

Sample syllabus for a one-semester topology course

based on

Topology Now!

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<i>day</i>	<i>section</i>
1	1.1 Equivalence
2	1.2 Bijections
3	1.3 Continuous Functions
4	1.3 Continuous Functions
5	1.4 Topological Equivalence
6	1.5 Topological Invariants
7	1.5 Topological Invariants
8	1.6 Isotopy
9	review
10	exam
11	2.1 Knots, Links, and Equivalences
12	2.2 Knot Diagrams
13	2.3 Reidemeister Moves
14	2.3 Reidemeister Moves
15	2.4 Colorings
16	2.4 Colorings
17	2.5 The Alexander Polynomial (definition and examples only)
18	2.6 Skein Relations
19	2.6 Skein Relations
20	2.7 The Jones Polynomial
21	2.7 The Jones Polynomial
22	review
23	exam
24	3.1 Definitions and Examples of Surfaces
25	3.2 Cut-and-Paste Techniques
26	3.3 The Euler Characteristic and Orientability
27	3.3 The Euler Characteristic and Orientability
28	3.4 Classification of Surfaces
29	3.4 Classification of Surfaces
30	3.5 Surfaces Bounded by Knots
31	4.1 Examples of Three-Dimensional Manifolds
32	4.2 The Euler Characteristic
33	4.3 Gluing Polyhedral Solids
34	4.3 Gluing Polyhedral Solids
35	review
36	exam
37	5.1 Continuous Functions on Closed Bounded Intervals
38	5.3 Sperner's Lemma
39	5.4 Brouwer Fixed-point Theorem for a Disk
40	7.1 Metric Spaces
41	7.1 Metric Spaces
42	7.2 Topological Spaces
43	7.2 Topological Spaces
44	7.3 Connectedness
45	7.3 Connectedness
46	7.4 Compactness
47	7.4 Compactness
48	7.5 Quotient Spaces
49	review
50	exam