MATH 353 – Fall 2015
Topology

Instructor: Jack Calcut Class: MWF 11–11:50 in King 241
Office: King 220A Office Hours: M 9–10, T 10–11, W 1–2,
Email: jcalcut@oberlin.edu and by appointment.
Office Phone: (440) 775-8008

Course Description
An introduction to point-set and algebraic topology. The fundamental notion of a topological space
is introduced and various properties a topological space might have are studied, including connect-
edness and compactness. Spaces are also investigated by means of certain algebraic invariants
including the fundamental group. These invariants are applied to the theory of covering spaces and
various results about surfaces, continuous maps, and vector fields are proved.

Prerequisite
MATH 301 (Foundations of Analysis) or 327 (Group Theory).

Textbook

Grading
Grades will be given based on the following scale and your overall percentage in the course.

<table>
<thead>
<tr>
<th>Letter</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D</th>
<th>F</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point</td>
<td>4.00</td>
<td>3.67</td>
<td>3.33</td>
<td>3.00</td>
<td>2.67</td>
<td>2.33</td>
<td>2.00</td>
<td>1.67</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>%</td>
<td>[93,100]</td>
<td>[90,93)</td>
<td>[87,90)</td>
<td>[83,87)</td>
<td>[80,83)</td>
<td>[77,80)</td>
<td>[73,77)</td>
<td>[70,73)</td>
<td>[60,70)</td>
<td>[0,60)</td>
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If the course is taken Pass/No Pass, then ≥C- is considered passing and is given the grade Pass (P); work <C- is considered not passing and is given the grade No Pass (NP).

40% Homework
Homework will be assigned approximately weekly on Blackboard. Homework must be written up neatly with multiple pages stapled. Students are encouraged to work together to learn the material, but each student must independently write up their own solutions. Homework is a major part of the course. No late homework will be accepted.

15% Quizzes
Given weekly and unannounced in lecture. No quiz during the exam week. The lowest score is dropped. No makeup quizzes.

20% Midterm Exam
Wednesday, October 14 in class. No electronic devices, notes, or books are allowed on exams.

25% Final Exam
Wednesday, December 16, 9–11 a.m. No electronic devices, notes, or books are allowed on exams.

Disabilities
The college will make reasonable accommodations for persons with documented disabilities. Students should notify the Office of Disability Services located in Peters G-27/G-28 and their instructor of any disability related needs within the first two weeks of class.
Honor Code
The College requires that students sign an Honor Code for all assignments. This pledge (which is written out on each assignment) states: “I affirm that I have adhered to the Honor Code in this assignment.” For further information, see the student Honor Code, which you can access via Blackboard>Lookup/Directories>Honor Code.

Cell Phones
The use of cell phones, smart phones, and other mobile communication devices is disruptive, and is therefore prohibited during class. Except in emergencies, those using such devices must leave the classroom for the remainder of the class period.

Important Dates

- First day of classes: Monday, August 31.
- Add/drop deadline: Thursday, September 10.
- Midterm Exam: Wednesday, October 14 in class.
- Fall recess: Saturday, October 17 – Sunday, October 25.
- Midterm grades available via PRESTO: Thursday, October 29.
- Last day to declare P/NP or to withdraw: Tuesday, November 3.
- Thanksgiving break: Thursday, November 26 – Sunday, November 29.
- Last day of classes: Friday, December 11.
- Final Exam: Wednesday, December 16, 9–11 a.m.