

**MATH 2250, Fall 2015**  
**LECTURE SCHEDULE**

INSTRUCTOR: DANNY KRASHEN

1. **Orientation:** introduction to the ideas of calculus, differentiation, integration, fundamental theorem of calculus. basic ideas of limits and their relevance. common sense definition of limits (recitation).
2. **Limits and limit laws** (Mooculus Ch 1): formal definition of limits, example via definition. limit laws (Mooculus, 1.3), examples.
3. **continuity, squeeze, One sided limits, some difference quotients**
  - i. limit laws (1.3) give continuity for polynomials, roots, etc.
  - ii. mention that trig functions are continuous (continuity in 2.3).
  - iii. examples, group work (radical cancellation!).
  - iv. squeeze (1.3.5), sine (1.3.6)
  - v. examples, group work (trig stuff)
  - vi. definition of one sided limits. one-sided limit laws. infinite limits and asymptotes (2.1).