Broward College
MAC 2311 – Calculus and Analytical Geometry I

Instructor:	Carlos Sotuyo	Term/Session:	Fall 2020, Session 1
Instructor's BC E-mail:	csotuyo@broward.edu	Reference No.:	661898
Office Hours:	TR: 10:35 am-10:55 am	Class Days:	Tues-Thurs
Office:		Class Time:	8:30 am-10:35 am
Math Department Phone Number:	(954) 201-6029	Classroom: Virtual	Blackboard collaborate (online)
Emergency Phone Number:	(954) 201-4357 (Safety) (954) 201-4900 (Hotline)	Withdrawal Date: Credit to Audit Date:	Aug 28, withdraw 100% refund Oct 28, withdraw with W.

Academic Calendar at https://www.broward.edu/registrar/_docs/printable-calendars/2020-21-academic-calendar.pdf
Class web page: http://www.imathesis.com/mac2311a.html

COURSE DESCRIPTION:

This is the first of a three-course sequence in calculus. Students may need to a graphing calculator throughout the sequence of courses. Topics include: analytic geometry, functions, limits, continuity, derivatives and their applications, transcendental functions, antiderivatives, and definite integrals. Certain sections of this course may require the use of a graphing calculator. Recommendation of the Mathematics Department or at least a grade of C in each of the prerequisite courses is required.

GENERAL OUTCOMES:

Units	General Outcomes The student shall be able to:
Unit 1. Functions, Limits, and Continuity	• Evaluate limits and determine when a function is continuous
Unit 2. The Derivative and Differentiation	• Derivatives using the definition of a derivative and special formulas, and apply derivatives to geometrical and physical problems
Unit 3. Extreme Function Values and Techniques of Graphing	• Find relative and absolute maxima and minima of a function, solve related geometrical and physical problems, and sketch graphs using the techniques of calculus
Unit 4. The Definite Integral and Integration	• Demonstrate knowledge of the theory of antiderivatives and skills in evaluating and applying antiderivatives
Unit 5. Transcendental Functions	• Differentiate and integrate transcendental functions
Unit 6. Inverse Trigonometric Functions	• Differentiate and integrate inverse trigonometric functions

PREREQUISITE:

MAC 1114 and MAC 1140, or MAC 1147 with a minimum grade of "C" or better.

COURSE MATERIAL:

Textbook: *University Calculus* (4th Ed.), Pearson; by Hass, Heil, Bogacki, Weir, Thomas.

Learning System: An online educational program titled MyMathLab that includes an electronic version of the textbook (e-book): Required.

SUPPLEMENTAL MATERIAL:
Scientific calculator. Not to be used during proctored exams: the Honorlock on-screen calculator will be allowed.

REQUIRED FOR REMOTE DELIVERY OF THIS COURSE:
Students will need a reliable internet connection and laptop or desktop computer with functioning webcam capable of running Honorlock, the remote exam proctoring service we will be using. Please see Honorlock tab on D2L for system requirements**.** In addition, students are required to use an erasable whiteboard and marker(s) which will be used instead of scratch paper for every test. The student must show their erasable board as clean and unmarked to the webcam before they begin their exam.
Important: failure to comply with Honorlock requirements, the student's exam will be invalidated.

Note: For assistance with technology needs, visit Technology Solution at https://bit.ly/2Ey7R5L

HOMEWORK:
Homework will be assigned on MyMathLab for each topic covered in class.
Register at www.pearson.com/mylab instructor's **course ID**: sotuyo98181
Registration deadline: September 8, 2020.
Notice that the HW grade **is not** Pearson's overall percentage; but the percentage of completed assignments.
There are 26 Homework assignments.
One assignment is considered to be completed once the student reaches at least 80% on it. Homework assignments are due always the night before a test at 11:59pm. After the due date, the student cannot change the grade but can still review it.

ASSISTANCE:

Remote learning assistance via ASC (**Academic Success Center**) via https://bc.mywconline.net/index.php
The ASC centers at Broward College are here to ensure your success in this class. You will benefit from an array of academic support services provided in a comfortable, collaborative atmosphere specifically designed to advance your academic achievement: http://www.broward.edu/studentresources/lrc/Pages/default.aspx

Here are just some of the services provided at the ASC:

- Academic Support Labs (Science Center, Math Lab, Writing Center)
- Collaborative Project Space
- Open Computer Centers (Printing)
- Study Groups
- Textbook Reserves
- Tutoring by Certified Tutors (All subject areas)

Seahawk Support Program:
The Seahawk Support Program is a coordination between students, faculty, the Office of Student Success, and the ASC designed to support students in order to increase their chances of success. If you are contacted by a representative of the Office of Student Success or the ASC, please take full advantage of this excellent opportunity to improve your success in this course.

CELL PHONE POLICY:
Put your cell phone away on "silent-mode". Cell phones, smart phones, IPod, and other similar devices are not allowed to be used as calculator during class time and Tests.

METHOD OF INSTRUCTION AND EVALUATION:

The course will be taught online, synchronously, via Blackboard Collaborate. Students will work on practices or activities of the day. Instructor and students will discuss the practices or activities at the end of the session. The student must participate in breakout groups discussions.
The student will achieve the course objectives through interactive lecture, in class practice problems, class participation, homework assignments, and assessments.

Assessment	Grade Points	Percent of Final Grade
3 Tests	500	50%
Participation in class	100	10%
MyMathLab Homework	200	20%
Final Exam	200	20%
Total	1000	100%

All **Tests**, including final exam, via D2L, proctored by Honorlock.
Participation in class: student's work as part of breakout groups via Blackboard Collaborate.
All exams are mandatory for all students and cannot be made up at an alternative time. Missing an exam for any reason will result in a zero score for that exam. If you miss an exam due to an emergency that would qualify as an excused absence, **you must inform your instructor within 24 hours of the scheduled exam**. In the case of an excused absence for an exam, the final exam score will be used in place of the missing exam score. You may not be excused from the final.

GRADING POLICY:

Overall grade = 0.50 (average of 3 Tests) + 0.10 (participation) + 0.20 (% of completed assignments) + 0.20 (Final exam).

Grading scale:

Grade	Grading Scale
A	90 – 100%
B	80 – 89.9%
C	70 – 79.9%
D	60 – 69.9%
F	0 – 59.9% or if a student commits an act of cheating/plagiarism
W	Official Withdrawal by the student by the Withdraw date
WN	Administrative Withdrawal for Non-Attendance

COURSE WITHDRAWALS:

During the second week of class, professors are required to report students who have never attended, and these students will be administratively withdrawn. Following this attendance verification, it is the student's sole responsibility to withdraw from the course and to verify that the withdrawal is properly recorded through the Registrar's Office prior to the withdrawal deadline. The professor cannot process withdrawals from any reason other than the above-stated student non-attendance. A withdrawal is considered an attempt.

ACADEMIC ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:

If you are requesting academic accommodations, you must first register with Accessibility Resources (contact information is provided below). Accessibility Resources will evaluate your request and determine eligibility. If approved, you will be provided with an Accommodation Plan that you must deliver to me either electronically or in person. Once received, we will discuss which accommodations you are requesting for this class, and in accordance with Broward College policy 6Hx2-5.09 you will be provided with the appropriate accommodations. Students who wait until after completing the course, or an activity, to request accommodations should not expect any grade to be changed, or to be able to retake the course or activity.

ATTENDANCE POLICY:

Attendance is **mandatory** in this class. You are expected to be present and on time for each class period. There will be no penalty for a student who is absent from academic activities because of religious holiday observances in his/her own faith, the student's serious illness, death in immediate family, or attendance to statutory governmental responsibilities. The students must notify the instructor of these absences, providing necessary documentation. It is the student's responsibility to make up the missed work.

STATEMENT OF ACADEMIC DISHONESTY:

Broward College expects its students to be honest in all of their coursework and activities. Breaches of academic honesty include, but are not limited to, cheating, plagiarism, misrepresentation, bribery, and the unauthorized possession of examinations, papers, or other class materials that have not been formally released by instructors. A student's academic work must be the result of his or her own thought, research, or self-expression. The term "cheating" includes but is not limited to, copying homework assignments from another student; working together with another individual on a take-home test or homework when specifically prohibited from doing so by the instructor, looking at test, notes or another person's paper during an examination when not permitted to do so. (See current BC catalog statement at www.broward.edu/catalog/).

Class schedule next page:

Dates	Section
8/25	2.1: Rates of Change and Tangent Lines to Curves
8/27	2.2: Limits of Functions and Limit Laws
9/1	2.3: The Precise Definition of a Limit
9/3	2.4: One-Sided Limits 2.5: Continuity
9/8	2.6: Limits Involving Infinity; Asymptotes of Graphs
9/10	Review
9/15	Test 1
9/17	3.1: Tangent Lines and the Derivative at a Point 3.2: The Derivative as a Function
9/22	3.3: Differentiation Rules 3.4: Derivative as a Rate of Change
9/24	3.5: Derivatives of Trig Functions
9/29	3.6: Chain Rule
10/1	3.7: Implicit Differentiation
10/6	3.8: Derivatives of Inverse Functions and Logarithms
10/8	3.9: Inverse Trigonometric Functions
10/13	3.10: Related Rates
10/15	3.11: Linearization and Differentials
10/20	Review
10/22	Test 2
10/27	4.1: Extreme Values of Functions 4.2: The Mean Value Theorem
10/29	4.3: Monotonic Functions and the First Derivative Test
11/3	4.4: Concavity and Curve Sketching
11/5	4.6: Applied Optimization
11/10	4.8: Antiderivatives
11/12	Review
11/17	5.1 Area and Estimating with Finite Sums 5.2 Sigma Notation and Limits of Finite Sums
11/19	5.3 The Definite Integral
11/24	5.4 The Fundamental Theorem of Calculus 5.5: Indefinite Integrals and the Substitution Method
12/1	5.6: Definite Integral Substitutions 7.1: The Logarithm Defined as an Integral
12/3	Review Test 3
12/8	Test 3
12/10	Review Final Exam
12/15	Final Exam