The course will cover roughly chapters 1 to 6.1 of Stewart’s Calculus, 7th Edition, Early Transcendentals, ISBN 9780538497909 (I will not use WebAssign). If time permits we will cover integration by parts and volumes.

The course will be fast paced, there will be homework sets at the end of every other class, two midterms and a final. All exams will be held in class. Here is a rough syllabus (subject to change!) where all the sections are from Stewart’s Calculus book mentioned above. Please keep in mind that the material written below is just to give a rough idea about the contents of the course and is not binding. Depending on how the course proceeds we may not be covering the exact same material written below.

- 28-30 May: §1.1 - §2.3
  - Basic properties of functions, tangent and velocity problems, definition and properties of limits, limit laws
- 3-6 June: §2.3 - §3.2
  - Continuity, rates of change, definition of a derivative, differentiability
- 10-13 June: §3.2 - §3.8
  - Basic differentiation rules, derivatives of trigonometric functions, chain rule, implicit differentiation, related rates, linearization
- 17-20 June: §3.8 - §4.5
  - Extrema of functions, mean value theorem, sketching graphs of functions
- 24-27 June: §4.5 - §5.4
  - Optimization problems, antiderivatives, areas, definitive and indefinite integrals, properties of integrals
- 1-3 July: §5.4 - §6.1
  - Fundamental theorem of calculus, substitution rule, areas between curves

Tentative midterm and final date (subject to change):

- Midterm I, June 6
- Midterm II, June 20
- Final, July 3

**Office of disability services:** Students with disabilities requiring special accommodation should contact the Office of Disability Services (ODS). You can get more information at

http://health.columbia.edu/services/ods/support/testing