Syllabus for Math 129 Sect. 20
Instructor: Kevin Lin
August 21, 2007

Note: This syllabus may be updated as the semester progresses.

- **Week of Aug. 20:** Integration by sbstitution; integration by parts. *Sects. 7.1, 7.2*
- **Week of Aug. 27:** Tables of integrals; algebraic identities and trig substitutions. *Sects. 7.3, 7.4*
- **Week of Sept. 3:** Approximating definite interals; Simpson's rule; improper integrals. *Sects. 7.5 - 7.7*
- **Week of Sept. 10:** More on improper integrals; **Exam 1** *Sects. 7.7, 7.8*
- **Week of Sept. 17:** Areas and volumes; applications to geometry. *Sects. 8.1, 8.2*
- **Week of Sept. 24:** Density and center of mass; applications to physics. *Sects. 8.1, 8.2, 8.5*
- **Week of Oct. 1:** Sequences; geometric series. *Sects. 9.1, 9.2*
- **Week of Oct. 8:** Convergence of series; tests for convergence. *Sects. 9.3, 9.4*
- **Week of Oct. 15:** Power series and interval of convergence; **Exam 2**. *Sect. 9.5*
- **Week of Oct. 22:** Taylor polynomials; Taylor series. *Sects. 10.1, 10.2*
- **Week of Oct. 29:** Finding and using Taylor series; intro to differential equations. *Sects. 10.3, 11.1*
- **Week of Nov. 5:** Slope fields; Euler's method; separation of variables. *Sects. 11.2 - 11.4*
- **Week of Nov. 12:** Growth and decay; modeling. *Sects. 11.5, 11.6*
- **Week of Nov. 19:** More on modeling; **Thanksgiving**. *Sect. 11.6*
- **Week of Nov. 25: Exam 3**; models of population growth. *Sect. 11.7*
- **Week of Dec. 2:** Review.
- **Dec. 10: Final exam.**