

**Mathematics 1220      Sections 2 and 3**  
**Calculus II          Spring 2017**

**Class Times and Place:**

1220–3, MTWF, 9:40–10:30, JWB 335

1220–2, MTWF, 10:45–11:35, LCB 219

**Instructor:** Professor Kenneth M. Golden, LCB 328, 801-581-6176 (o), 801-750-8555 (m)  
kenatmath@gmail.com, golden@math.utah.edu, website: [www.math.utah.edu/~golden](http://www.math.utah.edu/~golden)

**Office Hours:** Mondays 11:45 AM – 12:45 PM, by appointment, or most days after class.  
There will be a review session before each exam.

**Text:** *Calculus with Differential Equations, 9th Edition*, Varberg, Purcell and Rigdon

**Course Materials:** Practice exams, the syllabus, help schedules, etc. can be obtained at [www.math.utah.edu/~golden](http://www.math.utah.edu/~golden) then click on the “Teaching” tab.

**Course Description:** Mathematics 1220 is a continuation of the study of differential and integral calculus begun in 1210, focusing on applications. Topics include transcendental functions, exponential growth and decay, techniques of integration, improper integrals, infinite sequences and series, Taylor series, Fourier series, and differential equations.

**Teaching Assistants (TA’s):**

Christian Sampson, [css@math.utah.edu](mailto:css@math.utah.edu), 801-585-7663, JWB 105.

Rebecca Hardenbrook, [u0918162@utah.edu](mailto:u0918162@utah.edu), [rebalhardenbrook@gmail.com](mailto:rebalhardenbrook@gmail.com), 360-913-3089.

**Discussion Hours:**

Every week there will be (optional) hour-long discussion sessions conducted by the TA’s. During these sessions you can get help with webwork problems, exams, etc. You can go to any session. Schedule of times and rooms will be posted on the class web site.

**Grades and Exams:**

- (50%) Your two best scores on three in-class exams. The lowest of your three exam scores is dropped automatically in calculating the final grades. There are NO MAKE-UP EXAMS. You may bring one sheet of paper and a calculator to any exam, but NO laptops, smart phones, or wireless devices. Please bring University ID to all exams.
- (25% ) Final exam.
- (25% ) WeBWorK assignments.

## Getting Help:

- **Discussion Sessions and Office Hours:** See class web site for schedule.
- **Class web site:** [www.math.utah.edu/~golden](http://www.math.utah.edu/~golden) then click on the “Teaching” tab.
- **Accessing your WebWork account:** All of the homework in this class will be done online through the department’s WebWork system. During the first week of classes you will receive an email containing your login information and a link to the WebWork page for this class. This email will go to your **Umail** account. If you encounter any problems, please contact a TA, and give your full name, course number and section, and student ID number.
- **WebWork feedback button:** When you use the feedback button within an exercise, state your question clearly. All relevant data about your question and answers is sent to the TA. Please don’t over-use this option, the TA’s will be getting lots of emails.
- **Free tutoring:** Available M-F in the Rushing Undergraduate Math Center. Spring Semester Hours: Monday - Thursday 8:00 AM - 8:00 PM; Friday 8:00 AM - 6:00 PM.

## Course Outline:

January	9-13	6.1-6.2	Logarithms and inverse functions	
	17-20	6.3-6.5	Exponential functions and growth	
	23-27	6.6-6.9	1 <sup>st</sup> order DE’s and special functions	
	30-3	7.1-7.3	Techniques of integration	
February	6-10	7.4-7.5	More techniques of integration	EXAM I (February 10)
	13-17	8.1-8.4	L’Hôpital’s rule, improper integrals	
	21-24	9.1-9.2	Infinite sequences and series	
	27-3	9.3-9.4	Positive series	
March	6-10	9.5	Convergence tests	EXAM II (March 10)
	12-19		SPRING BREAK	
	20-24	9.6-9.7	Power series	
	27-31	9.8-9.9	Taylor series	
April	3-7		Fourier series	
	10-14	10.5-10.7	Polar coordinates	EXAM III (April 14)
	17-21	15.1-15.2	Differential equations	
	24-25	15.3	Applications	
April	27		10:30 AM – 12:30 PM, LCB 219	FINAL EXAM (1220-2)
May	2		8:00 AM – 10:00 AM, JWB 335	FINAL EXAM (1220-3)