

**DEPARTMENT OF MATHEMATICS  
SYLLABUS**

Course # & Name: Mathematics 147 Topology

Recommended Text(s) & Price: Munkres' *Topology: An Introduction* \$101

Prepared by: Jennifer Schultens      UPC Approval Date: Dec 7, 2004

<b>Lecture(s)</b>	<b>Sections</b>	<b>Comments/Topics</b>
1	12	Topological Spaces
2	13	Basis for a Topology
3	13	Basis for a Topology
4	14	The Order Topology
5	15	The Product Topology
6	16	The Subspace Topology
7	17	Closed Sets and Limit Points
8	17	Closed Sets and Limit Points (cont'd)
9	18	Continuous Functions
10	18	Continuous Functions (cont'd)
11	19	Continuous Functions (cont'd)
12	20	The Metric Topology
13	21	The Metric Topology (cont'd)
14	21	The Metric Topology (cont'd)
15	22	The Quotient Topology
16	23	Connected Spaces
17	24	Connected Spaces of the Real Line
18	26	Compact Spaces
10	26	Compact Spaces (cont'd)
20	27	Compact Subspaces of the Real Line
21	30	The Countability Axioms
22	31	The Separation Axioms
23	31	The Separation Axioms (cont'd)
24	32	Normal Spaces
25	33, 34	The Urysohn Lemma & The Urysohn Metrization Theory
26	50	An Introduction to Dimension Theory
27		Review

28	Review
29	Final Exam

Additional Notes:

Additional Topics:

Section 48—Baire Spaces

Section 49—A Nowhere—Differentiable Function

Section 50—An Introduction to Dimension Theory