

Arts & Science 2R06

Course Outline

**“Statistics: Mathematical Models for Change,
Chance and Error”**

September 2009 – April 2010

Instructor: Prof. N. Balakrishnan

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Lectures: Wed @ 7:00 – 10:00pm in JHE-326H

Lab Sessions: Tues & Fri @ 11:30am – 12:20pm in BSB/244

Tutorial Sessions: T01 – Wed @ 4:30 – 5:20pm in BSB/115

T02 – Mon @ 11:30 – 12:20pm in BSB/115

T03 – Tue @ 1:30 – 2:20pm in BSB/B140

Tutorial Leader: Ms. Li Zhang (Ph.D. Statistics student); Office: Hamilton Hall-301;
e-mail: *zhangl25@math.mcmaster.ca*

Course website: <http://www.math.mcmaster.ca/courses/20092010/term3/artssci2r06/>

Purpose: To introduce students to different statistical concepts and techniques such as

- Data Forms and Presentation, Diagrams and Plots
- Probability
- Statistical Distributions

- Measures of Association
- Tests of Significance
- Goodness-of-fit Methods
- Analysis of Variance
- Regression Analysis
- Some Other Quantitative Methods Useful in Analysis of Random Phenomena

Text: *Introduction to Probability and Statistics*, 12th edition, by W. Mendenhall, R.J. Beaver and B.M. Beaver, Thomson and Brooks/Cole (2006).

Grading Scheme:

Assignments – 20% (About 5 in each semester, with equal weight)

(To be submitted in the assigned locker in the basement of Hamilton Hall)

Tests – 40% (Two tests in each semester, each carrying 10%)

(Missed tests, with necessary documents, will be added to the Final Exam)

Group Project – 10% (To be presented by each group at the end of March 2009)

Final Exam – 30% (3-hour final exam in April 2009)

Tests:

Test 1 – October 7 (Wednesday) @ 8:30 – 10:00pm (tentatively)

Test 2 – November 18 (Wednesday) @ 8:30 – 10:00pm (tentatively)

Test 3 – Will be announced later

Test 4 – Will be announced later

Location will be announced later

Calculator: Any calculator can be used on tests and examination

Academic Dishonesty Policy Reminder: Academic dishonesty consists of misrepresentation by decision or by other fraudulent means and can result in serious consequences, e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: *Grade of F assigned for academic dishonesty*), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at

<https://www.mcmaster.ca/academicintegrity>

Important Message: The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.