SYLLABUS FOR MATH 2401 (Calculus I) - FALL 2009

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Web page: http://cms.uhd.edu/faculty/wallerw/courses/math2401 (this is not a Blackboard Vista page)

Meeting times: CRN 11123, 5:00 pm-6:45 pm on TR in C-320.

Office hours: 3:00-4:30 pm on TR and 1:00-2:30 pm on W, *and also by appointment if these times are not convenient.* However, you are not restricted to these times; if you can find me and I'm free, then we can talk. Usually I should be here on Fridays, too. During office hours, you are welcome to get help with anything related to the course, or college in general for that matter. IF YOU HAVE A QUESTION, ASK IT! IF YOU FEEL YOU NEED HELP, PLEASE COME SEE ME **IMMEDIATELY**! THE DOCTOR IS ALWAYS IN.

Course description: Functions, limits, the derivatives of algebraic and trigonometric functions, the derivatives of parametric equations, curve sketching, applications of the derivative and an introduction to definite and indefinite integrals of algebraic and trigonometric functions.

Course prerequisites: A grade of "C" or better in MATH 1404 or MATH 1505; or placement by exam, taken at UHD. If you do not meet these prerequisites, you are subject to being dropped from the course without prior notification at your own expense. Please see me immediately if you do not meet this prerequisite, so you can be enrolled in the appropriate MATH course.

Textbook: *Calculus* by James Stewart (Brooks/Cole, 6th ed). For emergency situations, a copy of this book is kept on reserve in the UHD Library and the Math Lab. However, lecture and other in-class activities will be an important source of material and information during this course. Therefore, you cannot expect to miss class or not pay attention in class, and then compensate by studying the textbook later. You do not need to purchase a graphing calculator, but you should have access to a scientific calculator throughout the course. A scientific calculator is one that includes "ln" and "log" keys. The software we use in class will be available on a CD that will be provided free of charge (do not lose the CD). You may not use a cell phone calculator. Cell phones should be turned off and put away during class.

Course grade: Your course average is determined by three major tests (51% total), homework (16%) and a comprehensive final exam (33%). You will receive (based on your course average) a course grade of "A" (90-100), "B" (80-89), "C" (70-79), "D" (60-69), or "F" (below 60).

If you take each test and do not violate the Attendance Policy described below, your lowest test score will be dropped at the end of the semester and replaced by your final exam grade, if it is a higher score. Tests will be announced far enough in advance to allow sufficient preparation. Test scores are never curved. No extra credit assignments will be given. Homework is normally assigned each class period and discussed the next class period, and will be collected for grading on a regular basis. The two lowest homework scores will be dropped.

Homework assignments: This course will have two types of homework assignments.

• Graded WebAssign assignments. Throughout the semester, there will be homework assignments to be completed online using WebAssign. Note: (1) For most exercises, you can view the corresponding text pages through the "Read It" link; (2) To type math symbols, you may click on the "math palette"; (3) You can continue trying each exercise until you get it right (up to 5 submissions) and you can continue to work on an assignment after it has been submitted, that is, you can continue to improve your grade on each assignment, up to 100%. (4) Each assignment will have a specified due date by which it must be complete. Once an assignment's due date has passed, you will no longer be able to improve your grade on that assignment. Please do not put off doing the WebAssign assignments! Instead, begin to work on these as soon as they are assigned. (5) The average of your grades on all of the WebAssign assignments will determine your homework grade, which will count as 16% of your course average (roughly the same as a regular test). Please take your WebAssign homework assignments seriously, as they have a major impact on your grade. If you have any questions, problems or issues regarding WebAssign, please contact me ASAP so we can resolve them quickly.

• Handout homework exercises and test preparation exercises. Before each regular test, I will assign a small group of exercises from the textbook for you to work using computer software and print out the solutions. Your name must be typed and printed on the sheets that you turn in. These exercises must be turned in to be graded along with the test, or I will not grade the test and a grade of 0 will be given.

Using WebAssign: To supplement what is done in class, we will use an online resource called WebAssign. In order to use WebAssign, you must purchase a Student Access Code online at **www.webassign.net** If you purchased a WebAssign code for MATH 2401 last semester (i.e. you are repeating the class), you DO NOT need to purchase a new code this semester. Your account will still be active, but you will need to enroll in a new

section. You can use WebAssign on any computer that has Internet access. To register with WebAssign, you will also need a valid email address - use one that you regularly check. You must register with WebAssign at **www.webassign.net** only the first time that you use it. The class key is **uhd 3087 0109** (2) You will then create a User Name and Password which you will use to log in whenever you use WebAssign at **www.webassign.net** Make sure to record your exact User Name and Password for future logins. The computers in the Math Lab (N-925), the Academic Computing Labs (S-800, C-300, B-200), the CMS Tutoring Lab (S-738), and the Library can be used to access WebAssign. Some of the features you can use are:

• Complete and submit homework assignments (which are required);
• Check out your course grades and course average in the Gradebook;
• View a complete online version of the textbook (if purchased) and look at multimedia sources such as online video clips that accompany the textbook.

Be sure to register with WebAssign during the first week of the semester, so you can begin to use it right away. A grace period of a couple of weeks is provided prior to payment (online with credit card). Please contact me ASAP if you are having any difficulty registering with WebAssign. You will not be allowed to continue attending class or take any test if you have not registered with WebAssign and enrolled in this course. The cost is as follows:

Hard Copy of Text, New: $211.35, Used: $158.50 (same book is used for MATH 2402 and MATH 2403)
WebAssign Homework Access without eBook, Single Term: $35.00, Life of Edition: $55.00
WebAssign Homework Access with eBook, Single Term: $60.00, Life of Edition: $85.00

Class attendance/Make-ups: Good attendance is crucial in college, as I'm sure you've discovered by now. Attendance will therefore be taken daily. If you miss more than 6 hours of class (3 class periods) you are in violation of the Attendance Policy. Whenever you miss a class, it is your responsibility to check what material was covered and what homework was assigned. *Any missed grades will be recorded as zeros*.

Make-up tests will not be given in this course except under extreme circumstances. If you miss a test, that grade will be the one replaced by your final exam grade. However, you must notify me as soon as possible if you miss a test or know in advance that you will miss a test. If you do not notify me *promptly* with an *appropriate excuse*, you will receive a 0 for the test.

Course policies: I have one pet peeve: I do not like students to leave class early. This is not a movie theater where you can walk out if you don't like the show. Unless you become physically ill, I expect you to remain in class until it is dismissed by me. (you are old enough to plan ahead). *Answering the call of nature does not constitute a physical illness.* If you have an urgent appointment or problem that you know will require you to leave class early, please inform me before class starts. Cell phones must be turned off and put away during class. Please remove any electronic earpieces that are not medically necessary. Since we are meeting in a computer classroom, do not surf the Internet during class, and do not work on the online homework during lecture. Please remember that as a member of the UHD academic community you are bound to observe the academic honesty code (see the UHD Student Handbook at **http://www.uhd.edu/campus/handbook.htm**) in all your school work. A grade of 0 will be given for any course work where cheating is detected.

Dropping: Please note that the last day to withdraw with a course grade of "W" is Thursday, Oct. 29 at 6:00 pm. If you do not complete the course requirements and do not officially withdraw, you will receive a course grade of "F." This is university policy over which I have no control. You cannot receive the grade "I"-Incomplete unless you have a documented personal emergency that prevents you from completing the last fraction of the course, such as the last test and/or the final exam. You must have a passing average based on the work you have already completed to receive an "I."

Where to get help with the course: The first place to seek help is from me, both inside and outside of class, and via phone or email. Next, students enrolled in MATH 2401 at UHD have access to the Math Lab in the Academic Support Center (925-N) where they may get additional help with understanding concepts or improving their skills. The Center is staffed with mathematics faculty and student assistants, and offers tutorial help, calculators, computer access, and other types of aides on a walk-in basis. The Math Lab maintains extensive hours which are published each semester (see below). You are encouraged to visit the Math Lab throughout the semester whenever you feel you need extra assistance, no appointment required. It is also an excellent place to study the textbook and work on homework problems, so that you can receive immediate help as necessary.

Math Lab Hours 925-N (for tutorial help by faculty members and peer tutors):
Monday - Thursday, 9 am - 8 pm
Friday, 9 am - 2 pm
Saturday, 11 am - 5:00 pm

How to be a successful college student (it's not rocket science):
1. Come to class.
2. Read your book.
3. Do your homework.
4. Listen and ask questions.
5. Contribute to classroom discussions.
6. Use any tutoring resources that are available.
7. Interact with your teachers, either face to face or using the phone or email.
8. Form study groups with your classmates.
9. Meet with your advisor.
10. Get involved in campus activities.
11. Share new ideas with your friends and family.

Statement on reasonable accommodations: UHD adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. Students with disabilities should register with Disabled Student Services (409-S) and contact me in an a timely manner to arrange for appropriate accommodations.

Excess course attempts: In accordance with state law, effective Fall 2004 the University of Houston-Downtown is charging an additional fee per semester credit hour for any course that is repeated for the third time, beginning with the Fall 2002 semester. If a course has been previously attempted twice, the third enrollment will result in the additional charge. An attempt is defined as an enrollment that results in any letter grade (including "F" and "W").

Textbook content: (material not necessarily covered in this order; not all topics from all sections are covered)

Chapter	*Sections*
1	1-4
2	1–5
3	1–8
4	1–7, 9
5	1–5
6	1-3

Goals/Objectives:
At the completion of the course, the student should be able to
1. Evaluate simple limits including one-sided and infinite limits.
2. State the definition of the derivative of a function and use it to find derivatives of algebraic functions.
3. State and apply the derivative formulas to find derivatives, first and higher order, of algebraic and trigonometric functions.
4. Use the concepts of limit and derivative, together with intercepts and symmetry to sketch curves.
5. Analyze and solve stated problems using maxima, minima, related rates, and the differential.
6. State and apply the integration formulas to evaluated definite and indefinite integrals.
7. Apply the integral to problems involving the area of a region, volume of a solid of revolution, arc length and area of a surface.

Final exam: Regular class location, 5:00 pm-7:30 pm, Thursday, Dec. 10.

Frequently asked questions:
I understand the material when you cover it in class, but then when I start to do the homework I immediately start having trouble. I'm afraid I'll bomb the tests. What can I do about this? This is one of the most familiar complaints math and stat teachers hear from students, and there is no easy answer. First, the fact that you understand the material in class is a very good sign - it means you have started the process of learning. But listening to me explain topics and talk about problems and solutions according to my understanding of the material can only get you so far. You have to build your own understanding of mathematics and statistics through patience and practice, by grappling with tough ideas yourself. I can try to help you with this process, but no one can do it for you. This is what homework is for, to give you a chance a practice on your own, and why it so important. Therefore, don't be overly concerned if the homework is a

struggle, just accept it as a necessary part of learning. In my experience, students who come to class and work diligently on their homework are usually sufficiently prepared for tests. There is no reason to think you are any different.

Why don't you ever curve grades? It is fairly uncommon in the Math Department for professors to curve any type of grade, especially tests, for two reasons. First, if I curve a score, I am indicating that learning 70% of the covered material is not necessary, in other words, I am implying that the material is not important. But that is not true. I feel that Calculus is very important to enriching both your career and your life. Second, if you get a low grade and I curve the score, there is no way you will feel good about the grade, the course, or yourself for that matter. You will only feel good about your performance in this course if you earn the grade you receive. I want you to feel good about your performance.