Miami Dade College
Kendall Campus

MAC 2311 Calculus I

Instructor:	Carlos Sotuyo	**Ref #:**	2592
Office:	3348	**Term:**	Summer 2019 May 13 – Aug 2
Email:	csotuyo@mdc.edu	**Department Phone:**	305-237-2431
Day/Time:	Monday-Wednesday 6:35 pm – 9:30 pm	**Room:**	4206

Office Hours						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
5:30pm-6:20pm Room 3348		5:30pm-6:20pm Room 3348				

Course Description:

This course includes topics in analytic geometry, limits, continuity, differentiation of algebraic and transcendental functions and their inverses, differentials, indeterminate forms and L'Hopital's Rule, introduction to integration and the fundamental theorem of calculus, basic rules of integration and integration by substitution, and applications of definite integrals and derivatives.

Certain sections of this course may require the use of a graphing calculator.

Prerequisite:

MAC1106 and MAC1114, or MAC1114 and MAC1140, or MAC1147 with a grade of "C" or higher.

Course material:

Calculus Early Transcendentals, **Author:** Howard Anton, **Edition:** 11th; **ISBN:** 9781119532545 (WileyPLUS Access). Online educational program titled WileyPLUS that includes an electronic version of the textbook. https://www.wileyplus.com/Section/id-410195.html WileyPlus course ID: 702013

Supplemental material:

Graphing calculator is highly recommended. TI 84 or Casio 9750GII. The graphing calculator will not be allowed for chapter 5 (Integration) test. The TI89 or TI CAS cannot be used during exams. No sharing and no cell phone calculators.

Homework:

Homework assignments will be assigned on WileyPLUS for each topic covered in class. **Deadline** to register for WileyPlus is May 22nd.

Miami Dade College
Kendall Campus

MAC 2311 Calculus I

Attendance:

Attendance is highly encouraged. Students are responsible for all material covered in class.

Classroom Decorum:

In order to optimize your learning experience, classroom interruption must be kept to a minimum. Please make every effort to arrive on time and avoid causing an interruption if you need to leave early. Please turn your cell phone to a silent mode and avoid using it during class. In an emergency, you may excuse yourself and leave the classroom.

Registration and Withdrawal:

It is the students' responsibility to make sure they are registered for the course, and not dropped due to late payments or any other circumstances that may have come up. It is also the students' responsibility to drop the course before the drop deadline if they feel they will not be able to complete the course.

Academic Dishonesty Policy:

If a student is caught cheating, that student will automatically fail the assignment, and will be referred to the dean. For additional information on academic dishonesty policies, please refer to the Student's Rights and Responsibilities Handbook.

Grading Policy:

The grade for this course will be based on homework and four equally weighted exams. **Exams consist of free-response questions**. The average of your homework will count for 10% of your grade and the average of the exams will count for 90% of your grade. There will be a final exam. If you miss an exam, the final will count as the makeup for that exam. You can use the following formula to calculate your grade in the course: Grade: 0.90 (average of $T_1+T_2+T_3+T_4$+ Final) + 0.10 HW (WileyPlus)

Your final grade will be distributed according to the following scale:

Average of 90-100%	A
Average of 80-89%	B
Average of 70-79%	C
Average of 60-69%	D
Average below 60%	F

Miami Dade College
Kendall Campus

MAC 2311 Calculus I

Tentative class schedule:

Day	DATES	Topic	Section
1	5/13	1.1, 1.2: Limits & Computing Limits.	*1.1, 1.2*
		1.3 Limits at infinity. End behavior of a function.	*1.3*
2	5/15	1. 4 Limits (Rigorously).	*1.4*
		1.5 Continuity	*1.5*
		1.6 Continuity of trigonometric functions	
3	5/20	Review	
4	5/22	Review and **Test 1**	
5	5/29	2.1 Tangent lines and rates of change	*2.1*
		2.2 The Derivative function	*2.2*
		2.3 Techniques of Differentiation	*2.3*
6	6/03	2.4 The Product and Quotient Rules	*2.4*
7	6/05	2.5 Derivatives of Trigonometric Functions	*2.5*
		2.6 The Chain Rule	*2.6*
8	6/10	Review	
9	6/12	Review and **Test 2**	
10	6/17	3.1, 3.2 Implicit differentiation. Derivatives of Log Functions.	*3.1, 3.2*
		3.3 Derivatives of Exponential and Inverse Trig Functions.	*3.3*
		3.4 Related rates	*3.4*
11	6/19	3.5 Local Linear approximation; Differentials.	*3.5*
		3.6 L'Hopital's Rule; Indeterminate forms.	*3.6*
		4.1, 4.2, 4.3 Analysis of Functions	*4.1,4.2,4.3*
		4.4 Absolute Maxima and Minima	*4.4*
12	6/24	4.5 Applied Maximum and Minimum Problems	*4.5*
		4.6 Rectilinear Motion, Newton's Method.	*4.6*
		4.7 Rolle's Theorem; Mean Value Theorem.	*4.7*
13	6/26	Review	
14	7/01	Review and **Test 3**	
15	7/03	5.1, 5.2 The Area Problem. The indefinite Integral	*5.1,5.2*
		5.3 Integration by Substitution	*5.3*
		5.5 The definite Integral	*5.5*
		5.6 The Fundamental Theorem of Calculus	*5.6*
16	7/08	5.7, 5.8 Rectilinear motion, Average value of a Function	*5.7, 5.8*
		5.9 Definite Integrals by Substitution	*5.9*
17	7/10	Review	
18	7/15	Review and **Test 4**	
19	7/17	6.1 Area of a region between two curves	*6.1*
20	7/22	6.2 Volumes by Slicing: The Disk and Washers Methods.	*6.2*
		6.3 Volumes by Cylindrical Shell Method.	*6.3*
21	7/24	Review	
22	7/31	**Final**	

Holidays: July 4th, Independence Day. Memorial Day: May 27th. Last day to withdraw with 100% refund: May 16. Final Exam: July 31st. Last day to withdraw with W: July/2