

McMaster University
Department of Mathematics and Statistics
Stats 4D03/6D03 – Intermediate Probability Theory

Instructor: Aaron Childs
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Office Hours: Monday 10:30-11:20, Tuesday 9:30-10:20, Wednesday 2:30-3:20, Thursday 10:30-11:20, Friday 10:30-11:20, or anytime my door is open

COURSE INFORMATION

Lectures: Monday and Thursday 9:30-10:20 and Tuesday 10:30-11:20 in BSB/B139

Topics Covered: Chapter 1 - Probability Spaces (Sections 1-4)
Chapter 2 - Integration (Sections 1-6)
Chapter 3 - Independence and Product Measures (as needed)
Chapter 4 – Convergence of Random Variables and Measurable Functions (Sections 1,3,4)
Chapter 5 – Conditional Expectation and an Introduction to Martingales (Sections 1,2,4-7)
Chapter 6 – An Introduction to Weak Convergence (as time permits)

Textbook: *An Introduction to Measure and Probability* by J.C. Taylor, published by Springer-Verlag.

Assignments: There will be six assignments to be handed in to the locker in the basement of Burke Science before 11:00am on the following days:

Assignment #1: Friday, January 18
Assignment #2: Friday, February 1
Assignment #3: Friday, February 15
Assignment #4: Friday, March 8
Assignment #5: Friday, March 22
Assignment #6: Friday, April 5

Tests: The tests will be on the following dates:

Test #1: Thursday, February 7 in class
Test #2: Thursday, March 14 in class

Course Evaluation: Assignments: 20%
Test 1: 20%
Test 2: 20%
Final Exam: 40%

Academic Honesty: Attention is drawn to *Statement on Academic Ethics* and the *Senate Resolutions on Academic Dishonesty* as found in the *Senate Policy Statements* distributed at registration and available in the Senate Office. Any student who infringes one of these resolutions will be treated according to the published policy.