

University of Manitoba  
Department of Statistics

**STAT 7360 T01, CRN 24816**  
**Selected topics on Markov decision processes**  
**Winter Term 2013**

<b>Instructor</b>	Dr. Xikui Wang Offices: 321 Machray Hall (Phone: 474 – 6275) 340 Machray Hall (Phone: 474 – 8172) E-mail: xikui_wang@umanitoba.ca
<b>Office Hours</b>	Tuesdays and Wednesdays 1:30 pm – 2:30 pm, or by appointment
<b>Description</b>	Selected topics from recent developments in Markov decision processes. Finite and infinite horizon models, existence, characterization and computation of optimal strategies
<b>Prerequisites</b>	Good knowledge on stochastic processes, in particular Markov processes. Consent of instructor.
<b>References</b>	1. <i>Markov decision processes</i> , by M. L. Puterman, John Wiley & Sons, New-York, 1994. 2. <i>Discrete-time Markov control processes</i> , by O. Hernandez-Lerma and J. B. Lasserre, Springer, 1996 3. <i>Adaptive Markov control processes</i> , by O. Hernandez-Lerma, Springer, 1989 4. Latest publications on Markov decision processes
<b>Evaluation</b>	Midterm test (in class, 1.5 hours, Date TBA) 40% Final Examination (2 hours, Date and place TBA) 60%
<b>Academic dishonesty:</b>	Plagiarism or any other form of cheating in the exams is subject to serious academic penalty. We wish to draw your attention to the university policy on academic dishonesty including 'plagiarism and cheating' and 'examination impersonation' as outlined in <i>The Undergraduate calendar</i> . <b>It is the responsibility of the student to know the rules! For details, see</b> <a href="http://umanitoba.ca/science/undergrad/resources/webdisciplinedocuments.html">http://umanitoba.ca/science/undergrad/resources/webdisciplinedocuments.html</a>