

STAT 7060: Advanced Probability Theory, Fall 2010 (A01)

Tentative Course Outline

Instructor: Brad Johnson
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Class-time: MW 11:30 a.m. – 12:45 p.m. (316 Machray Hall)
Office hours: MW 10:00 a.m. – 11:00 a.m. (or by appointment)

General Description: Selected topics from probability theory, including: probability as measure, events, random variables, independence, integration and expectation, convergence and conditional expectation.

Suggested Resources: The *'s ones are on 3 hour reserve in the Science Library. Note also that there are a number of probability theory books available through the Library's Springer E-book subscription.

*ASH, R. B. 2000. Probability and measure theory. Harcourt/Academic Press, second edition. With contributions by Catherine Doléans-Dade.

*BILLINGSLEY, P. 1995. Probability and measure. John Wiley & Sons Inc., third edition.

*CHUNG, K. L. 2001. A course in probability theory. Academic Press Inc., third edition.

DURRETT, R. 2005. Probability: theory and examples. Duxbury Press, third edition.

*JACOD, J. AND PROTTER, P. 2003. Probability essentials. Universitext. Springer-Verlag, second edition.

KLENKE, A. 2008. Probability theory. Universitext. Springer-Verlag London Ltd., London. A comprehensive course. (*Available as a Springer E-book through the Library*).

*RESNICK, S. I. 2005. A probability path. Birkhäuser Boston Inc., 5th printing.

ROSENTHAL, J. S. 2006. A first look at rigorous probability theory. World Scientific Publishing Co. Pte. Ltd., second edition.

*WILLIAMS, D. 1991. Probability with martingales. Cambridge Mathematical Textbooks. Cambridge University Press.

Grading Scheme:	Mid-term Test	30%	(Date/Time to be announced)
	Assignments	20%	(Approximately 4)
	Final Exam	50%	(Date/Time to be announced)
	Total	100%	

Academic Dishonesty: It is important that you understand what constitutes academic dishonesty and that you are familiar with the very serious consequences. Links to resources that describe academic dishonesty (including plagiarism, cheating, inappropriate collaboration and examination impersonation) can be found at: umanitoba.ca/science/student/webdisciplinedocuments.html or through the Faculty of Science home page at: www.umanitoba.ca/science. Typical penalties imposed within the Faculty of Science for academic dishonesty are also described. See also the sections in *THE UNIVERSITY OF MANITOBA UNDERGRADUATE CALENDAR 2009–2010* dealing with academic integrity, including plagiarism, cheating and (im)personation at examinations (Sections 4.2.8 on page 28 and 7 on page 29).