

MATH 112: Calculus for Business and Life Sciences Textbook: Brief Calculus, Sixth Edition, Larson, Edwards Instructor: George Voutsadakis Office: CAS 206J Phone: 635-2667 Email: gvoutsad@lssu.edu URL: http://pigozzi.lssu.edu/WWW/TEACH/LSSU/F05/LSSU112F05/LSSU112F05.html Office hours: MTWRF 1:00-1:50

**From the Catalog:** Limits, differentiation, applications of the derivative, integration, applications of the definite integral, techniques of integration. Calculus of exponential and logarithmic functions, elementary differential equations, functions of several variables.

**Prerequisites:** Math 111 with a grade of C or better. This course will not count towards a major or minor in mathematics.

## **Course Objectives:**

The students taking the class should be able to: find the limit of a function graphically and analytically, discuss continuity of functions, find slopes of graphs and determine derivatives using the definition and the different rules available, apply derivatives to find rates of change, calculate higher-order derivatives and derivatives using implicit differentiations and apply these techniques in related-rates problems, use derivatives to study the behavior of a graph with respect to monotonicity and concavity, evaluate integrals and use them to find areas and volumes of solids of revolution and solve elementary differential equations as well as use them to model real-life problems.

Week	Date	Monday	Tuesday	Thursday	Friday
1	8/29	1.4	1.5	1.5	1.6
2	9/5	BREAK	BREAK	2.1	2.2
3	9/12	2.3	2.4	2.5	Review
4	9/19	Review	EXAM 1	2.6	2.7
5	9/26	2.8	3.1	3.2	3.3
6	10/3	3.4	3.5	3.6	Review
7	10/10	Review	EXAM 2	3.7	3.7
8	10/17	4.1	4.2	4.3	4.4
9	10/24	4.5	5.1	5.2	Review
10	10/31	Review	EXAM 3	5.3	5.4
11	11/7	5.5	5.6	5.7	6.1
12	11/14	6.2	6.3	6.5	Review
13	11/21	Review	EXAM 4	BREAK	BREAK
14	11/28	6.6	D1	D2	D3
15	12/5	D4	D4	Review	Review

## SYLLABUS FOR FALL 2005: MTRF 9:00 - 9:50

Final Exam: Week of December 12-16. Please Check!