MANHATTAN COLLEGE Syllabus

Course Title:	Calculus II
Course Number:	MATH 186
Section Number(s):	02
Semester:	Fall
Year:	2013

Course Description

MATH 186. Calculus II. Applications of the definite integral, transcendental functions, integration techniques and infinite series. Prerequisite: Students are reminded that a grade of C- or lower in MATH 185 (Calculus I) may indicate inadequate preparation for MATH 186. MATH 155 (Calculus for the Life Sciences I) can be used as a prerequisite for MATH 186.

Class Meeting Times

Lab	2:00-3:15 PM	TF	RLC 107
Lecture	2:00-2:50 PM	WR	LEO 235

Instructor's Name:	Dr. Tyler Markkanen
Office Location:	RLC 200A
Office Hours:	TBD – See HW 0
Contact Information:	tyler.markkanen@manhattan.edu
	(718) 862-7831

Required Textbook

Option 1 (All-in-one package): CALC FOR SCI & ENGRS ALC & MAPLE 17 & MYMATHLAB ISBN-13: 9780321951045

Option 2 (Separated items):

MyMathLab Student Access Kit ISBN-13: 9780321262523 *PLUS:* (Optional) Calculus for Scientists and Engineers: Early Transcendentals, Books a la Carte Edition, by Briggs, Cochran, and Gillett ISBN-13: 9780321785466 *PLUS:* (Optional) Maple 16 ISBN-13: 9780321879851

For the students starting the Calculus I, II III sequence:

For \$173 you will get a looseleaf version of the 3-semester course, the MyMathLab code for 3 semesters, and Maple 17. The ISBN-13 for the package is 9780321951045.

For the students taking Calculus II:

If you used MyMathLab last year, the code you used last semester still works. You need to buy nothing. If you did not use MyMathLab last year, you probably should buy the Calculus I, II, III Package—Option 1.

Other information:

There are stand alone copies of MyMathLab available in the bookstore for \$114.25. These would be purchased by people who have not used MyMathLab before AND only want an electronic copy of the book AND do not want Maple. (Some students would rather buy this access code online.)

Subject Material Covered in the Course

We will cover some or all of the sections in each of the following chapters:

- Chapter 4: Applications of the Derivative
- Chapter 5: Integration
- Chapter 6: Applications of Integration
- Chapter 7: Integration Techniques
- Chapter 8: Differential Equations
- Chapter 9: Sequences and Infinite Series
- Chapter 10: Power Series

Outcome Expectations

- Improve problem-solving skills and quantitative literacy
- Interpret calculus objects (e.g., functions, limits, derivatives, and integrals) with various representations (e.g., numerically, graphically, analytically, and verbally)
- Gain familiarity with Maple and how to use it to help solve calculus problems
- Understand and apply some classical mathematical models and techniques for dealing with and changing quantities
- Appreciate the beauty and significance of calculus

MyMathLab (Online Prep Questions, Homework & Practice) See handout: MyLab & Mastering Student Registration Instructions.

Howework Assignments and Suggested Exercises

- For each section of the textbook, there will be an online problem set on MyMathLab. Occasionally handwritten problems will be assigned to **hand in**. All instructions and due dates for assignments will be announced as the semester progresses. ALL WORK and steps must be clearly shown (in your notebook for online assignments and on the homework itself for handedin assignments). Remember, office hours are a good place to get homework help.
- HW 0: Logon to the course website on Moodle at <u>https://lms.manhattan.edu</u>. Click on the My Schedule link. Fill out and submit the schedule form that comes up.
 HW 0 IS DUE BY THURSDAY 8/29 AT 11:55 PM.

At-Home Lectures

For each section of the textbook, there will be a playlist of video lectures for you to take at home. These will "flip" our classroom: lecture at home and practice in class. To access the playlists, go to <u>http://www.youtube.com/user/profmcalculus2/videos</u>. Each playlist will be titled according to its textbook section, and you must take that lecture (which includes ALL videos in the playlist) before coming to class for that section. The due dates for each lecture will be announced in class as the semester progresses.

Dates and Times of Quizzes and Exams

- **PAPER QUIZZES:** There will be a quiz **once a week** (except on the first week of the semester and exam weeks). They will be given **in class** on the following Wednesdays: 9/4, 9/11, 9/18, 10/2, 10/9, 10/16, 10/23, 11/6, 11/13, and 11/20.
- **PAPER EXAMS:** There will be **three in-class exams** and a **common cumulative final exam.** The dates of the exams are shown below

PAPER EXAM	DATE	TIME
Exam 1	Wed 9/25	In-Class
Exam 2	Wed 10/30	In-Class
Exam 3	Wed 12/4	In-Class
Final Exam	Wed 12/11	1:30-3:30 PM, Room TBA

Grading Method, Extra Credit Assignments, and Make-Up Policy

• GRADE:

Grade Category	Percentage of Final Grade
Class Participation	15%
Homework	10%
Quizzes	10%
Exams (3)	15% (each)
Final Exam	20%

- *EXTRA CREDIT:* There will be occasional extra credit opportunities. Details will be announced as the semester progresses.
- *MAKE-UPS:* Make-up quizzes and exams are generally not allowed unless you tell me in advance that you will be absent on a quiz/exam day. After solutions to a quiz have been posted, make-ups for that quiz will not be allowed.

Attendance Policy

You are expected to attend each class. Please come to class prepared and ready to learn. Ask questions and make helpful comments. Be ready to participate in class discussions and activities. If you miss class, you are responsible to get the notes and assignment details from someone in the class, as well as any handouts. You must notify me IN ADVANCE if you will be absent on a quiz/exam day.

Expected Academic/Professional Conduct

- All written work must conform to Standard English usage. Failure to meet such standards will affect your grade.
- When placed on your assignments, your name verifies that the work is your own.
- All Manhattan College students are expected to maintain the highest standards of academic and personal integrity. Any violations of academic integrity like exam cheating, facilitation of dishonesty, plagiarism, i.e., copying from any source (e.g., classmates, published sources, and the Internet) for an assignment without proper quotation and citation, will be dealt with in accordance with the student handbook of Manhattan College and will result in disciplinary penalties.

Students with Disabilities

Qualified students with disabilities will be provided reasonable academic accommodations if determined to be eligible by the <u>Specialized Resource Center</u>. Prior to granting disability accommodations in this course, the instructor must receive written verification of a student's eligibility from the Specialized Resource Center, which is located at Miguel Hall, Room 301B. It is the student's responsibility to initial contact with the Specialized Resource Center staff and to follow the established procedures for having the accommodation notice sent to the instructor.