MATH 022.H – Calculus II / Spring 2009

Textbook: Calculus (Early transcendentals), by J. Stewart, 6th Ed.

Class Meets: MWF: 12:50 – 1:40 and R: 1:00-2:15 (205 Votey)

Instructor: Dr. Taras I. Lakoba, Math & Stats Bldg. (16 Colchester Ave.), Room 405 656-2610, lakobati@cems.uvm.edu, http://www.cems.uvm.edu/~lakobati

Office Hours M & W: 3:30 – 5:30 and by appointment.

Important deadlines: Add/Drop and Pass/no Pass: January 26; Class withdrawal: March 30.

Course contents Verbal description: Planar area, volume, arclength, and surface area; Work; Center of mass; Integration techniques; Approximate integration; Improper integrals; Sequences and series and their convergence tests; Taylor, Maclaurin, and power series; Definitions of conics; Parametric equations of curves; Polar coordinates; First-order differential equations, separation of variables, first-order linear differential equations, exponential growth and decay models. By Section: Chaps. 6 – 8 (Secs. 8.4, 8.5 if time permits), Chap. 9 (except Secs. 9.2, 9.6), Chap. 10 (Secs. 10.5, 10.6 if time permits).

Homework Homework is posted on the website listed above. It will be considered as assigned at the end of each covered section. The purpose of the homework is to help you master the techniques covered in class. As such, homework problems will be substantially based on examples considered in class. Therefore, you should use your notes and the book when you do the homework. See the instructor for help as soon as you find out that you are having difficulty with the homework. Homework will not be graded. However, both quizzes and tests will be substantially based on the homework problems.

Computer work We will do about eight Mathematica Labs. We will start them in class, and you are expected to complete the Labs outside of class. Unlike the regular homework, these Labs will be graded. Please review an important note, posted on the website, about my policy on grading the Labs and on helping you with them during the office hours. Using Mathematica when doing regular homework problems is encouraged but not required.

Tests and Quizzes (a) There will be 3 (three) in-class tests during the semester. Their dates will be announced in class at least a week before each test. Make-up exams will be given only to those students who have documented excused absence. (b) The date and time of the final exam will be posted online when it is determined by the Office of the Registrar’s. It will be held in 205 Votey. (c) Quizzes, sometimes unannounced, will be given approximately once a week. The quizzes will be based on homework problems assigned at least 3 calendar days ago. You are encouraged to ask which section’s homework will be covered in the next quiz. (Note: The first quiz will be based on the contents of this syllabus.) The main purpose of the quizzes is to help you monitor how well you are doing in the course. If you receive a low grade on a particular quiz, it is a flag that you need to review the corresponding material. A structured, 3-step process of such a review is posted on the course website. If you receive a few low quiz grades in a row, see the instructor for help as soon as possible.

Grading policy The first in-class test will be worth 13%, and the other two — 15%, of the final grade. All quizzes combined will be worth 17% of the final grade. All Labs combined will be worth 11% of the final grade. The final exam will be worth 29% of the final grade. Extra credit may be earned as explained below.

Note: I do NOT drop your lowest grade. Thus, ALL the grades that you earn during the semester will contribute to your final grade, as detailed above.

Academic integrity You are expected to read and understand the UVM Academic Honesty policy, found at http://www.uvm.edu/~uvmppg/PPG/student/academicintegrity.pdf.

Attendance Attendance will be monitored randomly. If the record shows that you have attended at least 90% of monitored classes, you will get a bonus equivalent to one half of your highest quiz grade (starting with Quiz 4) added to the final grade.

Extra credit Additional homework, which is considered an extra credit, may be assigned occasionally. These assignments will be graded (on a coarse scale). No penalty will be given if you choose not to do these extra credit assignments. Before you decide to do a particular extra credit assignment, please review more detailed instructions found on the course website.

I also reserve the right, at my sole discretion, to increase the final grade of any student by one level (e.g., from B- to B) for a demonstrated achievement, some examples of which are: active and constructive class participation, regular and active attendance of office hours, excelling on the final exam, being the “most improved” student in terms of performance or attitude, etc.

Special accommodation Students with disabilities who require special accommodation must notify the instructor of their needs within the first two weeks of the semester. They must also provide a formal letter from the Office of Specialized Student Services.