## VALENCIA COMMUNITY COLLEGE MAC 2233 – CALCULUS FOR BUSINESS AND SOCIAL SCIENCES COURSE SYLLABUS SPRING TERM 2010

Course: MAC 2233 Calculus for Business and Social Sciences (CRN: 20908 and 24979)

**Professor:** Kurt Overhiser

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## **Student Engagement Hours:**

Monday 12:45 p.m. – 2:15 p.m. AND 4:25 p.m. – 5:25 p.m.

Tuesday 10:30 a.m. – 1:00 p.m.

Wednesday 12:45 p.m. – 2:15 p.m. AND 4:25 p.m. – 5:25 p.m.

Thursday 10:30 a.m. – 1:00 p.m.

Friday 8:00 a.m. – 10:00 a.m. via cell phone (407-267-1882)

Catalog Course Description: MAC 2233 is a three-credit mathematics course that introduces calculus via applications to business and social science. The prerequisite for this course is MAC 1105 (College Algebra) with a minimum grade of 'C' or an appropriate score on an approved assessment such as the CPT. Topics in this course include functions, limits, differentiation and integration of algebraic, exponential and logarithmic functions, rates of change, curve sketching, and applications of the derivative and integration. A student wanting to use this course to satisfy Gordon Rule or general education requirements is required to obtain a minimum final grade of 'C' for the class.

**Learning Outcomes:** This course will enable a student to achieve the following learning outcomes:

- 1) Demonstrate an understanding of the limiting process as it applies to functions, continuity, derivatives, and integrals.
- 2) Demonstrate an understanding of the concept of derivative.
- 3) Calculate indefinite and definite integrals.
- 4) Solve applied problems using derivatives and integrals.

## **Required Materials:**

- 1. Calculus for Business, Economics, and the Social and Life Sciences 10<sup>th</sup> ed. by L. Hoffmann and G. Bradley
- 2. A Graphing Calculator (the instructor will be using the TI-84 PLUS for classroom demonstration) Note: Any calculator with a built-in C.A.S. such as the TI-89 or TI-92 may not be used on in class tests.

**Optional Materials:** Student Solutions Manual

**Attendance:** Regular attendance and class participation are significant factors that promote student success in this course. Attendance is required and will be taken at the beginning of each class. During those days when a student is absent, he or she is responsible for all material covered that day and for any in-class announcements. Missing more than five classes for any reason is excessive and a basis for withdrawal. If you arrive late or leave early, it is courteous to speak privately with the instructor about your reasons for doing so. Each tardy will count as a half absence.

**Homework:** The assigned homework problems are taken from your textbook and are listed by section in the accompanying homework list. You are expected to read the textbook and review your notes as you do the assigned homework. Please complete all your homework on loose leaf paper. I will collect your homework chapter by chapter for a grade on the due dates listed in the course calendar. You will have a total of five homework assignments in this course each covering one of five chapters. I will grade each assignment by selecting FIVE problems (even or odd) of my choice and assigning a grade of either 0, 1, or 2 to each selected problem based on your work and the required steps needed to arrive at the correct answer. I will not grade the answers but will ONLY grade the work/steps used to arrive at those answers. A grade of 0 means that the problem was not done or only the answer is shown with no supporting work. A grade of 1 means that there was some work shown but was either not complete or there was a substantial flaw in the work. A grade of 2 means that all work is shown and is correct. I will not say in advance which problems I will be grading so be sure to do all the homework. Collected homework assignments with answers that are not supported with work and required steps will not receive credit at all. I will add up the grades for the five problems on a given assignment and multiply the resulting sum by 10 to obtain a percent score for the assignment. Your overall homework grade for the course will be computed as the average (mean) of the percent scores on each of the five individual assignments. There will be time allotted at the beginning of class to go over selected homework problems. The key for success in this course is to do the homework. Get help if you are having trouble with the material.

**Examinations:** There will be THREE in-class exams and a comprehensive final. Because mathematics builds upon itself, some of the content from exam to exam may be cumulative. Many of the exam questions are similar to homework problems, examples in the book and/or examples worked in class. Exam dates and the sections that are to be tested will be announced in class at least one week in advance. Tentative exam dates can be found in the accompanying course calendar. Not taking the final exam will automatically result in a final course grade of 'F'.

**Makeup Policy for Exams:** No makeup exams are available without the explicit consent of the professor, which will only be granted in certain cases per VCC policy. All exams must be taken on or before the dates assigned. If you are unable to take an exam due to a medical emergency, legal situation, or death in the family then the final exam score may replace ONE missed exam once documentation is received by the professor. Missing more than one exam is considered falling behind in work and is a basis for withdrawal.

**Final Exam Dates and Times:** You must attend the final exam for the CRN that you are assigned. The final exam for CRN: 20908 will be held on Wednesday April 28, 2010 from 1:00 p.m. – 3:30 p.m. The final exam for CRN: 24979 will be held on Thursday April 29, 2010 from 7:00 a.m. – 9:30 a.m. Final exams are held in the regularly scheduled classroom.

**Course Grade and Evaluation:** Each of the three in-class exams is worth 20% of the final grade. The overall homework grade is worth 15% of the final grade. The Final Exam will count for 25% of the final grade. Grades will be assigned according to the rule: 90 - 100 is an A, 80 - 89 is a B, 70 - 79 is a C, 55 - 69 is a D and below 55 is an F.

**Tutoring:** The Math Support Center provides free walk-by tutoring on a first come first serve basis. This center is located in building 4 inside the Academic Success Center (ASC) on the first floor. The ASC has limited tutoring hours. See the posed hours outside for more details.

**College Withdrawal Policy:** The College has initiated withdrawal procedures and timelines in response to laws/rules adopted by the state legislature and State Board of Community Colleges. The Withdrawal Deadline for Spring Term 2010 is <u>Friday March 26, 2009</u>. If you withdraw or are withdrawn from the course after this deadline, you will be assigned either a WP (withdrawn passing) or a WF (withdrawn failing) based on the work you complete up to that point. It is not the responsibility of the professor to withdraw a student from class. It is up to the student to make that decision and to take the action to withdraw from class. More information is available in the 2009-2010 College Catalog on pages 90-92.

**Valencia Student Core Competencies:** Valencia faculty members have defined four interrelating competencies (Think, Value, Communicate, Act) that prepare students to succeed in the world community. These competencies are outlined in the 2009-2010 College Catalog on page 18. In this course, you will further your mastery of these core competencies through classroom lecture and discussion, group work, and other learning activities.

**Academic Dishonesty:** All forms of academic dishonesty are prohibited at Valencia. Academic dishonesty includes, but is not limited to, plagiarism, cheating, furnishing false information, forgery, alteration or misuse of documents, misconduct during a testing situation, and misuse of identification with intent to defraud or deceive. Sanctions available to the professor should a violation occur are described in the Valencia Student Handbook or online at <a href="http://valencia.cc.fl.us/policies/PDF/10-16.pdf">http://valencia.cc.fl.us/policies/PDF/10-16.pdf</a>.

Student Code of Classroom Conduct: Valencia is dedicated not only to the advancement of knowledge and learning, but is concerned with the development of responsible personal and social conduct. By enrolling at Valencia, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct. Students who engage in any prohibited or unlawful acts that results in disruptive behavior may be directed by the professor to leave the class. Violation of any Valencia policies or procedures or classroom rules may lead to disciplinary action up to and including expulsion from the College. Disciplinary action may include being withdrawn from the class, probation, suspension, expulsion, or other appropriate and authorized actions. Valencia's Student Code of Classroom Conduct (Policy 10-18) can be found in the current Student handbook, or online at <a href="http://valencia.cc.fl.us/policies/PDF/10-18.pdf">http://valencia.cc.fl.us/policies/PDF/10-18.pdf</a>. Additional information is available in the 2009-2010 College Catalog on page 93.

**Students with Disabilities:** Students with disabilities who qualify for academic accommodations may provide the professor a notification letter from the Office for Students with Disabilities (OSD) and discuss specific needs with the instructor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities. The East Campus office is located in Building 5, Room 216.

**Valencia ID cards:** Valencia ID cards are required for the Library, Testing Center, and other on campus services. No other forms of ID at those locations will be accepted and having a Valencia ID is mandatory to obtain those services. You may obtain a Valencia ID on the 2<sup>nd</sup> floor of building 5 on the East Campus.

**E-mail Notification:** Where appropriate, I will communicate with you through ATLAS email. Please check your ATLAS account regularly.

**Disclaimer:** Changes to the syllabus, grading procedure, course calendar, and homework assignments may be made at any time at the discretion of the professor.