

136.272
Multivariable Calculus, Fall 2005

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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:

<http://server.maths.umanitoba.ca/homepages/sasho/CurrentCourses/272/272-Fall-2002.html>

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 Page for this course; 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 page is equipped with easy to use interactive scripts related to this course; check it out.)

Office Hours: Mondays 9:30-10:20, Tuesdays 11:25 -12:25 A.M. or by appointment.

Text: Multivariable Calculus, by James Stewart, Fifth Edition. You may also use the Fourth Edition.

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

1. Four take-home assignments, each worth 2.5% for a total of 10%.
2. A mid-term test worth 30%, **October 26, 5:30-6:30**
3. A final exam given in December, worth 60%.

Course Outline 5th Edition:

Review (sections 13.1 - 13.5)

13.6 Quadric Surfaces

13.7 Cylindrical and Spherical Coordinates

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).

Course Outline 4th Edition:

Review (sections 12.1 - 12.5)

12.6 Quadric Surfaces

12.7 Cylindrical and Spherical Coordinates

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).

Voluntary Withdrawal: November 16, 2005 is the last date for voluntary withdrawal .

Academic Regulations and Policy: You are advised to read the Academic Regulations and Policy section in the General Calendar, particularly the items on Plagiarism and Cheating.