

# MA3D5 Galois Theory — Alternative book list

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February 2007

On our preliminary chapter 2:

- Sigler, Algebra, 1976, QA 155 S4. Very good literature on our chapter 2. Extensive, thorough, lots of examples and exercises.
- Chatters, Hajarnavis, An introductory course in commutative algebra, QA 251.3 C4. Alternative literature on our chapter 2. See 1,3,5,7,8,13,14.
- Jacobsen, Basic Algebra I, QA 155 J2. Alternative literature on our chapter 2. See chapter 2, sections 1., 2, 5, 6, 7, 9, 10, 11, 12, 14.

On all of our chapters. In the following, we list for each of our chapters 1, 2, 3, 4 which chapters of the book are related.

- Michael Artin, Algebra, QA 155 A7. Especially good for our chapter 2.
  1. 14.2, 14.3, 14.6.
  2. 10.1–10.7, 11.1–11.4.
  3. 13.1–13.8.
  4. 14.1, 14.5.
- Escofier, Galois Theory, 2001, QA 211 E8. Good and quite similar to our printed notes.
  1. 2, 3, 9.3.
  2. Not covered.
  3. 4, 6, 7, 15.
  4. 8, 11, 12, 14.
- Kaplansky, Fields and Rings (part I), 1969, QA 251 K2. Excellent and warmly recommended. The main theorem of Galois theory is treated early on, with examples coming later. Slightly denser than our module.
  1. 10.
  2. Note covered.
  3. 1, 2.
  4. 3, 4, 5, 6, 7, 8, 11.
- Rotman, Galois Theory, QA 211 R6.
  1. 25, 33, 38, 93.
  2. 1, 7, 10, 12, 17, 22.
  3. 28, 35.
  4. 41, 46, 48, 54.
- Garling, A course in Galois Theory, 1986, QA 211 G2.
  1. 14.
  2. 3, 4, 5.
  3. 7, 9, 10.
  4. 11, 12, 17.
- Bhattacharya a.o., Basic Abstract Algebra, 1986, QA 251 B4.
  1. 18.3 and 18.4.
  2. 9, 10, 11 but not 11.3.
  3. 15, 16.
  4. 17.
- Durbin, Modern Algebra, 2005, QA 251 D8.
  1. 6, 8, 9.
  2. 10.
  3. 11, first 3 sections.
  4. 11, last section.
- Lang, Algebra. Somewhat advanced.
  1. Not covered.
  2. 2, 5.1.
  3. 5.3–5.6.
  4. 6.1, 6.2, 6.3, 6.7.
- Hungerford, Algebra, 1974, QA 155 H8.
  1. Not covered.
  2. 3.
  3. 5.
  4. 5.