

WE^BCA^LC : Calculus 2

A Web Based, Interactive, Multimedia Calculus
by
The WebMath Group

MATH 152 at Texas A&M University – Spring 2005

Syllabus

Below is the syllabus for the semester. (Sections I 33 and 34 are from WebCalc I.)

Week Sections

1. 1 Applications: Area and Average Value
I 33 Review: Fundamental Theorem of Calculus
I 34 Review: Method of Substitution
Maplet: Average Value of a Function
2. 2 Integration by Parts
8 Applications: Volume
Maplet: Volumes by Slicing
Maplet: Volumes of Revolution
3. 5 Trigonometric Integrals
10a Applications: Work
Maplet: Indefinite Integral Drill
4. 7 Trigonometric Substitutions
11 Partial Fractions
5. 3 Numerical Integration
 - Exam 1, Thursday 2/17
covers: I33, I34, 1, 2, 5, 7, 8, 10a, 11
6. 9 Improper Integrals
13 Differential Equations and Initial Value Problems
14 Applications of Differential Equations
7. 6 Applications: Arc Length and Surface Area
4 Applications: Mass and Center of Mass
8. 10b Applications: Fluid Pressure and Force
15 Sequences
9. 16 Series
Maplet: Geometric Series
 - Exam 2: Thursday 3/24
covers: 3, 4, 6, 9, 10b, 13, 14
10. 17 Convergence of Positive Series
18 Convergence of General Series
Maplet: Series Tests
11. 19 Power Series

12. 20 Taylor Series
 - 21 Applications of Power Series
 13. 22a Vector Algebra, Dot Product
 14. 22b Cross Product
 - Exam 3: Tuesday 4/26
 - covers: 15, 16, 17, 18, 19, 20, 21, 22
 15. Review for Final
 - Final Exam Wednesday 5/11 1-3 PM in HELD 109
-