Midterm Topics

You will not be allowed any notes, though calculators are allowed but will not be necessary. There will be four questions in forty minutes, on the topics listed below. The midterm will be very similar to the practice midterm posted online. It is likely that you will be asked to state and prove at least one theorem from Part I of the notes.

Course notes Part I

- Sections 1.1 1.7. Omit material on trees in Section 1.7.
- Omit all of Section 1.8. (Averaging)
- Know how to state and use Principles 1 5.
- Know all statements and proofs of Theorems 1 6.
- Know the examples on bijections and combinatorial proofs.

Course notes Part II

- Sections 2.1-2.4, 2.7-2.9(omit 2.9.1)
- Know how to work with sums and formal power series.
- Know how to state and use the Binomial Theorem
- Know how to count compositions of various types.