

MATH 2720
Multivariable Calculus, Winter 2009

Instructor: Sasho Kalajdzievski
434 Machray Hall; **Phone:** 474-6929; **email:** sasho@cc.umanitoba.ca

Lectures: Tuesdays, Thursdays 8:30-9:45, 111 Armes

Office Hours: Mondays 10:30-11:30, Tuesdays 9:55 -10:55 A.M. or by appointment.

Text: Multivariable Calculus, by James Stewart, Sixth Edition. You may also use the large book *Calculus Early Transcendentals*, Metric international version, or the Fifth Edition, all by the same author. Ask me if you are not sure.

Evaluation (tentative): The final grade will be calculated according to the following formula:

1. Two tests, each worth 20%
 - Term Test #1: Wednesday, February 11, 5:30-6:30
 - Term Test #2: Wednesday, March 11, 5:30-6:30
2. The final exam given in April, worth 60%.

Course Outline 6th Edition:

Review (sections 12.1 - 12.5)
12.6 Quadric Surfaces
13.1-13.3 Vector Functions, Derivatives and Integrals of Vector Functions, Arc Length, Curvature
13.4 Motion in Space (briefly)
14.1-14.8 Functions of several variables; this chapter is the core of the course.
15.1-15.6 Double Integrals (Sections 15.5 and 15.6 will be covered partially).
16.1-16.4 Vector Fields, Line Integrals and Greens Theorem (time permitting).

Course Outline 5th Edition:

Review (sections 13.1 - 13.5)
13.6 Quadric Surfaces
14.1-14.3 Vector Functions, Derivatives and Integrals of Vector Functions, Arc Length, Curvature
14.4 Motion in Space (briefly)
15.1-15.8 Functions of several variables; this chapter is the core of the course.
16.1-16.6 Double Integrals (Sections 15.5 and 15.6 will be covered partially).
17.1-17.4 Vector Fields, Line Integrals and Greens Theorem (time permitting).

VOLUNTARY WITHDRAWAL DEADLINE: March 19, 2009 (you should double check this)

Web pages:

1. Courses page:

<http://server.maths.umanitoba.ca/homepages/sasho/>

(courses new and old, contains all of the links listed below)

2. A page for this course, this section:

to come (will be linked from the main page above).

3. Discussion Page:

<http://home.cc.umanitoba.ca/cgi-bin/discus/discus.cgi>

(a place to ask questions and get answers; already contains hundreds of posts; check it out)

4. WebMathematica: a link can be found in the above pages or through the main webMathematica page at

<http://webware.cc.umanitoba.ca:8080/webMathematica/MY.html>

The Department of Mathematics, the Faculty of Science and the University of Manitoba regard acts of academic dishonesty in quizzes, tests, examinations or assignments as serious offenses and may assess a variety of penalties depending on the nature of the offense.

Acts of academic dishonesty include bringing unauthorized materials into a test or exam, copying from another student, plagiarism and examination personation. Students are advised to read section 7 (Academic Integrity) and section 4.2.8 (Examinations: Personations) in the "General Academic Regulations and Requirements" of the current Undergraduate Calendar. ***Note, in particular that cell phones and pagers are explicitly listed as unauthorized materials, and hence may not be present during tests or examinations.***

Penalties for violation include being assigned a grade of zero on a test or assignment, being assigned a grade of "F" in a course, compulsory withdrawal from a course or program, suspension from a course/program/faculty or even expulsion from the University. For specific details about the nature of penalties that may be assessed upon conviction of an act of academic dishonesty, students are referred to University Policy 1202 (*Student Discipline Bylaw*) and to the Department of Mathematics policy concerning minimum penalties for acts of academic dishonesty.

The *Student Discipline Bylaw* is printed in its entirety in the Student Guide, and is also available on-line or through the Office of the University Secretary. Minimum penalties assessed by the Department of Mathematics for acts of academic dishonesty are available on the Department of Mathematics web page.

All Faculty members (and their teaching assistants) have been instructed to be vigilant and report incidents of academic dishonesty to the Head of the Department.