MAT 3-121 Calculus of a Single Variable

November 2016

Course Outline

Instructor: Professor Tony deLaubenfels

Office: Law 222

Office Hours: 2:30 - 3:30 p.m. Monday through Friday

Office Phone: Extension 4295   **Home Phone**: 895-8336

E-mail address: tdelaubenfels (tdelaubenfels@cornellcollege.edu from off campus)

Text: Calculus, 2E by Ostebee and Zorn, Houghton-Mifflin. We will cover most of Chapters 1-5.

Class meetings: There will be Lecture/ Discussion each morning from 9 a.m. until around 11 a.m. and afternoon class each afternoon from 1:15 p.m. until 2:30 p.m in our Law 203 classroom.

Exam schedule:

Exam 1	Chapters 1 – 2	Monday, November 7
Exam 2	Chapters 3-4	Monday, November 14
Final Exam	5 + comprehensive	Wednesday, November 23

Evaluations: Your grade will be based on your performance on homework and exams according to the following schedule:

Exam 1	100 points
Exam 2	100 points
Final Exam	125 points
Homework and Quizzes	75 points
TOTAL possible	400 points

Grade cutoffs are posted in our course Moodle pages.

This course supports the *Educational Priorities and Outcomes of Cornell College* with emphasis on knowledge, inquiry, reasoning, and communication.

Course Goals

Students should be able to:

- work with functions represented in a variety of ways: graphical, numerical, analytical, or verbal. They should understand the connections among these representations.
- communicate mathematics and explain solutions to problems both verbally and in written sentence.
- model a written description of a physical situation with a function, a differential equation, or an integral.
- use technology to help solve problems, experiment, interpret results, and support conclusions.

Students should understand

- the meaning of the derivative in terms of a rate of change and local linear approximation, and should be able to use derivatives to solve a variety of problems.
- the meaning of the definite integral both as a limit of Riemann sums and as the net accumulation of change, and should be able to use integrals to solve a variety of problems.
- the relationship between the derivative and the definite integral as expressed in both parts of the Fundamental Theorem of Calculus.

Students should develop an appreciation of calculus as a coherent body of knowledge and as a human accomplishment.

Policies:

Homework. Homework assignments and other course related information will be posted on Moodle. Most homework will not be collected, but it will be the basis for our class discussions, quizzes, and exams.

Distractions. Other than our classroom computer, no electronic devices (laptop computers, cell phones, pdas, mp3 players) may be used in our classroom while class is in session. Exceptions will be made in special cases, for example if these are used in an accommodation for a disability.

Drop. I follow the college's policy on 15th day drops. i.e. in order to be eligible for a third Friday drop, you must attend class and complete all course work.

Academic Integrity. Cornell College expects all members of the Cornell community to act with academic integrity. An important aspect of academic integrity is respecting the work of others. A student is expected to explicitly acknowledge ideas, claims, observations, or data of others, unless generally known. When a piece of work is submitted for credit, a student is asserting that the submission is her or his work unless there is a citation of a specific source. If there is no appropriate acknowledgment of sources, whether intended or not, this may constitute a violation of the College's requirement for honesty in academic work and may be treated as a case of academic dishonesty. The procedures regarding how the College deals with cases of academic dishonesty appear in *The Compass*, our student handbook, under the heading "Academic Policies – Honesty in Academic Work."

Accommodation. Students who need accommodations for learning disabilities must provide documentation from a professional qualified to diagnose learning disabilities. For more information see cornellcollege.edu/disabilities/documentation/index.shtml. Students requesting services may schedule a meeting with the disabilities services coordinator as early as possible to discuss their needs and develop an individualized accommodation plan. Ideally, this meeting would take place well before the start of classes. At the beginning of each course, the student must notify the instructor within the first three days of the term of any accommodations needed for the duration of the course.