

Math 7B Calculus for Life Sciences II

Textbook – Calculus for Biology and Medicine 3rd Edition by Neuhauser

Suggested number of 50-minute lectures:

2 lectures – (6.1) The Definite Integral

2 lectures – (6.2) The Fundamental Theorem of Calculus

1 lecture – (6.3.1) Areas

1 lecture – (6.3.2) Cumulative Change

1 lecture – (6.3.3) Average Values and Mean Value Theorem

1 lecture – (6.3.4) The Volume of a Solid (Disk Method)

1 lecture – (6.3.5) Rectification of Curves, Arc Lengths

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

3 lectures – (7.4) Improper Integrals

2 lectures – (7.8) Trigonometric Integrals*

2 lectures – (7.9) Trigonometric Substitution*

2 lectures – (8.1) Solving Differential Equations

2 lectures – (8.2) Equilibria and Their Stability

* From APEX Calculus