



intuitive calculus

math 170
5 credits
black 222
mtwhf - 11:00am

text:
(1997). *gootman, eliot c. calculus*. new york: pearson- addison wesley.

description:
the ideas behind the calculus are among some great thoughts ever created by humanity --everyone with a college degree should have a semester or two. i say this not simply because i am a mathematician (everyone should have a semester or two of shakespeare, too :) there are two basic geometric questions behind it all: how does one find the slope of a tangent line to a given curve, and how does one find the area of a region that is bounded by a curve? sounds simple, doesn't it?

there are some links in the left sidebar of this page. take the time to explore what some people in other universities are interested in. there are other possibly useful links back at my [home page](#).

this quarter we will march as deeply as is reasonable in our text, covering at the very least:

- o ch. 1: brief review of a library of functions. (this will be done rather quickly and mainly on your own. get to me with questions!)
- o ch. 2: change and the idea of the derivative
- o ch. 3: the idea of limits
- o ch. 4: computing derivatives
- o ch. 5: derivative formulas

from there, we will go on to some applications and the anti-derivative.

check out the winter 2010 class calendar.

evaluation:
your grade will be determined by two midterms (30% ea.) and a final examination (40%). the first midterm will take place (and be graded) before the deadline for dropping the class. grades will be assigned on a 90%-80%-70%-60% scale. i do give A-'s, B-'s, and C-'s. occasionally, the lines between A-/B+, etc. are lowered, but **never** raised. in other words, if your average is 90% then you will receive some sort of an 'A.'

i collect selected homework assignments and we will have several unannounced, but straight-forward, quizzes to help you see where you stand regarding the content of the course.

if you have any questions or comments, feel free to come by my office or e-mail me at the address below.

student learner outcomes
the most important things you learn in school are not going to be measurable, sorry. in fact, the absolute best service a list of 'student learner outcomes' could possibly provide is as a random sample of behavioral objectives. that said, at the end of this course, you will have a reasonable facility (as measured by the evaluation procedures described above) in computing limits, identifying continuous and differentiable elementary functions, differentiating and anti-differentiating a variety of elementary functions, and applying these techniques to several applied problems. By the way, the phrase *elementary functions* refers to polynomial, exponential, logarithmic, and trigonometric functions. the word 'elementary' should not be confused with 'simple.'

note
students with disabilities who wish to set up academic adjustments in this class should give me a copy of their confirmation of eligibility for academic adjustments from the disability support services office so that we can meet in order to discuss how the approved adjustments will be implemented in this class. students with disabilities without this form should contact the disability support services office, bouillon 205 or dssrecept@cwu.edu or 963-2171 as soon as possible.

no, no, no!
no late assignments, no early tests, no late tests, no make-up tests (including finals ... be there).



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hours:
10:00am mwf
else, by appointment,
gleefully accepted

- links:**
- [wikipedia entry](#) - all the news that's fit to print about sir isaac.
 - [history of mathematics web resources](#)
 - [where is your birthday in pi?](#)
 - [yoga and meditation techniques](#) - you may need it by the time we're done.
 - [short course in trigonometry](#) - you may wish this one before it's all over, too.
 - [javaslide](#) - fruit from the tree of worthless information.