Calculus III *Fall 2004*
MA213:007–008 *Russell Brown*

ANNOUNCEMENTS.

- The final exam will be 1-3pm on Wednesday, 15 December 2004 in our regular (lecture) classroom, CB 349. Please visit http://www.uky.edu/Registrar/finals-fall.html for the University final exam schedule. The time listed in the course calendar is not correct.
- Please read the syllabus to find out if you may use your calculator on the exam.
- You will be allowed one 8.5 by 11 sheet of handwritten notes for the final exam.
- The final exam will be cumulative, but with an emphasis on the material covered since the second exam. I expect that approximately 50% of the final exam will cover sections 14.1 to 14.8. The remainder of the exam will be taken from the material from the first two exams as described in the review sheets for these exams.
- Most of the final exam will consist of problems as in the first two exams. However, there will be a section of short answer questions, also.

REVIEW QUESTIONS AND PROBLEMS.

1. Be familiar with the following terms: conservative vector field, positively oriented simple closed curve, open set, closed set, connected set, simply connected set, curl, gradient, divergence, positive orientation on a curve which is the boundary of an oriented surface, path independence, curl, divergence, integrals of vector fields along curves and over oriented surfaces, Green's theorem, Stokes theorem, the divergence theorem in two dimensions.
2. The following problems from the homework will are examples of the types of questions that will be used to examine your mastery of the material in Chapter 14.

   §14.1 #5, 21, §14.2 #19, 27, §14.3 #15, 19, 26, 30. §14.4 #11, 21. §14.5 #13, 25, 34. §14.6 #5, 27. §14.7 #3, 18. §14.8 #3, 8.

December 6, 2004