Numerical and Scientific Computing with Applications David F. Gleich CS 314, Purdue

In this class you should learn:

- How to analyze the in the two-point Newton-Cotes formula (the trapezoid rule)
- The three point Newton-Cotes formula, or Simpson's rule. Any this is surprisingly accurate
- Newton-Cotes vs.
 Chebyshev quadrature vs.
 Gauss quadrature
- How we can combine Newton-Cotes formulas into piecewise rules

November 8, 2016

Numerical integration!

Next class

Intro to solving ODEs on a computer Chapter 11

Next next class

Consistency, stability, and local truncation error Section 11.4