## MA 223 – EXAM 2 INFORMATION

Exam 2 is an evening exam on Wednesday, October 17, at 8:30 p.m. in the Elliott Hall of Music. Your instructor will assign seats for your class and <u>only</u> he/she will know your assigned seat. (The course web page only shows the section where your class will be sitting.) Students arriving more than 30 minutes late to the exam will not be allowed to take the exam. Rather, they will have to get an alternate exam form from their instructor and will receive a 20 point penalty on the alternate exam.

The exam consists of 13 multiple-choice questions, and "None of the above" is <u>not</u> used as a choice. The only formulas provided on the exam are volume and surface area formulas (see separate formula page link). 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. <u>No regrades</u> will be allowed for miscoded/uncoded answer sheets.

Late the following Friday (or Monday), your exam score will be available via a link on the course web page (<u>not</u> on WebCT). 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 <u>as soon as</u> you know you will miss the exam, or have missed the exam. Do <u>not</u> 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 <u>may</u> be allowed to take an alternate, but it will be with a 20 point penalty.

The alternate exam will take place on Monday, October 22 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. Class on Monday, October 15, is not optional. However, class on Wednesday, October 17, is optional to compensate for the evening exam.

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.

**Topics** List

## I. Finding derivatives

- Using the power, constant multiple and sum rules
- Using the product rule
- Using the quotient rule
- Using the chain rule both directly and using related functions
- Using implicit differentiation
- Higher order derivatives

- II. Applications of the derivative
  - Finding the slope/equation of a tangent line; finding point(s) on a graph where the tangent line is horizontal
  - Finding the rate of change of a function
  - Finding a marginal function; its use in estimating actual change
  - Using increments to approximate the change in a function
  - Finding velocity and acceleration
  - Finding a related rate
- III. Applications not using the derivative
  - Finding the *y*-value of a point
  - Finding the actual change in a function