

**MA182 Calculus II**  
**Section 21588 4 credits**  
**FALL 2008**

Atul N. Roy

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Office Hours: MWF 11:30-12:00 + 1:30-2:00 or by appointment

Prerequisites: Math 181 with a grade of C or better or equivalent background

A continuation of MA 181; intended primarily for students of the physical sciences, engineering, and mathematics. Further differentiation and integration of transcendental functions. Methods of integration with applications, indeterminate forms, improper integrals, Taylor's formula; infinite series; polar coordinates. (CE: R) PREREQUISITE: A grade of C or better in MA 181 or equivalent, or consent of department. For computation of tuition, this course is equivalent to five semester hours. Five hours each week.

4.000 Credit Hours

5.000 Billing Hours

Schedule Types: Lecture

Course Attributes:

General Elective, Math Foundation, Upper Level Requirement

Course Outline, Objectives, and TEXT information: ATTACHED

Test 1	Oct3	100 points
Test 2	Nov7	100 points
Test3	Dec5	100 points
Final Exam (Comprehensive and <b>compulsory</b> )		200 points
Final Examination Week		
Total		500 points

If your score is	the grade will be
90% to 100%	A
80% to 89%	B
70% to 79%	C
60% to 69%	D
0% to 59%	F

**Makeup policies:** There will be **no make up for** missed tests unless it happens because of an emergency. The **make ups will** be given only during the last week of the course.

**Help:** Please seek help right away in case you are having difficulty. Your success in this course is my top concern. Please make sure that you do not delay in giving me or the math center (HT 229) an opportunity to help you.

**Student Attendance:**

This course is taught in a lecture/discussion format. Class participation, attendance, and preparedness are expected. If you miss more than three classes and your grade falls below a C, I shall drop you from the class.

**Tardiness:** Class begins promptly at the scheduled time. Students are expected to be ON TIME. If a student is tardy two times, it will constitute one unexcused absence.

**Policy on Academic Integrity:** See the Student Code of Conduct – “Academic Dishonesty and Misconduct”. (Student Handbook)

**Student Conduct:** Students are expected to abide by the Code of Conduct of the *Student Handbook*.

Conduct: In order for learning to occur, it is necessary that the classroom environment be one of mutual respect. If a student behaves in such a way that 1) demonstrates a lack of respect, 2) interferes with the educational process or 3) violates the Student Code of Conduct, instructors are responsible for advising the student of the inappropriate behavior and granting her/him an opportunity to correct it. A student who fails to correct this behavior will be asked to leave the class and will be subject to disciplinary action, as outlined in the *Montgomery College Student Code of Conduct*.

Some specific situations for example are

Disruptive behavior includes carrying on individual conversations with classmates or yourself during class, interrupting the instructor or a fellow student while they are speaking, coming into class late and/or leaving class early, having a activated cell phone or beeper in class, being rude or belittling to the instructor or a fellow student. **Please do not use the in class computers for any other work that is assigned by the instructor that is deemed as a distracting and/or a disruptive activity. Cell phones conversations are not permitted in the classroom.** If a student behaves disruptively in the classroom after the instructor has explained the unacceptability of such conduct and the consequences that will result, the student may be asked to leave the room for the remainder of the class time. If the student does not leave, the faculty member may request the assistance of Security.”

**Support Services**

There is a **Math/Accounting Learning Center** located in HT229 where tutoring and computer support materials are available. The Solutions Manual for the text is available at the main desk.

**Disability Support Services:** Any student needing an accommodation due to a disability

should make an appointment to see me during my office hours. A letter from Disability Support Services (DSS) authorizing your accommodations will be needed. The DSS office is located in SA201 and may be called on 301-353-7783.

**Cancellation of Classes**

If class is cancelled, the make up will be posted on the WebPage of the course.

**The instructor may make amendment in this syllabus.**

**Montgomery College**  
**Business, Science, Mathematics, and Technology Division**  
**Germantown Campus**

**MA182-Calculus II**  
**Course Outline**

**Text: Calculus 8<sup>th</sup> Edition by Larson Hosteller and Edwards**

**Graphing Calculator is required (TI83plus or similar)**

<b>Chapter</b>	<b>Sections</b>	<b>Topics</b>	<b>50-minutes sessions (Face to face or online.)</b>
<b>5</b>	<b>5.1 to 5.8</b>	<b>Transcendental Functions</b>	<b>9</b>
<b>6</b>	<b>6.1 to 6.3</b>	<b>Differential Equations</b>	<b>3</b>
<b>7</b>	<b>7.1 to 7.7</b>	<b>Applications of Integrals</b>	<b>10</b>
<b>8</b>	<b>8.1 to 8.6</b>	<b>Techniques of Integration</b>	<b>6</b>
<b>8</b>	<b>8.7 and 8.8</b>	<b>Indeterminate Forms and Improper Integrals</b>	<b>6</b>
<b>9</b>	<b>9.1 to 9.10</b>	<b>Infinite Series</b>	<b>15</b>
<b>10</b>	<b>10.1 to 10.6</b>	<b>Conics and Polar Coordinates</b>	<b>10</b>
<b>Reviews and Examinations</b>			<b>11</b>

## Suggested Practice Problems

Section 7.1: 1,5,7,11,13, 15, 19, 21, 29, 41, 45, 59, 65, 89

Section 7.2: 1,5,7,9, 11,13, 15, 19, 21,23,27, 29,32, 41, 53, 59, 61,63, 65, 89

Section 7.3: 1,3,7,11,15,21,23,25, 29,39, 41, 43, 51

Section 7.4: 3, 5, 11, 15, 17,30, 33, 35, 39, 43, 55

Section 7.5: 3, 7, 11, 15, 21, 23, 25

Section 8.1: 6, 13, 19, 25, 29, 31, 35, 39, 47, 51, 53, 59, 67, 69, 73

Section 8.2: 5,9,15, 21, 29, 35, 37, 41, 43, 47, 51, 57, 61, 85, 103 (just refer to rule about centroid), 111, 113

Section 8.3: 7, 11, 15, 17, 21, 23, 27, 35, 41, 47, 57, 63, 67, 89, 97

Section 8.4: 7, 11, 15, 19, 21, 23, 29, 33, 39, 49, 51, 53

Section 8.5: 1 thru 45 (odd), 59, 60

Section 8.7: 1 thru 77 (odd), 83, 85, 95, 96, 97, 99, 101, 109

Section 8.8: 1 thru 81 (odd)

Chapter 8 Review: 1 thru 67 (odd), 73 thru 89 (odd)

Section 9.1: 1 thru 135 (odd)

Section 9.2: 1 thru 87 (odd),

95, 97, 99, 101, 103, 105, 107, 109, 110, 131, 132

Section 9.3: 1 thru 43 (odd), 51 thru 73 (odd), 78, 79 thru 89 (odd)

Section 9.4: 1 thru 47 (odd), 52

Section 9.5: 1 thru 91 (odd)

Section 9.6: 1 thru 105 (odd)

Section 9.7: 1 thru 69 (odd)

Section 9.8: 1 thru 69 (odd), 79 thru 87 (odd)

Section 9.9: 1 thru 57 (odd)

Section 9.10: 1 thru 61 (odd), 73, 75, 77, 79

Chapter 9 Review: 1 thru 101 (odd)

Section 10.1: 83, 85, 87, 91, 105, 109,

Section 10.3: 1 thru 15 (odd), 21 thru 59 (odd), 67, 69, 79, 81, 85  
87, 91, 93

Section 10.4: 65 thru 79 (odd), 109, 111, 113

Section 10.5: 1 thru 59 (odd)