value
- Finding the rate of change of a function
- Finding a marginal function and its use in estimating actual change
- Finding velocity
- Finding the value of a derivative at a given point

VIII. Applications not using the derivative
- Finding the *y*-value of a point
- Finding the average rate of change
- Finding the actual change
- Estimating the slope of a graph at a point using a grid
- Estimating the average rate of change and rate of change of a function using a grid

NOTE: Lesson 11 is more practice on solving equations by factoring. Since this was covered on Exam 1, it will not be on this exam except when it is a tool to solving another type of problem.