Math 227 – Calculus II
Course Outline, subject to minor changes

Text: Calculus, Early transcendentals, 5th edition, by James Stuart
San Francisco State University, Spring 2007
Instructor: Joseph Gubeladze

- 1/24 The definite integral §5.2
- 1/26 The Fundamental theorem of Calculus §5.3
- 1/29 More on the Fundamental Theorem §5.4
- 1/31 Substitution rule §5.5
- 2/2 Substitution rule §5.5 (continued)
- 2/5 Areas between curves §6.1
- 2/7 Volumes by cross sections §6.2
- 2/9 Volumes by shells §6.3
- 2/12 Work §6.4
- 2/14 Average value of a function §6.5
- 2/16 Integration by parts §7.1
- 2/19 Integration by partial fractions §7.4
- 2/21 Integration by partial fractions §7.4 (continued)
- 2/23 Integration by partial fractions §7.4 (continued)
- 2/26 Approx. integration: midpoint, trapezoid methods §7.7
- 2/28 Approx. integration: Simpson’s rule §7.7
- 3/2 Improper integrals: type 1 §7.8
- 3/5 Improper integral: type 2 §7.8
- 3/7 Arc length, Area of surface of revolution §8.1, §8.2
- 3/9 Review
- 3/12 [1st Midterm]
- 3/14 Sequences §11.1
- 3/16 Series §11.2
- 3/19 Integral test and estimates of sums §11.3
- 3/21 Comparison tests §11.4
- 3/23 Alternating series §11.5
- 3/26 Absolute convergence §11.6
- 3/28 The ratio and root tests §11.6 (continued)
- 3/30 Break – Cesar Chavez Day
- 4/2 Power series, the interval of convergence §11.8
- 4/4 Power series §11.8 (continued)
- 4/6 Power series functions §11.9
- 4/9 Spring Break
- 4/11 Spring Break
- 4/13 Spring Break
- 4/16 Taylor series §11.10
• 4/18 Taylor series §11.10 (continued)
• 4/20 Taylor series §11.10 (continued)
• 4/23 Application of Taylor series §11.12
• 4/25 Application of Taylor series §11.12 (continued)
• 4/27 Review
• 4/30 2nd Midterm
• 5/2 Parametric equations §10.1
• 5/4 Calculus with parametric curves §10.2
• 5/7 Polar coordinates §10.3
• 5/9 Polar coordinates §10.3 (continued)
• 5/11 Area and length in polar coordinates §10.4
• 5/14 Area and length in polar coordinates §10.4 (continued)
• 5/16 Review
• 5/21 Final Exam – 227.01
• 5/25 Final Exam – 227.02