

STAT 7350: Order Statistics

Fall 2011

Course Outline

Instructor: Dr. Katherine Davies
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Class time and location: Tuesday and Thursday 1-2:15pm 316 Machray Hall
Office hours: Monday, Thursday 11am-12pm, Tuesday 2:30-3:30pm, or by appointment

Course description: This course will explore various topics in the area of order statistics. A tentative list of topics to be covered is as follows:

1. Introduction and Review of Basic Concepts
2. Order Statistics from Specific Distributions
3. Order Statistics in Statistical Inference
4. Censored Data Analysis
5. Moment Relations, Bounds and Approximations
6. Asymptotic Theory
7. Record Values

Textbook: *A First Course in Order Statistics*, by B.C. Arnold, N. Balakrishnan and H.N. Nagaraja (Siam, 2008)

Other resources (on reserve in library): *Order statistics and inference : estimation methods*, by N. Balakrishnan and A. C. Cohen (1991), *Order Statistics*, by H. A. David (2003) and *Relations, bounds, and approximations for order statistics*, by B. C. Arnold and N. Balarkishnan (1989).

Grading scheme: Your grade will be based on assignments and final exam according to the following weights:
Assignments - 50% (approximately 3 with equal weight)
Final Exam - 50%

Note about final exam: The final exam will be 2 hours in length and take place on a mutually agreed date and time.

Note about assignments: Discussing with other students and the sharing of ideas is encouraged but each student must write up their assignment on their own.

Academic dishonesty: It is important that you understand what constitutes academic dishonesty and that you are familiar with the consequences. For descriptions of these terms and other issues, please see http://umanitoba.ca/faculties/graduate_studies/publications. Additional information can be found at http://umanitoba.ca/student/student_discipline_home.html