

Stats 3D03 — Course Outline

September 2017

Instructor: Prof. N. Balakrishnan, HH/206A, (905)525-9140, Ext. 23420; bala@mcmaster.ca

Lectures: Mon., Wed. 11:30am – 12:20pm and Fri. 1:30pm – 2:20pm, in HH/302

Objectives: The primary objectives of this course are to develop a rigorous approach to the theory of probability and statistical inference in order to analyze data and make justifiable decisions when faced with uncertainty, variation, or randomness in observations, with particular emphasis on distributions, estimation, and maximum likelihood.

Required Text: *Introduction to Mathematical Statistics, 7th Edition*, by Hogg, McKean and Craig, Prentice-Hall, 2013.

Chapters 1–6 are expected to be covered, with some sections likely excluded. Some material in these chapters, previously discussed in Stats 2D03, will be covered only briefly.

Course Evaluation: There will be 6 assignments for a total of 20%, two tests for a total of 30%, and the final exam for 50%.

First test will take place in October and the Second test will take place in November. The exact dates and location will be fixed soon, and the announcement will be made.

Calculator: McMaster Standard Calculator is allowed for the tests and exam.

McMaster Photo ID: For the tests and final exam, students are required to bring their McMaster photo ID cards.

Policy for Missed Work/McMaster Student Absence Form (MSAF): A missed test counts as 0% and there are no make-up tests. In the event of an absence for medical or other reasons, students should review and follow the Academic Regulations in the Undergraduate Calendar (Requests for Relief of Missed Academic Term Work), and if the case is a valid one with proper documentation, the test mark will be added to the final examination.

McMaster Policy on Academic Integrity: You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, such as a 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 types of academic dishonesty, please refer to the Academic Integrity Policy at <http://www.mcmaster.ca/academicintegrity>. The following illustrates only three forms of academic dishonesty: (1) Plagiarism, e.g., the submission of work that is not one's own or for which other credit has been obtained; (2) Improper collaboration in group work; (3) Copying or using unauthorized aids in tests and examinations.

Academic Accommodation of Students with Disabilities: Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. SAS can be contacted over phone (905)525-9140, Ext. 28652 or by email at sas@mcmaster.ca. For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities.

Email Contact and Student Responsibility Statement: Please note the following: 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. The instructor also reserves the right to change the weight of any portion of the grading scheme in such a way that if changes are made, each student's grade will be the higher of the original weightings and the new weightings. It is the responsibility of students to check the course website and their McMaster email weekly during the term and to note any changes. Announcements will be made in class and on the course website.