

MA 223 – EXAM 2 INFORMATION

Exam 2 is an evening exam on Monday, March 5, 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.) 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 penalty on the alternate exam.

The exam consists of 13 multiple-choice questions, and “None of the above” is not 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.

Late the following Wednesday (or Thursday), your exam score will be available via a link on the course web page (not 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 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 penalty.

Your instructor will provide a set of review problems and other information about the exam. Class on Monday, March 5, is an optional review day to compensate for the evening exam.

Sample exams from previous semesters are available online for practice. However, keep in mind that the exams will 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 somewhat.

Topics List

- I. Finding derivatives
 - Using the product rule
 - Using the quotient rule
 - Using the chain rule – both directly and using related functions
 - Using implicit differentiation
 - When a function is defined in terms of other differentiable functions
(see problems 31-34, page 183; problems 55-57, page 198)
 - Higher order derivatives

- II. Applications of 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; its use in estimating actual change
- Finding velocity and acceleration
- Finding a related rate
- Using differentials to approximate the change in a function

III. Applications not using the derivative

- Finding the y -value of a point
- Finding the actual change
- Finding the average cost function