Math 2100 Fall 2014 Syllabus

Section:	
Instructor:	MyMathLab Course ID:
Office:	
Office Phone:	
Email:	
Office Hours:	

COURSE DESCRIPTION

Math 2100 provides students with additional calculus concepts and techniques that are useful in business, life science and social science applications. Topics include basic integration, functions of several variables, partial differentiation, integration techniques and an introduction to differential equations.

PREREQUISITES

In order to satisfy the prerequisite requirements for Math 2100, students must satisfy ONE of the following criteria:

✓ C- or higher grade in Math 1320, Math 1400 or Math 1500 (or transferable equivalent)

Note: **Students who do not satisfy the prerequisite requirements will be dropped from Math 2100.** For transfer credits, it is the student's responsibility to provide appropriate documentation that these prerequisites are satisfied and to check that the corresponding documentation has been entered in the MU system.

TEXTBOOK AND ONLINE HOMEWORK ACCESS

The textbook for this course is *Calculus and Its Applications by Goldstein, Lay, Schneider and Asmar, 13th Edition*.

At a minimum, all students are required to have access to MyMathLab and the online eTextbook, ISBN 9781269605922.

Students who would like to purchase a **physical textbook**, access to MyMathLab and the online eTexbook should order ISBN 9781269607377.

CALCULATOR

In this course, students are required to have a **scientific calculator** for use on exams and quizzes; **graphing calculators are prohibited**. Any calculator with power functions, root functions, logarithms and exponential functions is sufficient. The MU Bookstore sells a number of inexpensive and acceptable scientific calculators. For example, the TI-30Xa is a standard scientific calculator which sells for around $14.99 at the MU Bookstore. Any of the calculators in the TI-30 series are acceptable for use on exams and quizzes in this course.

As noted above, **graphing calculators are not permitted** for use on exams or quizzes. For example, Texas Instruments graphing calculators, such as those in the TI-83 series, TI-84 series, the TI-86, TI-89, TI-Nspire and Voyage 200 are not permitted. Similarly, the Casio line of graphing calculators, such as the CASIO FX-9750G (or GA) Plus or CASIO CFX-9850GC Plus cannot be used.

Business and financial calculators such as the TI-BAII, TI-BA II Plus and similar models are not prohibited, but often have features which make them difficult to use without reading the manual.

It is very important that students remember to bring an appropriate, functioning calculator to each exam, and that they know how to use it. Instructors will not have extra calculators that can be borrowed, and students who take exams and quizzes without a calculator will not be graded by a different standard.

GRADING

Final grades will be based on 3 midterm exams, 1 final exam, 7-12 in-class quizzes (lowest score dropped) and 11 online homework assignments (lowest 2 scores dropped). Final grades will be weighted as follows:

Midterm Exams 45%
Final Exam 25%
Online Homework 15%
In-Class Quizzes 15%

EXAMS

Below is a summary of dates, times and sections covered on the midterm and final exams.

Exam	Day	Date	Time	Textbook Sections
1	Wednesday	24-Sep	Class Period	3.1-3.2, 4.1-4.6, 6.1-6.5
2	Wednesday	22-Oct	Class Period	7.1-7.6
3	Wednesday	19-Nov	Class Period	9.1-9.3, 9.6, 10.1-10.3
Final	Friday	19-Dec	7:30-9:30 AM	10.4-10.6, All

HOMEWORK

There will be 11 online homework assignments in this course. The two lowest scores for each student will be dropped and the remaining 9 assignments will account for 15% of each student's grade.

Online homework assignments will generally be due Tuesday mornings at 8:00 AM. After the deadline, online homework assignments 1-10 can still be submitted for 50% credit until 8:00 AM on Friday, December 12. Aside from dropping the lowest two scores and allowing students to submit homework assignments after the deadline for 50% credit, there will be no additional deadline extensions for online homework assignments.

There will be no online homework assignments due the week after each midterm exam.

In addition to online homework assignments, the course instructor will assign problems from the textbook for in-class discussion and exam preparation. Students are expected to work these problems prior to class. Please see the course calendar for a list of these problems.

QUIZZES (In Class)

There will typically be 7-12 in-class quizzes in this course. These quizzes will be timed, administered individually; students will not have access to notes and other materials. Quizzes will be administered at the instructor's discretion. The lowest score for each student will be dropped and the remaining quizzes will account for 15% of each student's grade.

No make-ups will be given for these quizzes except for University sponsored travel. Athletes who miss a quiz due to team travel must provide a letter or email from the Total Person Program or university sponsor. Any quizzes missed for this reason must be made up within one week.

CLASS ATTENDANCE

Attendance is vital to your success in this course. Students are expected to attend all scheduled class sessions and attendance will be taken regularly. Students who miss class for any reason are responsible for learning any material covered, obtaining any materials distributed and being aware of any announcements made by the instructor.

GRIEVANCE POLICY

If you have a complaint regarding this course or your instructor, please contact the **course coordinator**, **Nakhle Asmar** (asmarn@missouri.edu). You may also contact the Mathematics Department's Director for Undergraduate Studies, Professor Ian Aberbach (aberbachi@missouri.edu).

UNIVERSITY POLICIES

All University policies, rules and regulations are incorporated by reference into this course syllabus. You can find a statement of these polices rules and regulations in the M-book, available at http://studentlife.missouri.edu/mbook.php

Academic Dishonesty

Academic honesty is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards academic dishonesty as an extremely serious matter, with serious consequences that range from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, or collaboration, consult the course instructor.

Academic Dishonesty includes but is not necessarily limited to the following:

✓Cheating or knowingly assisting another student in committing an act of cheating or other academic dishonesty.
✓Plagiarism which includes but is not necessarily limited to submitting examinations, themes, reports, drawings, laboratory notes, or other material as one's own work when such work has been prepared by another person or copied from another person.
✓Unauthorized possession of examinations or reserve library materials, or laboratory materials or experiments, or any other similar actions.
✓Unauthorized changing of grades or markings on an examination or in an instructor's grade book or such change of any grade report.

Academic Integrity Pledge: Students are expected to adhere to this pledge on all graded work whether or not they are explicitly asked in advance to do so: "I strive to uphold the University values of respect, responsibility, discovery, and excellence. On my honor, I pledge that I have neither given nor received unauthorized assistance on this work."

The University has specific academic dishonesty administrative procedures. Although policy states that cases of academic dishonesty must be reported to the Office of the Provost for possible action, the instructor may assign a failing grade for the assignment or a failing grade for the course, or may adjust the grade as deemed appropriate. The instructor also may require

the student to repeat the assignment or to perform additional assignments. In instances where academic integrity is in question, faculty, staff and students should refer to Article VI of the Faculty Handbook. Article VI is also available in the M-Book. Article VI provides further information regarding the process by which violations are handled and sets forth a standard of excellence in our community.

University of Missouri-Columbia Notice of Nondiscrimination

The University of Missouri System is an Equal Opportunity/Affirmative Action institution and is nondiscriminatory relative to race, religion, color, national origin, sex, sexual orientation, age, disability or status as a Vietnam-era veteran. Any person having inquiries concerning the University of Missouri-Columbia's compliance with implementing Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans With Disabilities Act of 1990, or other civil rights laws should contact the Assistant Vice Chancellor, Human Resource Services, University of Missouri-Columbia, 130 Heinkel Building, Columbia, Mo. 65211, (573) 882-4256, or the Assistant Secretary for Civil Rights, U.S. Department of Education.

Accommodations For Students With Disabilities

If you need accommodations because of a disability, if you have emergency medical information to share with your instructor, or if you need special arrangements in case the building must be evacuated, please inform the instructor privately as soon as possible. Please see your instructor after class, or at his/her office. To request academic accommodations (for example, a note-taker), students must also register with Disability Services, S5 Memorial Union, 882-4696. This is the campus office responsible for reviewing documentation provided by students requesting academic accommodations, and for accommodations planning in cooperation with students and instructors, as needed and consistent with course requirements. Another resource, MU's Adaptive Computing Technology Center, 884-2828, is available to provide computing assistance to students with disabilities. For more information about the rights of people with disabilities, please see ada.missouri.edu or call 884-7278.

OTHER MATH 2100 POLICIES

✓Make-up exams will only be given to students who have an approved excuse. Approved excuses include the following: (a) the exam overlaps with participation in a University sanctioned athletic or academic event, (b) the student has a serious medical condition or (c) the student has a death in the immediate family. **Documentation is required for each of these circumstances.** Students must contact the course instructor to find out what documentation is required and to schedule a make-up exam.

Students who anticipate an exam conflict with any University sanctioned activity or University sanctioned travel should contact the course instructor at the beginning of the semester. Students who have a chronic medical condition that may cause them to miss exams without prior warning should contact the instructor at the beginning of the semester. **Students who become ill the day of the exam should immediately seek in-person medical attention for purposes of documenting the illness and their inability to take the exam.** Students who are informed of a death in the immediate family the day of the exam should immediately contact the course instructor.

Students who miss exams or who arrive more than 30 minutes late due to personal negligence will receive no credit.

✓Make-up exams will NOT be offered to accommodate the following: personal travel such as vacations, weddings or graduations; work schedules; court appearances; university events (other than sanctioned athletic or academic events) such as fraternity and sorority events, intramural sports or club activities.

✓Online homework deadlines will not be extended. Students should begin their assignments shortly after the relevant sections are covered in class.

Math 2100 Fall 2014
Calendar

	Date	Day	Lecture (Section)	Lecture (Topic)	Online Homework	In-Class Textbook Problems
Week 1	25-Aug	Mon	3.1/3.2	Product, Quotient, Chain Rules		3.1: 1,3,5,7; 3.2: 11,13,15,17
	26-Aug	Tue				
	27-Aug	Wed	4.3	Differentiation of Exponential Functions		4.3: 1,3,5,7,9,13,15
	28-Aug	Thu				
	29-Aug	Fri	4.5/4.6	Differentiation of Logarithmic Functions		4.5: 1,3,5,7,9
Week 2	1-Sep	Mon	Labor Day - No Class			
	2-Sep	Tue			HW 1 - Due 8:00 AM	
	3-Sep	Wed	6.1	Antidifferentiation		6.1: 3,5,7,13,15,27,31,37,43,45,47,49
	4-Sep	Thu				
	5-Sep	Fri	6.2	Definite Integrals - Net Change		6.2: 3,5,7,9,11,13
Week 3	8-Sep	Mon	6.2	Definite Integrals - Net Change		6.2: 15,17,25,31,33,37,39
	9-Sep	Tue			HW 2 - Due 8:00 AM	
	10-Sep	Wed	6.3	Definite Integrals - Riemann Sums		6.3: 5,9,15,17
	11-Sep	Thu				
	12-Sep	Fri	6.4	Areas In The XY-Plane		6.4: 1,3,5,7,11,13
Week 4	15-Sep	Mon	6.4	Areas In The XY-Plane		6.4: 15,17,19,21,27,29
	16-Sep	Tue			HW 3 - Due 8:00 AM	
	17-Sep	Wed	6.5	Applications of the Definite Integral		6.5: 1,5,7,11
	18-Sep	Thu				
	19-Sep	Fri	6.5	Applications of the Definite Integral		6.5: 21,25,29,31,33
Week 5	22-Sep	Mon	Review	Exam 1 Review		
	23-Sep	Tue			HW 4 - Due 8:00 AM	
	24-Sep	Wed	Exam 1	Exam 1		
	25-Sep	Thu				
	26-Sep	Fri	7.1	Functions of Several Variables		7.1: 1,3,5,11,15,23,25
Week 6	29-Sep	Mon	7.2	Partial Derivatives	**Last Day - Drop Without Grade**	7.2: 1,3,5,7,9,13,19
	30-Sep	Tue				
	1-Oct	Wed	7.2	Partial Derivatives		7.2: 21,23,25,37
	2-Oct	Thu				
	3-Oct	Fri	7.3	Minima and Maxima		7.3: 1,3,5,7,31
Week 7	6-Oct	Mon	7.3	Minima and Maxima		7.3: 11,13,17,19,21,33
	7-Oct	Tue			HW 5 - Due 8:00 AM	
	8-Oct	Wed	7.4	Lagrange Multipliers		7.4: 1,3,5
	9-Oct	Thu				
	10-Oct	Fri	7.4	Lagrange Multipliers		7.4: 7,9,11,17,19
Week 8	13-Oct	Mon	7.5	Method of Least Squares		7.5: 5,7,9,11
	14-Oct	Tue			HW 6 - Due 8:00 AM	
	15-Oct	Wed	7.6	Double Integrals		7.6: 1,3,9,11
	16-Oct	Thu				
	17-Oct	Fri	7.6	Double Integrals		7.6: 5,7,13,14
Week 9	20-Oct	Mon	Review	Exam 2 Review		
	21-Oct	Tue			HW 7 - Due 8:00 AM	
	22-Oct	Wed	Exam 2	Exam 2		
	23-Oct	Thu				
	24-Oct	Fri	9.1	Integration by Substitution		9.1: 1,3,5,7,9,13,15,23,25

Week 10	27-Oct	Mon	9.2	Integration by Parts		9.2: 1,2,3,4,7,9
	28-Oct	Tue				
	29-Oct	Wed	9.2	Integration by Parts		9.2: 11,13,19,21,23
	30-Oct	Thu				
	31-Oct	Fri	9.3	Evaluation of Definite Integrals		9.3: 1,3,5,7,11,13,15,16,25
Week 11	3-Nov	Mon	9.6	Improper Integrals		9.6: 1,3,5,13
	4-Nov	Tue			HW 8 - Due 8:00 AM	
	5-Nov	Wed	9.6	Improper Integrals		9.6: 15,21,23,25,33,35,39
	6-Nov	Thu				
	7-Nov	Fri	10.1	Solutions of Differential Equations		10.1: 1,3,9,11
Week 12	10-Nov	Mon	10.2	Separation of Variables		10.2: 1,3,5,7,9,13
	11-Nov	Tue			HW 9 - Due 8:00 AM	
	12-Nov	Wed	10.2/10.3	First Order Linear ODEs		10.2: 11,15,19,22,27; 10.3: 1,3,5
	13-Nov	Thu				
	14-Nov	Fri	10.3	First Order Linear ODEs		10.3: 7,9,13,15,17,21,23,25
Week 13	17-Nov	Mon	Review	Exam 3 Review		
	18-Nov	Tue			HW 10 - Due 8:00 AM	
	19-Nov	Wed	Exam 3	Exam 3		
	20-Nov	Thu				
	21-Nov	Fri	10.4	Applications of First Order Linear ODEs		10.4: 1,5,9
Week 14	24-Nov	Mon	Thanksgiving Break			
	25-Nov	Tue				
	26-Nov	Wed	Thanksgiving Break			
	27-Nov	Thu				
	28-Nov	Fri	Thanksgiving Break			
Week 15	1-Dec	Mon	10.4	Applications of First Order Linear ODEs		10.4: 13,15,19,25
	2-Dec	Tue				
	3-Dec	Wed	10.5	Graphing Solutions of Differential Equations		10.5: 7,10,13,15,19,20
	4-Dec	Thu				
	5-Dec	Fri	10.6	Applications of Differential Equations		10.6: 2,3,5,7
Week 16	8-Dec	Mon	10.6	Applications of Differential Equations	**Last Day-Withdraw From Class**	10.6: 9,11,13,17,19
	9-Dec	Tue				
	10-Dec	Wed	Review	Final Exam Review		
	11-Dec	Thu			HW 11 - Due 8:00 AM	
	12-Dec	Fri	Reading Day - No Class		HW 1-10 Late - Due 8:00 AM	
Finals	15-Dec	Mon				
	16-Dec	Tue				
	17-Dec	Wed				
	18-Dec	Thu				
	19-Dec	Fri		**Final Exam, 7:30 - 9:30 AM**		**Final Exam, 7:30 - 9:30 AM**