STAT 7310 Section A01
Research Tools for Statistics
Fall 2011

This course provides instruction in the use of a number of tools required for graduate level research in statistics. Topics include instruction in various software, such as LaTeX, R, SAS, etc. as well as Library usage, presentation and communication skills.

Time MWF, 2:30 PM – 3:45 PM, unless otherwise noted.
Location 316 Machray Hall, unless otherwise noted.

Instructor Dave Gabrielson, et. al.
323 Machray Hall
Telephone: 474-6688
Email: `Dave_Gabrielson@UManitoba.CA`

Web Pages Department of Statistics: `http://www.stats.umanitoba.ca/`

Office Hours Open drop in. (Or by appointment.)

Mark Breakdown This course is evaluated on a Pass/Fail basis. You must complete and pass *all* given assignments. For purposes of this course, a "pass" on an assignment is when that assignment is completed to the instructors satisfaction. *Extensions for assignments will not be given.* ***Failure to submit any assignment by its due date will result in failure for this course.***
NOTE: If an instructor asks for further work on an assignment, they will give an additional deadline for that work.

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 that describe academic dishonesty (including plagiarism, cheating, inappropriate collaboration and examination impersonation) can be found through the Faculty of Science home page at `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 2011–2012 dealing with academic integrity, including plagiarism, cheating and (im)personation at examinations.

Preliminary Schedule (subject to change)

Sept. 9	7310 Orientation
Sept. 12	LaTeX intro — history & background
Sept. 14	Class cancelled — Ph.D. Defence
Sept. 16	LaTeX lab (311 Machray Hall) — basics
Sept. 19	LaTeX — sectioning, basic referencing
Sept. 21	LaTeX — math display, fonts, theorems
Sept. 23	LaTeX lab (311 Machray Hall) — graphics, figures, tables
Sept. 26	LaTeX — document formatting
Sept. 28	LaTeX — citations, bibliography, references
Sept. 29	**Statistics Canada Visit** — 1:30 PM (306 Buller)
Sept. 30	Class cancelled for StatsCan visit
Oct. 3	*W. Poluha*: Library Skills (Science Library)
Oct. 5	*W. Poluha*: Library Skills (Science Library)
Oct. 7	*W. Poluha*: Library Skills (Science Library)]
Oct. 10	**Thanksgiving Day** — No class
Oct. 12	Presentations skills & LaTeX
Oct. 14	Presentations skills & LaTeX
Oct. 17	No class
Oct. 19	No class
Oct. 21	No class (4100 Midterm)
Oct. 24	*A. Leblanc*: Basic Programming in R
Oct. 26	*A. Leblanc*: Basic Programming in R
Oct. 28	*A. Leblanc*: Basic Programming in R (311 Machray Hall)
Oct. 31	*T. Koulis*: More R
Nov. 2	*T. Koulis*: More R/SAS
Nov. 4	*T. Koulis*: SAS (311 Machray Hall)
Nov. 7	No class
Nov. 9	No class
Nov. 11	**Remembrance Day** — No class
Nov. 14	No class
Nov. 16	No class
Nov. 18	No class (4100 Exam)
Nov. 21	No class
Nov. 23	Parallel R: Xgrid
Nov. 25	Xgrid lab (311 Machray Hall)
Nov. 28	*S. Muthukumarana*: Introduction to the Bayesian paradigm
Nov. 30	*S. Muthukumarana*: Introduction to MCMC
Dec. 2	*S. Muthukumarana*: MCMC using WinBUGS
Dec. 5	*S. Muthukumarana*: MCMC using WinBUGS
Dec. 7	*S. Muthukumarana*: MCMC using WinBUGS