S08

MA 221 – EXAM 2 INFORMATION

Exam 2 is an evening exam on Monday, March 3, 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 Wednesday (or Thursday), 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 29, is not optional. However, class on Monday, March 3, is optional to compensate for the evening exam.

Topics List

I. Trigonometric Functions
- Evaluating trig values using special angles and quadrant signs
- Rewriting expressions in terms sin and cos; converting between sin and cos
- Derivatives of trig functions

- Combining derivatives of trig functions with previous derivative rules
- Applications involving derivatives of trig functions
- Finding the second derivative of a function having a trig term

II. Graphing applications of the derivative (no trigonometric terms in the function)
- Intervals increasing and decreasing – from graph and from function expression
- Relative extrema (minima and maxima) – from function expression
- Concavity – from graph and from function expression
- Inflection – points from function expression

III. Sketching a graph using information from 1^{st} and 2^{nd} derivatives

IV. Other applications of the derivative (no trigonometric terms in the function)
- Finding a maximum or minimum in word problems
- Finding a related rate – from given rates and in word problems