

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

Instructor: Aaron Childs
Office: Burke Science 113
Phone: 525-9140 Ext. 23426
E-mail: childsa@mcmaster.ca
Office Hours: Monday, Thursday, and Friday 9:30-10:20, Tuesday 1:30-2:20,
Wednesday 2:30-3:20.

COURSE INFORMATION

Lectures: Monday, Wednesday, and Thursday 10:30-11:20 p.m. in BSB/145

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 seven 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 12
Assignment #2: Friday, January 26
Assignment #3: Friday, February 9
Assignment #4: Friday, March 2
Assignment #5: Friday, March 16
Assignment #6: Friday, March 30
Assignment #7: Friday, April 6

Tests: The tests will be on the following dates:

Test #1: Thursday, February 15 in class
Test #2: Thursday, March 22 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.