

Class schedule: Math 4120, Fall 2021

Week 1: 8/18–8/20. Course overview Wednesday. One lecture Friday covering the Chapter 1 slides (pp. 1–15). Approximate YouTube content: Lectures 1.1–1.2.

Week 2: 8/23–8/27. Three lectures covering the Chapter 1 slides (pp. 16–54). Approximate YouTube content: Lectures 1.3–1.6. HW 1 due Friday.

Week 3: 8/30–9/3. Three lectures covering the Chapter 2 slides (pp. 1–35). Approximate YouTube content: Lectures 2.1, 2.2, and supplemental material (roots of unity). HW 2 due Friday.

Week 4: 9/6–9/10. Three lectures covering the Chapter 2 slides (pp. 36–71). Approximate YouTube content: Lectures 2.3, 2.4, 3.4, and supplemental material (dicyclic groups, permutation matrices, and representations of other groups by matrices). HW 3 due Friday.

Week 5: 9/13–9/17. Three lectures covering the Chapter 2 slides (pp. 72–107) and Chapter 3 slides (pp. 1–12). Approximate YouTube content: Lectures 3.1, and supplemental material on automorphisms of cyclic groups, semidirect products, and other finite groups. HW 4 due Friday.

Week 6: 9/20–9/24. Three lectures covering the Chapter 3 slides (pp. 13–41). Approximate YouTube content: Lectures 3.2, 3.3, 3.6, and supplemental material. HW 5 due Friday.

Week 7: 9/27–10/1. Three lectures covering the Chapter 3 slides (pp. 42–72). Approximate YouTube content: Lectures 3.5, 3.7. HW 6 due Friday.

Week 8: 10/4–10/8. Two lectures covering the Chapter 4 slides (pp. 1–22). Approximate YouTube content: Lectures 4.1, 4.2, 4.3 (0:00–7:00). Midterm 1 Wednesday. HW 7 due Friday.

Week 9: 10/11–10/15. Fall break Mon–Tues. Two lectures covering the Chapter 4 slides (pp. 23–44). Approximate YouTube content: 4.3 (7:01–32:52), 4.5 (0:00–33:18). HW 8 due Friday.

Week 10: 10/18–10/22. Three lectures covering the Chapter 4 slides (pp. 45–74). Approximate YouTube content: Lectures 4.5 (33:19–46:19), 4.6, and supplemental material on semidirect products. HW 9 due Friday.

Week 11: 10/25–10/29. Three lectures covering the Chapter 5 slides (pp. 1–35). Approximate YouTube content: Lectures 5.1, 5.2, 5.3 (0:00–31:35), and supplemental material on the orbit counting theorem. HW 10 due Friday.

Week 12: 11/1–11/5. Two lectures covering the Chapter 5 slides (pp. 36–44, 53–64). Approximate YouTube content: Lectures 5.3 (31:35–44:05), 5.4, 5.5 (0:00–3:23), and supplemental material on actions of automorphisms. Midterm 2 Wednesday. HW 11 due Friday.

Week 13: 11/8–11/12. Three lectures covering Chapter 5 slides (pp. 64–82, 89–91) and Chapter 7 slides (pp. 1–7). Approximate YouTube content: Lectures 5.5 (3:24–22:13), 5.6, 5.7, and 7.1 (0:00–23:43). HW 12 due Friday.

Week 14: 11/15–11/19. Three lectures covering Chapter 7 slides (pp. 8–29). Approximate YouTube content: Lectures 7.1 (23:44–32:36), 7.2, 7.3 (0:00–10:48, 19:19–34:50). HW 13 due next Monday.

Week 15: 11/22–11/26. One lecture covering the Chapter 7 slides (pp. 30–35). Approximate YouTube content: Lecture 7.3 (34:51–45:53), 7.4 (0:00–7:22). HW 13 due Monday. Thanksgiving break Wed–Fri.

Week 16: 11/29–12/3. Three lectures covering the Chapter 7 slides (pp. 36–54). Approximate YouTube content: Lecture 7.4 (7:23–39:38). HW 14 due Friday.