MAC2311 Calculus and Analytical Geometry I FALL 2014 Professor A. Loschak Bldg 1008/ Rm 306 T/TH 2 - 4:15pm Reference # 493857

COURSE DESCRIPTION This is the first of a three course sequence in calculus. Topics include analytical geometry, functions, limits, continuity, derivatives and their applications, transcendental functions, anti-derivatives and definite integrals. Prerequisite: a grade of "C" or higher in both MAC1140 and MAC1114, or the recommendation of the Mathematics Department.

COURSE OUTCOMES The students should be able to evaluate limits and determine when a function is continuous. The students should be able to find derivatives using the definition of a derivative and special formulas, and apply derivatives to geometrical and physical problems. The students should be able to find relative and absolute maxima and minima of a function, solve related geometrical and physical problems, and sketch graphs using the techniques of calculus. The students should be able to demonstrate knowledge of the theory of antiderivatives and skills in evaluating and applying antiderivatives. The students should be able to differentiate and integrate transcendental functions. The students should be able to differentiate and integrate inverse trigonometric functions.

ATTENDANCE Attendance at each class session is extremely important and is the responsibility of the student. There is no penalty for a student who is absent because of religious holy days, the student's serious illness, a death in the immediate family, or statutory government responsibilities, all with documentation. Students attending through the aid of veteran's benefits will lose those benefits if they do not attend. Students wishing to withdraw from the course should do so through the Registrar. If you withdraw online, print a receipt, for documentation. The last day to withdraw from any class is October 30, 2014. If you stop attending class prior to the withdrawal date, you will be administratively withdrawn from class and you will receive a "W", or if it is your third attempt, an "F." If you stop attending class after the withdrawal date, you will receive a "WF" that will then be computed as an "F" in your GPA. To avoid this situation, you should remain an active learner in this class. Always communicate extenuating circumstances to me. Ongoing communication with the instructor is critical to your course success.

GRADING There will be four cumulative tests, and a cumulative final exam. The lowest test grade, of the four tests, will be dropped. All students are required to take the final exam. The final exam grade may not be dropped. If the student is absent on the day of a test, other than the final exam, then that grade will be dropped in place of the lowest. If an absence is excused for the reasons listed above and the student requires a makeup test, the instructor must be notified within 24 hours of the absence.

GRADING SCALE 90-100 A, 80-89 B, 70-79 C, 60-69 D, 0-59 F

COURSE MATERIALS Book: <u>Calculus Early Transcendental Functions</u>,5th Edition, authors Larson and Edwards. All students are required to have a scientific calculator. Only these two models, (Texas Instruments) TI-30XA and TI-30XIIS, are permitted on tests. Graphing calculators are needed for class lectures but graphing calculators are not permitted on tests.

All students are required to check their BC email and their D2L email, daily.

INSTRUCTORTUE & THUBuilding 7/Room 235OFFICE4:15-7:15 pm(office) 954-201-4871HOURSEmail: aloschak@broward.edu

Instructor's home phone number, for emergencies: 954-748-5498. Leave a clear message and a phone number with area code 954, to receive a call back.

Cell Phones: If you need to use your phone during class, please step outside of the room and then return to class when you finish.

TENTATIVE SCHEDULE

Aug 26	Tue	2.1,2.2,2.3
Aug 28	Thu	2.3,2.4
Sep 2 Sep 4 Sep 9 Sep 11 Sep 16 Sep 18 Sep 23 Sep 25 Sep 30	Tue Thu Tue Thu Tue Thu Tue Thu	2.4,2.5 2.5,3.1 3.1,3.2 3.2,3.3 TEST I 3.3,3.4 3.4,3.5 3.5,3.6 3.6,3.7
Oct 2 Oct 7 Oct 9 Oct 14 Oct 16 Oct 21 Oct 23 Oct 28 Oct 30	Thu Tue Thu Tue Thu Tue Thu	3.7,4.1 4.1,4.2 TEST II 4.2,4.3 4.3,4.4 4.4,4.5 4.5,4.6 4.6,4.7 4.7,4.8
Nov 4	Tue	4.8,5.1
Nov 6	Thu	TEST III
Nov 13	Thu	5.1,5.2
Nov 18	Tue	5.2,5.3
Nov 20	Thu	5.3,5.4
Nov 25	Tue	5.4,5.5
Dec 2	Tue	5.5,5.6,5.7
Dec 4	Thu	5.7,5.8
Dec 9	Tue	TEST IV

CUMULATIVE FINAL EXAM: THURSDAY, DECEMBER 11, 2014 2:30pm - 4:20pm