

## MATC34 Fall 2018

The chapter numbers refer to the textbook by Priestley (2nd edition).

- Assignment 1: due Thurs Sept 20, 2018
  - The complex plane (Chaps. 1 and 3);
  - holomorphic functions and power series (Chaps. 5 and 6)
- Assignment 2: due Thurs Oct 4, 2018
  - Cauchy's theorem (Chaps. 11 and 12)
- Assignment 3: due Tues, Oct 23, 2018
  - Cauchy's integral formula, zeros of holomorphic functions, maximum modulus theorem, open mapping theorem, Liouville's theorem (Chaps. 13, 15 and 16)
- Assignment 4: due Thurs, Nov 15, 2018
  - Laurent's theorem, meromorphic functions, singularities, branch points, branch cuts, poles, residues (Chaps. 9 and 7)
- Assignment 5: due Thurs, Nov 29, 2018
  - Cauchy's residue theorem; applications of contour integration, Schwarz' lemma, argument principle (Chaps. 18, 19 and 20).