Syllabus for MATH 210
Calculus I, Summer 2013

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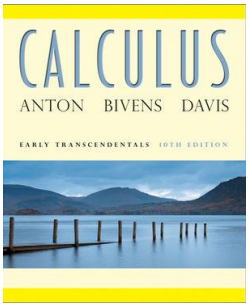
Lectures:

Section 1: Monday through Thursday, 9:10–11:00 am, School of Education Rm. 240
Section 2: Monday through Thursday, 5:30–7:20 pm, Katz Hall Rm. 10

Office hours: Monday through Thursday, 11:30 am – 12:30 pm or by appointment.

Required Course Materials

A. **Textbook:** *Calculus: Early Transcendentals* (10th edition), by Anton, Bivens, and Davis
ISBN 978-0-470-64769-1
Book + Wiley access code ~ $234 or
eBook + Wiley access code ~ $50



B. **Calculator:** A non-graphing scientific calculator is required for this course. Examples are Casio FX260SLR Solar Scientific Calculator ($ 8.97), Casio FX260HA Solar Scientific Calculator (~$11.47) , or Texas Instruments TI-30X IIS Scientific Calculator (~$12.97)

Notes: (1) Sharing calculators on exams or quizzes is not allowed.
(2) Please do not have notes, formulas, applications or programs in your calculator or on its cover. They are considered cheating and they will be reported.

C. **Access to Wiley Plus:** We will be using an online homework and online quiz systems supported by Wiley Plus, so you will be required to get an access code to Wiley. You may spend $50 to have access to the online homework, online quiz, eBook, and other resources for the class. When checking out you must enter the **promo code MKC01**. Here is how it works:

1. Go to the Wiley homepage https://edugen.wiley.com/edugen/secure/index.uni
2. Click Get Started in the Students section of the homepage. The Course Finder page will display.

3. On this page, enter, UNIVERSITY OF MISSOURI KANSAS CITY, in the search field
4. Courses and instructors for your school appear on the next page, organized by tabs.
5. Click the plus sign next the calculus tab. Choose your class section with Majid Bani-Yaghoub as the instructor, click the green play button.
6. The WileyPLUS log in screen will now appear, and provide details for the class you selected, along with the title of the WileyPLUS course material you will be using. If you have used WileyPLUS before and already have an account, enter your e-mail address and password and click log in. If you do not have a WileyPLUS account, click Create Account.
7. Next, the End User License Agreement screen will display. Please review the agreement, select the "I agree to these terms" check box, and click Continue. ***Note:*** *If you already have a registration code for this class section, enter it here, and then click Continue. If not, please skip to step 10.*
8. If you have not already logged into WileyPLUS, you will need to create an account. Enter your name, email address, and create a password. Please note: your email address this will be used as your ID to access WileyPLUS. Now, click Continue.
9. You'll be brought to a confirmation page which tells you that your registration code has been accepted. Click Access Course Now, and you will be entered directly into your WileyPLUS course.
10. If you do not already have a WileyPLUS registration code, click Buy Course Access. Next, enter your credit card information in the Billing Details section, (REMEMBER THE PROMO CODE **MKC01**) and click Continue.
11. On the next page, review the information and click Place Order. You will now be directed to a confirmation page which shows you your registration code along with the details of the class in which you are now registered. Please note: the registration code along with the order confirmation for the class will now be sent to the e-mail address you entered. Click Access Course Now, and you will be entered directly into your WileyPLUS course.
12. If you experience any problem with the registering for WileyPLUS, please contact Technical Support at www.wileyplus.com/support

Grace Period

*" **1**. To help instructors easily get their class started with WileyPlus, and to improve access to students who are waiting financial aid or bookstore inventory, we will offer students the option to access their WileyPlus class (full site, including assignments) for a period of up to 14 days without having to enter a registration code, at the end of which students will be prompted to enter a registration code to continue accessing WileyPlus"*

*"**2.** Students can purchase and/or enter their WileyPlus registration code at any time during the 14 day grace period. Students who have registered but have not yet entered a registration code will de notified by email, and by a message in their My WileyPlus, prior to the expiration of their 14 day grace period."*

Prerequisites: Four units of high school mathematics, including trigonometry, or Math 120 (Precalculus), or Math 110 (College Algebra) and Math 125 (Trigonometry)

Catalog Description: Functions and graphs, rational, trigonometric, exponential functions, composite and inverse functions, limits and continuity, differentiation and its applications, integration and its applications

Course Webpage and Resources: Important dates, Syllabus and the link to student resources can be found at http://b.web.umkc.edu/baniyaghoubm/math210su13.htm Also, the following webpage is designed for UMKC students enrolled in Math 210. You may find YouTube videos of the lectures by Dr. Delaware, Copy of past Final Exams and the Tutoring Information http://roocal.wordpress.com/

Student Learning Objectives: This is an introductory course in calculus covering the concepts of limits, continuity, derivatives, applications of derivatives and integrals. By the end of the semester the students should be able to

- **(a)** compute limits of various functions at infinity or a given point and have a clear understanding of continuity and limits approaching from left or right hand side.
- **(b)** apply various derivative rules and techniques including product rule, power rule, quotient rule, chain rule, derivatives of trigonometric and logarithmic functions, and implicit differentiation
- **(c)** apply derivative techniques to compute linear approximations, velocity, acceleration, various rate of changes, and the limits using L'Hôpital's Rule
- **(d)** graph, describe and analyze various functions by determining the relative and absolute extrema, inflection points, intervals of increase and decrease, and vertical and horizontal asymptotes
- **(e)** solve maximization or minimization problems, and demonstrate the applications of Rolle Theorem and the Mean Value Theorem
- **(f)** compute various definite and indefinite integrals, have a clear understanding of the Fundamental Theorem of Calculus, and know the definition of area as a limit and be familiar with the sigma notation
- **(g)** compute the average value of a function, the area between to curves, volumes of solids using disks and washers methods, and the length of parametric curves

Grading Policy: The following scheme will be used to determine your final grade.

Online Quiz	100 points	A = 930-1000, A – = 900-929
Online Homework	150 points	B + = 866-899, B = 830-865
Two midterm exams	400 points	B – = 800-829, C + = 760-799
Group Work	100 points	C = 730-759, C – = 700-729
Final Exam	250 points	D + = 660-699, D = 630-659
Total	1000 points	D – = 600-629, F = 0-599

Make-up policy: Make-up exams will be given under certain circumstances. If you miss an exam, you have to notify me by the end of the next working day. Otherwise the student forfeits his/her right to a make-up.

Homework and Quiz: Starting June 15, every five days you will be required to submit an online homework and an online Quiz to Wiley Plus. You are encouraged to discuss ideas with other students but no copying from each other. The due dates (11:00 pm of June 15, 20, 25, 30, July 5, 10, 15, 20, 25, 30) are firm. Late homework or quiz will be marked down by 50%. Please try to enter the solutions at least a day before each due date.

Group Work: In addition to online quiz and homework. You will be required to form groups of 3 or 4 students and solve the problems sets given in the last 20 minutes of the class. You may hand in your group work at the end of the class period or at the beginning next class meeting. There is no need to hand in individual works and I only accept one work for each group. You may print your name and student ID number on the solution sheet only if you have contributed to the problem solving.

Review sessions: To prepare the students for the midterm and final exams and to reduce the amount of stress there will be 3 review sessions (July 3, 18 & 31) before the exams.

Exams: There will be two in-class exams (July 8 and July 22) and a final comprehensive exam (August 1). The exam schedule and the sections are as follows. All possible changes will be announced in the class or will be posted on the course webpage.

Exam 1	July 8	Chapters 0 – 3
Exam 2	July 22	Sections 4.1 – 4.6 & 5.1 – 5.6
Final Exam	August 1	Comprehensive

Attendance: Attendance of lectures is necessary. If you must miss a class, please contact me as soon as you know.

Grade Appeals: Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the instructor. The grade appeal procedure is available only for the review of allegedly capricious grading and not for review of the instructor's evaluation of the student's academic performance. See the following link for more information http://www.umkc.edu/catalog/Procedure_for_Appeal_of_Grades.html

Students with Disabilities: The following statement was provided by the Department of disability Services: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Office of Services for Students with Disabilities 4825 Troost, Suite 104 , Tel 816-

235-5612 Email: disability@umkc.edu For additional information please visit http://www.umkc.edu/disability

Tentative calendar: Chapters 0 - 6 of the textbook will be mainly covered. The specific sections of the textbook and the topics to be covered are given below. All possible changes will be announced in the class or will be posted on the course webpage.

#	Date	Sections Numbers and the Topics (Subject to Change)
1	June 10, 11	0, 1.1, 1.2: Introduction, Limits (An Intuitive Approach), Computing Limits
2	June 12, 13	1.3, 1.5: Limits at Infinity, End Behavior of a Function, Continuity
3	June 17, 18	1.6, 2.1, 2.2: Continuity of Trigonometric, Exponential functions, and Inverse of a function, Tangent Lines and Rates of Change, The Derivative Function
4	June 19, 20	2.3, 2.4: Introduction to Techniques of Differentiation; The Product and Quotient Rules
5	June 24, 25	2.5, 2.6, 3.1: Derivatives of Trig. Functions, Chain Rule, Implicit Differentiation
6	June 26, 27	3.2, 3.3, 3.4: Derivatives of Logarithmic Functions, Derivatives of Exponential and Inverse Trigonometric, Related Rates
7	July 1, 2	3.5, 3.6, 4.1: Local Linear Approximation, Differentials L'Hôpital's Rule, Indeterminate Forms Analysis of Functions (First Part) Intervals of Increase and Decrease
8	July 3	4.2, 4.3: Analysis of Functions (Second Part) Relative Extrema Graphing, Rational Functions, **Review for Exam 1**
9	July 8, 9	**Exam 1 (Covering Chapters 0-3)**, 4.3, 4.4
10	July 10,11	4.5, 4.6, 4.8: Applied Maximum and Minimum Problems; Rectilinear Motion; Rolle's Theorem; Mean-Value Theorem
11	July 15, 16	5.2, 5.3, 5.4: The Indefinite Integral, Integration by Substitution, The Definition of Area as a Limit; Sigma Notation
12	July 17, 18	5.5, 5.6: Definite Integral, The Fundamental Theorem of Calculus **Review for Exam 2**
13	July 22, 23	**Exam 2 (Covering Chapters 4 & 5)**, 5.7, 5.8: Rectilinear Motion Revisited Using Integration, Average Value of a Function and its Applications
14	July 24, 25	5.9, 6.1: Evaluating Definite Integrals by Substitution, Area Between Two Curves
15	July 29, 30	6.2, 6.4: Volumes by Slicing; Disks and Washers, Length of a Plane Curve
16	July 31, August 1	**Review for Final Exam, Final Exam (Comprehensive)** **Last chance for Grade Appeals: August 2, 1:00 pm**

Academic Honesty: The Board of Curators of the University of Missouri recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards. Academic dishonesty, including cheating, plagiarism or sabotage, is adjudicated through the University of Missouri Student Conduct Code and Rules of Procedures in Student Conduct Matters. For more information visit http://www.umkc.edu/catalog/Student_Conduct.html also http://www.umkc.edu/catalog/Rules_of_Procedures_in_Student_Conduct_Matters.html , see also http://www.umkc.edu/catalog/Policies_and_Procedures.html

A&S Life Coach: If you are feeling lost or stuck in your personal and academic life, please contact A&S Life Coach for help aslifecoach@umkc.edu (816)235-1446

Academic integrity: Do not copy work done by others. There is no tolerance for any Academic dishonesty, including cheating, plagiarism or sabotage. To help prevent plagiarism and to maintain the University's policy on academic integrity, UMKC purchased the Internet-based plagiarism- prevention resource turnitin.com (Turn it in). This site allows faculty and students to submit papers online to examine a paper's originality. The site compares submitted papers with several proprietary algorithm databases to check for plagiarism.

Statement on Discrimination: The faculty, administration, staff, and students of the University of Missouri-Kansas City are dedicated to the pursuit of knowledge and the acquisition of skills that will enable us to lead rich and full lives. We can pursue these ends only in a culture of mutual respect and civility. It is thus incumbent upon all of us to create a culture of respect everywhere on campus and at all times through our actions and speech.

Statement on Intimidation, and Sexual Harassment: As a community of learners, we are committed to creating and maintaining an environment on campus that is free of all forms of harassment, intimidation, and discrimination. Any form of discrimination or coercion based on race, ethnicity, gender, class, religion, sexual orientation, age, disability, rank, or any other characteristic will not be tolerated. Should you, a friend, or a colleague ever experience any action or speech that feels coercive or discriminatory, you should report this immediately to the department chair, the office of the Dean, and/or the Affirmative Action Office. The Affirmative Action Office, which is ultimately responsible for investigating all complaints of discrimination or sexual harassment, is located at 218A Administrative Center, 5115 Oak Street; the office may be contacted at 816-235-1323. All formal complaints will be investigated and appropriate action taken.