## Math 251: Differential Calculus Fall 2012

Instructor: Gregg Waterman, 176 Boivin Hall, 885-1324, gregg.waterman@oit.edu

Web Page: http://tangent.oit.edu/~watermang/ There is a link there to our class.

Office Hours: 10-10:50 MTWF, 1-1:50 R. You are also welcome to drop in any time to see if I am around - if I am I can usually take some time to help you. I can also make appointments for other times.

**Learning Resources:** You can/will use the textbook for this class, *Calculus: Early Transcendentals*, 2nd. Edition, by Jon Rogawski. You will also find a number of (hopefully) useful resources at the page for this class that can be accessed through my web page (see above).

Course Goals and Objectives: After completing this course, students will be able to

- 1. compute limits, both graphical and computational
- 2. explain what the concept of a derivative is
- 3. derive the definition of the derivative
- 4. compute derivatives.
- 5. solve applied problems including related rates and optimization
- 6. communicate mathematical ideas using correct and appropriate notation

Students will also communicate mathematical ideas using correct and appropriate notation

Course Logistics: Some aspects of this class may be unlike any class you have ever had (or I have ever taught!):

- I will rarely "lecture" and, when I do, those lectures will be brief. You will be expected to get your initial exposure to concepts and calculations through reading the text or watching the videos I'll be providing, or both. As stated above, those things can be accessed at the course web page.
- Your course grade will be based on exam scores alone, or exam scores and quiz scores. See more about this below.
- You need only attend class on the days we have exams, if you wish. That said, I would encourage you to attend every day. Although I will not be lecturing, I will have some activities planned for every class session.
- There will be no assignment component in your grade, but I will give assignments that you can (should?) turn in. I will look over all your work carefully and point out any errors. (I'll also try to give a "warm fuzzy" here and there too!) Since these assignments don't count for a grade, you can do as much or as little of them as you wish. They WILL have due dates; I will "grade" them as quickly as I can, and once I have graded a particular assignment I will no longer accept it.

At the web page you will find clearly stated performance criteria (the things you are supposed to be able to do) for each unit. You are to do what you need in order to be able to do those criteria, and you will be held accountable by being asked to perform the criteria on exams. There is no reason you should show up for an exam without a good idea of what you will be asked to do on the exam!

Grading: Your grade will be based on your scores on quizzes and exams, or just exams.

- Regular Exams: There will be four exams given during the term. You MUST take exams at the scheduled times and there will be no make-up for missed exams. See the schedule at the end of this syllabus for exam dates. Make-up exams can be given for previously arranged absences if you have a good reason to miss an exam.
- Final Exam: The final is comprehensive and will be given during the time period listed in the calendar below. You MUST take the final at the designated time, so make all travel arrangements accordingly.
- Quizzes: There will be a quiz given on every Wednesday that we do not have an exam. There will be no make-up for missed quizzes, regardless of the reason, but I will throw out your lowest quiz score.

I will calculate four grades for you, two that include both quiz and exam scores and two that include only exam scores; you will then receive the highest of the four grades. When considering the quizzes, I will average all of them and count that average as one exam score. When averaging exam scores (with and without the quiz average), I will weight all exams equally to get one grade, and I will calculate another grade with the final weighted as two exams.

## Other Things of Importance:

- *Incomplete Grades:* An incomplete grade can only be assigned to you under the following circumstances:
  - 1. You are passing the course, or you are very close to passing AND have shown good effort (regular attendance, assignments turned in).
  - 2. You have a SERIOUS problem that begins after the withdraw date and prevents you from being able to complete the term.

An incomplete grade will definitely not be assigned in the event that you are not performing well in the course and fear that you may not obtain a passing grade!

• Disabilities: If you have, or think you have, a disability that could affect your performance in this course, you can tell me outside of class or contact Bill Proebstel, Campus Access & Equal Opportunity, at 541-851-5227.

Calendar: Below are some important dates for the term.

October 11th - Exam One

October 25th - Exam Two

November 8th - Exam Three

November 9th - Last day to withdraw with a "W"

November 21st-23rd - Thanksgiving Holiday - no class

November 29th - Exam Four

Monday, December 3rd, 2:00 PM - 4:00 PM - Final Exam