

Syllabus for Math 221, Calculus 3

MWF 8:00 (Appleton 217), Spring 2010

Dr. Tamara Veenstra

Contact Information:

Office	Appleton 221	Office Hours
Phone	x8634	MWF: 9:30-1:30; TH: 1:30-3:30; Others by appointment
Email	Tamara_Veenstra@redlands.edu	or luck (anytime I'm there)
Web	http://bulldog2.redlands.edu/facultyfolder/tamara_veenstra/	

Note: I will be gone to a conference for the first two days of class, Jan 13 and 15. There will be no class, but there will be HW due on the 18th.

Prerequisite: Strong understanding of calculus I, II as demonstrated by a grade of 1.7 or higher in MATH 121, 122 (2.7 or higher recommended) **or** permission.

Text: Calculus: Single and Multivariable, Hughes-Hallett et al (fourth edition)

Technology: We will use computer programs occasionally. If you have a graphing calculator, you are encouraged to use it also. Some assignments will be due over email. HW assignments will be posted on blackboard and my web site (see address above).

Classroom Environment: I believe that understanding and applying concepts is much more valuable than memorizing procedures. Thus, I will expect you to be able to explain your reasoning as well as solve problems. I also feel that mathematics is learned best when you are actively involved in doing mathematics. Thus, the classroom environment will be structured so that there are many occasions for you to work on problems with other students and to be involved in discussions about mathematics.

Topics: In this course, we will cover derivatives of multivariable functions, sequences and series, and line integrals, that is, chapters 9, 10, 12-15, 17-18 (not necessarily in order).

Time Commitment: You should expect to spend at least two hours studying outside of class for every hour spent in class.

Grading: Your grade will be based on the following categories and weighted as the given percentages:

Daily HW: 10%

Quizzes: 10%

Attendance and Participation: 10%

3 in-class and 1 final exam: 15% each

Weekly turn-in HW: 10%

Daily Homework and Participation: It is very important that you do your homework as assigned as mathematics builds on previous mathematics. Thus, homework will be assigned daily and will be discussed the following class period. It will not be collected. However, I will

check these at the beginning of class. If you are late to class, then your HW will be late and will be penalized. I will call on people at random to put these problems on the board. We will then discuss the problems. To get credit for this you must show a significant effort at attempting the problem and be able to explain your reasoning. No credit for just an answer, you must be able to explain how you got the answer and why you think it is correct (or incorrect). This will count toward your participation grade along with active participation in class. Obviously you cannot get full credit for participation if you are absent or late.

Absences: It is **your** responsibility to learn material covered in your absence and to turn in all HW **when due** (it's always posted on website and blackboard.)

Weekly Homework: Additionally, there will be weekly HW. This will be collected and graded and NOT discussed in class. You should attend office hours or tutoring sessions if you have questions. Homework is due at the beginning of class. Late homework will be penalized even if you are absent. HW is always posted on my website and in blackboard.

Quizzes: There will be quizzes roughly every other week. These may or may not be announced in advance. No makeup quizzes will be given unless arranged prior to the quiz. These will cover recent material from class, homework problems, and reading.

Examinations: There will be 3 in-class exams during the semester. **Approximate** schedule for these is **Feb 12, Mar 17, and Apr 9**. No make-up exams unless arranged prior to the exam. The final will be comprehensive and is scheduled by the Office of the Registrar for **Wed April 21** at 9 am. This is the final examination period for all calculus courses.

Academic Honesty Policy: Academic honesty is expected of all students and I take this very seriously. You should read this policy in the catalog and ask if you have any questions.

First Homework assignment:

- 1) Review single variable derivatives and complete the following problems pp. 159-162 (56,58,60,62,68,70) and pp. 230-232 (12,16,18,22). These will be collected on Monday January 18.
- 2) Read sections 12.1 and 12.2. We will cover both of these on Monday.
- 3) Email me your answers to the following questions by 5pm Friday 15th:
 - What's your name? (as you wish to be called)
 - What is your previous calculus experience? That is, where (if at U of R, with who) and when did you take previous calculus courses?
 - What are you (thinking of) majoring in? Why did you choose it, and what career do you hope to pursue?
 - Construct a metaphor for mathematics (as you see it). For example, if math were an animal what would it be? Explain why you chose your metaphor.
 - Please tell me anything you think I should know about you, and/or anything you'd like to tell me about yourself.