

Mathematics. The science of patterns.

Math 125, Calculus II

Instructor Information

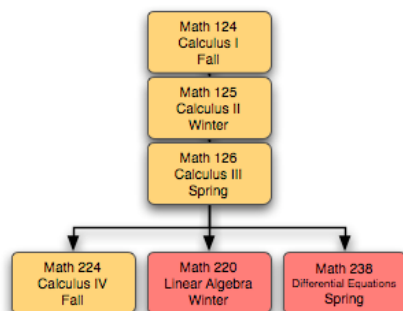
Eric Schulz, 509-527-4281, eric@wwcc.edu , Office #288A located in the Academic Support Center on the 2nd floor of the Main Building on WWCC's Walla Walla campus. My office hours are 10:30 to 11:30 daily. I am also available in the afternoons on an appointment basis; please contact me via email or phone to arrange an appointment if you are unable to come by during posted office hours. I normally respond to email promptly during the day but rarely in the evenings and on weekends. If you send an email in the evenings or weekends I will reply as soon as I can on the following work day.

Course Description

A continuation of MATH 124. Topics for the course include: an introduction to the definite integral (optional), applications of the definite integral, differentiation and integration of logarithmic, exponential, trigonometric, and hyperbolic functions, and techniques of integration.

The course will include use of the computer algebra software Mathematica. Mathematica is available on all computers in Room 207, a limited number of computers in Room 221, and all computers in Room 288 on campus. For those students with a computer at home and planning to take several of the advanced math courses at WWCC, purchasing a student edition of Mathematica is suggested. Mathematica will be used throughout the calculus sequence (Math 124/125/126/224) and will continue to be used in Linear Algebra (Math 220) and Differential Equations (Math 238) at WWCC. Mathematica for Students version 5.2 can be ordered either from the WWCC College Bookstore or from <http://www.wolfram.com/> for approximately \$140.

Advanced math courses at WWCC:



Required Materials

1. The textbook for the course is Calculus Concepts & Connections, 1st edition, Smith/Minton. The textbook is used for Math 124, 125, 126, and 224.
2. A graphing calculator will be necessary. There are many different calculators that are sufficient for the needs of the course. Please feel free to contact the instructor with any questions about calculators.
3. Engineering Computation paper for homework assignments, pencil, etc. Available in the WWCC Bookstore for approximately \$2.50 for a 100-sheet pad.

Attendance

Attendance at every class session is expected. I understand absences are sometimes unavoidable and will work with students when such occasions arise. In the event of an absence occurring on the date of a scheduled exam or quiz, **prior** arrangements must be made in order to schedule another time to write the exam.

Cell Phones/PDAs



Our classroom is a **No Cell Phone/PDA environment**. Cell phones are to be silenced before class begins and put away. Cell phones/PDAs are not to be accessed for any reason during classtime. Text messaging is not allowed during class. Using a cell phone as a calculator is not acceptable - you should have a scientific calculator for use in the course.

Homework Assignments

Homework will be assigned regularly and collected to be reviewed for completeness, correctness, and granted credit when

appropriate as outlined below. Homework assignments can include textbook problems, instructor written problems, and Mathematica assignments.

* Each homework assignment will be worth 10 points.

* Assignments turned in on time where at least 50% of the assigned problems are completed with sufficient supporting work will earn 4 of the 10 possible points. Answers without supporting work do not count as "completed with sufficient supporting work".

* Three randomly selected problems on each assignment will be graded in detail. Complete, correct, detailed solutions for each of these three problems will be worth 2 points. The problems to be graded will be selected using a random sampling algorithm in Mathematica. Random problem selection is made after assignments have been turned in, hence, do not ask which problems on the assignment will be graded in detail before the assignment is due.

* Assignments on which answers are written without supporting work will not receive credit.

* Assignments which are messy and unorganized will not receive credit. Neatness and readability counts!!

* Assignments are to be written on "Engineering Computation Paper" using the non-grid side of the paper - the graphpaper grids show through on the blank side to provide excellent alignment guides. Work written on the graphpaper side is difficult to read.

Complete assignments turned one day late will be worth at most 6 points (3 points for being turned in and 1 point per graded problem). Incomplete assignments turned in one day late are worth 0 points. Assignments turned in more than one day late will not receive any credit.

In addition to textbook assignments, there will be Mathematica assignments given throughout the course. The points possible for each Mathematica assignment will be stated when the assignment is made.

Assignments and due dates are posted regularly on the class Quarter Schedule.

Exams

There will be 3 one-hour exams and a comprehensive final exam. Each one-hour exam will be composed of an inclass paper and pencil portion and a second portion that is to be completed outside of class and will require the use of Mathematica. The in-class portion of each one-hour exam is worth 100 points and the second portion is worth 25 points. The final exam is worth 250 points.

Grades

Grades for the course are computed by adding up the number of points earned and dividing by the total number of points possible in the course. If we assume that there will be 30 textbook homework assignments (each worth 10 points) and 5 Mathematica assignments (each worth 10 points), then the total number of points possible in the course would be:

$$hw + ma + ex1 + ex2 + ex3 + final = 300 + 50 + 125 + 125 + 125 + 250 = 975$$

In this case, homework assignments account for 30.8% of the course grade, Mathematica assignments for 5.1%, each one-hour exam for 12.9% (in class portion 10.3% and Mathematica portion 2.6%), and the final exam for 25.6%.

Final grades are simply a function of the percentage of possible points earned:

Let p be the percent of the possible course points earned by a student, the course grade is then given in the following table:

93% $\leq p \leq 100\%$ -> A
 90% $\leq p < 93\%$ -> A-
 87% $\leq p < 90\%$ -> B+
 83% $\leq p < 87\%$ -> B
 80% $\leq p < 83\%$ -> B-
 77% $\leq p < 80\%$ -> C+
 73% $\leq p < 77\%$ -> C
 70% $\leq p < 73\%$ -> C-
 67% $\leq p < 70\%$ -> D+
 60% $\leq p < 67\%$ -> D
 0% $\leq p < 60\%$ -> F
