Math 317 syllabus and grading policy

Text

- Whitman, primarily chapters 13 and 16
- Strang, primarily chapters 12 and 15

Topics

1. Vector valued functions of one variable:
   - Parameterized curves, velocity, acceleration, arc length.
   - Includes curvature, normal and binormal vectors, tangential and normal components of acceleration.

2. Vector valued functions of several variables:
   - vector fields, line integrals, conservative fields, fundamental theorem of line integrals,
   - Green's theorem, gradient, curl, divergence,
   - parameterized surfaces, suface area, surface integrals,
   - Stoke's theorem, divergence theorem.

Grading

- There will be two midterms, tentatively scheduled for Wednesday, February 8th and Wednesday, March 15th.
- Homework will be due on Wednesdays and will generally cover material presented the previous week. Each week you will either turn in written homework or take a quiz based on the homework. This will be decided in class randomly. The quizzes will consist of one, two, or three problems taken directly from the homework. The quiz will take place in the last 15 minutes of class. At the end of the term, your two lowest homework/quiz grades will be dropped. There will be no make up quizzes or late homework assignments accepted.
- The final exam is scheduled for TBA. No calculators will be allowed on any of the exams.
- Final grade computation. It is given by which ever is greater,
  Homework/Quizzes*20% + Midterms*30% + FinalExam*50%
  OR
  FinalExam - 10.
  The second option is your safety net: even if you perform very badly on the midterms, you can still get a good grade in the class by doing well on the final.
- Final grades will then be scaled to be commensurate with historical averages.
- X factor: at the end of the grading process, I may move a few grades up by one or possibly two points. These will be awarded based on some X factors: for example, class room participation or drastic improvement over the course of the se