

## Math 7B Calculus for Life Sciences II

Textbook – Calculus for Biology and Medicine 4th Edition by Neuhauser

### Suggested number of 50-minute lectures:

- 1 lecture (5.10) Antiderivatives
- 2 lectures (6.1) The Definite Integral
- 2 lectures (6.2) The Fundamental Theorem of Calculus
- 1 lecture (6.3.1) Cumulative Change
- 1 lecture (6.3.2 – 6.3.3) Average Values and Mean Value Theorem
- 1 lecture (6.3.4) Areas
- 1 lecture (6.3.5) The Volume of a Solid (Disk and Washer Methods)
- 2 lectures (7.1) The Substitution Rule
- 2 lectures (7.2) Integration by Parts and Practicing Integration
- 2 lectures (7.3) Rational Functions and Partial Fractions
- 2 lectures (7.4) Improper Integrals
- 2 lectures (7.8) Trigonometric Integrals\*
- 2 lectures (7.9) Trigonometric Substitution\*
- 2 lectures (8.1) Solving Separable Differential Equations
- 2 lectures (8.2) Equilibria and Their Stability
- 1 lecture (8.3) Differential Equation Models

\* From APEX Calculus