Summer 2021 Topology Crash Course

Instructor: Rebecca Sorsen

Time: 10:00 – 11:40am Aug 2–Aug 13 (except Saturday and Sunday)
Classroom: Room 110 MLH
Zoom Meeting ID: 915 6202 7522
Passcode: 787928

No registration required.
For questions, please send an email to keiko-kawamuro@uiowa.edu

Syllabus:
From Munkres's "Topology":

- Chapter 2: Topological spaces and continuous functions,
- Chapter 3: Connectedness and compactness
- Chapter 4: Countability and Separation axioms

From "Abstract Algebra" by Dummit and Foote:

- Definition of groups (1.1)
- Abelian, cyclic, dihedral (Section 1.2 and 2.3)
- Permutation groups, cycle notation, even/odd cycles (1.3)
- Subgroups, normal subgroups, relation to the kernel (2.1)
- Homomorphisms (1.6)
- Quotient Groups (3.1)
- Cosets, Lagrange's Theorem (3.2)
- 1st, 2nd, 3rd isomorphism theorems, (3.3)
- Group actions (1.7, 4.1, 4.3)
- Sylow's theorem (4.5)