

MATH 317

SYLLABUS

Textbook: “Multivariable Calculus” by James Stewart, edition 7E

Topics:

- *Vector valued functions of one variable (Chapter 13):*
Parameterized curves, velocity, acceleration, arc length (includes curvature, normal and binormal vectors, tangential and normal components of acceleration).
- *Vector valued functions of several variables (Chapter 16):*
Vector fields, line integrals, conservative fields, fundamental theorem of line integrals, Green’s theorem, gradient, curl, divergence, parameterized surfaces, surface area, surface integrals, Stoke’s theorem, divergence theorem.

GRADING SCHEME

The grade is composed of:

- Final exam (50%)
- Two midterms (30%)
- Homework and quizzes (20%)

Or:

- Final exam grade minus 10 points.

(Whichever is higher.)

The second option is a safety net — even if you did poorly during the semester, you can still have a good grade by doing well on the final exam.