Department of Mathematics and Statistics McGill University

MATH 324 Statistics

MATH 324 Statistics (3 credits; Prerequisites: MATH 323 or equivalent). Sampling distributions; estimation, properties of estimators, confidence intervals; tests of hypotheses, power function, likelihood ratio test; regression, analysis of variance and experimental design; goodness of fit, contingency tables, non-parametric tests.

Textbook: Wackerly, Mendenhall, and Scheaffer. (2008). *Mathematical Statistics with Applications, 7th Ed.*, Duxbury. Sections 6.7, 7.2, Ch 8 (all), Ch 9: (all) plus Cramer-Rao inequality (exercise 9.8 page 420), Ch 10: (all), Ch 11: 11.1 to 11.8 (except first part of 11.6), 12.3, 12.4, 13.1-13.6, 13.8, 13.9, 14.1-14.4, 15.3, 15.6, 16.1, 16.2.

Note: Students are expected to have memorized the standard statistical distributions as found in the inside back cover of the text. In addition, a table of standard tests and confidence intervals will be made available on the 324 mycourses site which should be memorized, unless you are prepared to derive them

Assignments: Assignments must be submitted by 4:45 p.m. on the due date, after which they will not be accepted. They may be handed in at the end of class, or deposited in the slot by the Math Office on the tenth floor of Burnside Hall. In the latter case, make sure you write the course number MATH 324 and instructor's name prominently on the front of your assignment (as well as your own name and student number, of course). The marker(s) will be available when assignments are returned, to answer questions concerning the marking.

Office Hours: TBA. The professor cannot act as a tutor, nor will he help with solutions to assignment problems.

The last five minutes of each class will be devoted to questions.

Midterm: The 324 midterm will be during class on TBA. It will be closed book with no crib notes. Bring a calculator.

		Formula I	Formula II
Marking Scheme:	Biweekly assignments:	10%	10%
	Midterm (one hour): Final Exam (three hours):	$\frac{20\%}{70\%}$	90%

Your final mark for the course will be the greater of the marks computed from these two formulas. Those students who do not write the midterm will be marked according to formula II. If needed, there will be a supplemental examination. No special writings of the final examination can be arranged, other than those officially prescribed by the University. The final exam will be closed book with no crib sheet.

Marker: TBA

W. J. Anderson Burnside Hall 1245

Important: In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

Right to submit in English or French written work that is to be graded [approved by Senate on 21 January 2009]: In accord with McGill University's Charter of Students Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Statement on Academic Integrity: McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/) for more information).

L'université McGill attache une haute importance à l'honnêtet académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/students/srr/honest/).