

SECTION LISTING FOR COURSE LECTURE NOTES

(References to the course text are given in parentheses)

0. Introduction and general information (Burton, Preface)
1. Mathematics in the earliest civilizations (Burton, 1.1-1.3, 2.2-2.5)
2. Greek mathematics before Euclid (Burton, 3.1-3.4, 10.1)
3. Euclid and the Elements (Burton, 4.1-4.3)
4. Alexandrian mathematics after Euclid (Burton, 4.4-4.5)
5. The late Greek period (Burton, 5.1-5.4)
6. The mathematical legacy of Islamic civilization (Burton, 5.5, 6.1)
7. Mathematical revival in Western Europe (Burton, 6.2-6.4, 7.1)
8. The sixteenth century: Cubic and quartic formulas (Burton, 7.2-7.4)
9. Mathematics and the Renaissance (Burton, 7.1, 8.1)
10. Mathematics and the beginnings of modern science (Burton, 8.1)
11. Precalculus mathematics in the seventeenth century (Burton, 8.1-8.2)
12. The development of calculus (Burton, 8.3-8.4)
13. Newton and Leibniz (Burton, 8.3-8.4)
14. Calculus in the eighteenth century (Burton, 9.3, 10.2)
15. The nineteenth century: New ideas (Burton, 10.3, 11.1-11.2, 11.4)
16. The nineteenth century; Stronger logic (Burton, 11.3, 12.2)
17. The twentieth century; Abstraction, growth, interaction (Burton, 12.3, 13.1-13.3)