

DEPARTMENT OF MATHEMATICS

MATH 1520 Calculus for Management and Social Sciences

Fall 2009

Sections:	A01 Developmental Section	A02
Instructors:	Darja Kalajdziewska	G.I. Moghaddam
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Office:	427 Machray Hall	429 Machray Hall
Office Hours:	Tues. 11:00 a.m.-12:30 p.m., Wed. 11:20 a.m.-12:20 p.m., and Fri. 11:20 a.m.-12:20 p.m..	Mon.1:30 - 2:30 p.m., Wed. 10:30 - 11:30 a.m. and Fri. 11:20 a.m.- 12:20 p.m. or by appointment
Lectures:	305 St. Paul's College 12:30 p.m.-1:20 p.m. M/W/F, and 11:30 a.m.- 12:20 p.m. Th	225 St. Paul's College 10:00 a.m.-11:15 a.m. T/R
Labs/Tutorials	One of the following (Tuesdays):	One of the following (Wednesdays):
(required)	B01- T, 11:30 a.m., 419 Machray Hall	B04- W, 8:30 a.m., 385 University College
	B02- T, 11:30 a.m., 305 St. Paul's College	B05- W,10:30a.m., 385 University College
	B03- T, 11:30 a.m., 124 Machray Hall	B06- W, 12:30 p.m., 419 Machray Hall
		B07- W, 2:30 p.m., 419 Machray Hall

TEXT: Calculus with Applications (Brief version), 9th edition by Lial, Greenwell and Ritchey, Addison Wesley, 2008. (Note: Older editions are also acceptable.) A list of suggested homework problems for the 9th edition is attached. A booklet of old midterm and final exams with solutions (available in the bookstore).

WEBPAGES: <http://home.cc.umanitoba.ca/~moghadm/Math1520> (A01 and A02)
<http://server.maths.umanitoba.ca/homepages/kalajdzi> (A01 only)

TUTORIALS AND QUIZZES: Beginning on September 17, there will be a tutorial/lab each week. There will be five quizzes held in the tutorial classes, written approximately every two weeks.

MIDTERM EXAM: There will be a mid-term test on **Tuesday, October 27, 2009 at 5:30 p.m.** No make-ups or deferrals are permitted except for reasons the university normally finds acceptable for absence from a formal final exam.

GRADING: (calculators cannot be used for quizzes and exams):
 Best four out of five quizzes (and assignments for A01) 10 % , Mid-term test 30 % and Final exam 60 %.

Section A01 is a developmental section with an additional teaching period per week, for a total of four teaching periods each week. This will enable us to do some review of relevant high school materials as well as more examples of the new topics.

As in other section, students in the developmental section will be required to write a final exam, a midterm exam and five quizzes. However, in addition, there will be four assignments. These are to be handed in for grading. The assignments and quizzes will count for 10 % of the final grade with the assignments being weighted 5% and the average of the best four out of five quizzes accounting for the remaining 5%.

VW (voluntary withdrawal) DATE: Wednesday, November 18, 2009.

Text: Calculus with Applications (Brief version), 9th edition by Lial, Greenwell and Ritchey, Addison Wesley, 2008

Course Outline and Suggested Homework Exercises

Chapter and Section	Topic and page numbers	Suggested Exercises
R.1 (A01 only)	xxvii	all odds numbers
R.2 (A01 only)	xxx	all odds numbers
R.4 (A01 only)	xxxiv	1 – 7 odds
1.1	15–20?	1–35 odds, 39, 41, 63
1.2	28–30	1–39 odds
2.1	66–68	1–49 odds, 55 – 73 odds, 77, 79, 83(rough sketch in (c))
R.4 (A01 only)	xl	9, 11, 13, 19, 27, 29, 35
R.6 (A01 only)	l	1 – 23 odds, 31, 35, 45, 47
R.7 (A01 only)	liv–lv	1 , 7, 21, 23, 25, 27, 35, 37
2.4	106–110	1, 11, 13, 15, 17, 23, 31, 33, 35, 37, 39, 41,45, 47-a,b
2.5	121–125	1 – 63 odds, 67-a,b, 71(without graphing calculator), 77
2.6	133–136	1 – 25 odds, 27, 29, 31, 37, 39, 41
3.1	163– 167	1 – 51 odds, 57
3.2	175–178	1–6, 7–27 odds, 33, 35
3.3	189– 191	1, 5, 7, 9, 15, 23, 27, 29
3.4	210–215	1, 3–10,11–23 odds, 33–39, 49, 50, 53
3.5	220– 221	3–15 odds
4.1	248–253	1 – 45 (odds), 46, 51–55 odds
4.2	259–261	1 – 31 odds, 32, 36,, 39. 43
4.3	269–273	1, 3, 5 , 7, 11, 23–49 odds, 53,55,63
4.4	279–280	1–33 odds, 37,38,39
4.5	289–292	1–43 odds, 55,56,57
5.1	313–316	1–8, 9–35 odds, 40,41,45
5.2	327–329	1–8, 9–35 odds, 41
5.3	341–345	1, 7, 9 , 13, 17, 27–33, 37,39,41, 73, 93
5.4	354–356	3, 7 , 13, 15, 17,21, 25, 33–39 odds
6.1	372–373	1–9, 11, 15 , 17, 21, 23, 25, 27, 33, 35
6.2	382–386	1–25 odds, 28
7.1	438–439	1–5 odds, 57,59,65, 67, 69
7.3	458–459	15, 16
7.4	471–475	1, 3, 5 , 9, 11,13, 15, 17, 23, 31–43 odds, 51,52,57, 59
9.1	554	1, 3
9.2	566–567	1–45 odds,

HELP CENTRE:

Students can go for assistance with mathematical problems (on a first-come, first-served basis) to 318 Machray Hall. The Help Centre starts operation on September 21 and is open for most of each week-day (shorter hours on Friday). Students are also welcome to seek help from their instructors.

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 offences and may assess a variety of penalties depending on the nature of the offence.

Acts of academic dishonesty include bringing unauthorized materials into a test or exam, copying from another student, plagiarism and examination personating. 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.

Information concerning the Mathematics Diagnostic Test and Remedial Mathematics Program "Preparing for University Mathematics"

The Department of Mathematics has developed two new programs available **on a voluntary basis** to all students registered in Mathematics courses 1200, 1210, 1300, 1310, 1500, 1510, 1520, 1700 and 1710.

The diagnostic test is a voluntary online 50 question test, whose purpose is to measure your potential for success in the above Mathematics courses. The questions test your knowledge and skill in topics contained in the high school mathematics curriculum, principally Pre-Calculus 40S. The test provides you with an assessment of your knowledge and skill level, and provides advice about actions you should take in order to increase your chances of success in mathematical courses.

Access to the Mathematics Diagnostic Test is gained from your personal WebCT Homepage. (If you have not already done so, you must claim your UMnetID from the University's homepage at address "<http://pasweb.cc.umanitoba.ca/webapp/gu/claimid/>" in order to log on to your WebCT homepage.)

From your WebCT homepage select the link "Mathematics Diagnostic Test." Follow the instructions in order to complete the test, submit your test for grading, and immediately obtain results of your test. Finally, from your WebCT homepage, you should select the "Test Feedback" link, which will appear after you have submitted your test for grading. It will provide you with advice as how you should interpret the results of your test. If your results on the diagnostic test indicate that you would benefit by improving your mathematical skills, you should purchase a copy of the notes prepared for this purpose, entitled "Preparing for University Mathematics." The notes are available at the Bookstore. There are two methods in which you could use these notes to improve your mathematical skills and knowledge:

1. Self-study: carefully work through those sections of the notes in which weaknesses have been identified by the diagnostic test,
2. Enroll in one of the sections of the non-credit course MATH 0500 "Preparing for University Mathematics": this course will be offered on Saturday mornings (9:00 am until noon) during the first half of the term. Enrollment in each section will be limited to 25 students. During these sessions a graduate student from the Department of Mathematics will serve as a tutor, helping you and the other students registered in that section work your way through the course material.

It is very important to note that in order for the remedial course to be of any benefit, students must complete it as thoroughly and as quickly as possible, whether it be done by self-study or tutor-guided study.