



Department of Statistical and Actuarial Sciences. University of Western Ontario
Room 262 Western Science Centre. Phone: 519-661-3607. Fax: 519-661-3813

2018/2019

Intermediate Probability Statistical Sciences 3657A

Instructor Information

Instructor: Serge Provost, Professor, Ph.D., A.S.A.
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General Course Information

Lecture Hours Monday, Wednesday, Friday 11:30 a.m.-12:30 p.m., B&G Bldg, Room 0165
Tutorial Hours Wednesday 5:30 PM-6:30 p.m., WSC 55

Prerequisites

SS2858A/B A minimum mark of 60% in Statistical Sciences 2858A/B and in Applied Mathematics 2503A/B or Calculus 2503A/B. Students are advised that they are responsible to ensure that they either have the prerequisites for this course or written special permission from their Dean to enroll in it.

Antirequisites

None

Course Description

A continuation of the study of multivariate probability and stochastic processes. This course builds on the background developed in the second year courses, and focuses on the more advanced aspects of multivariate probability, namely transformations where the domain of random variables must be carefully considered.

Course Objectives

This course provides a thorough treatment of the concepts of probability, properties of random variables, conditional expectation and transformations of variables, among other topics. The successful student will become adept at carrying out the techniques and in understanding why they are needed.

Course Materials

The recommended textbook is
Mathematical Statistics and Data Analysis, Third Edition, by J. A. Rice

This textbook is available at the Taylor Library's service desk.
The course will focus on sections from the first six chapters.
The remaining chapters will be covered in part in SS3858B.

Additional material will be posted on the **course website**:

<http://fisher.stats.uwo.ca/courses/SS3657>

which should be consulted on regular basis for announcements, course material and updates.
This will be the primary means of disseminating information to all.

Methods of Evaluation

The overall course grade will be calculated as follows:

4 assignments worth 20% of the course mark (please note that these assignments may not be marked in their entirety due to limited TA support; however, the complete solutions will be posted on the course website.)

Two term tests worth 15% each to take place in Room 55 WSC during the tutorial hour, that is, from 5:30 to 6:20 p.m. on Wednesday **October 3rd** and Wednesday **November 7**:

A Final Exam worth 50% of the course mark.

A non-programmable calculator will be needed for the the tests and final exam.

Academic Policies

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your Dean's office as soon as possible, and contact your instructor immediately. If accommodation is approved by your Dean's office, your instructor will be notified, then it is your responsibility to make alternative arrangements with your instructor. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Dean's Office immediately. For further information please see: http://www.stats.uwo.ca/accommodation_medical.pdf . A student requiring academic accommodation due to illness, should use the Student Medical Certificate when visiting an off-campus medical facility. Or, request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services.

The department adopted a policy whereby there will be no make-up exams for missed tests. For those who legitimately miss an exam and provide the required supporting documentation, the standard practice consists in reassigning the weight of this exam to other evaluation components.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at this website: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf .

Please note that unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

In accordance with policy, <http://www.uwo.ca/its/identity/activatenonstudent.html> , the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner. The website for Registrarial Services is <http://www.registrar.uwo.ca> .

The Department has adopted a "Mutual Expectations" policy governing the classroom environment and all work submitted by students. The full text of the policy can be found at <https://www.uwo.ca/stats/undergraduate/mutual-expectations.html>. In summary, the policy was developed under the premise that all interactions between students and faculty should be governed by the principles of courtesy, respect and honesty.

Support Services

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 if you have questions regarding accommodation.

The policy on Accommodation for Students with Disabilities can be found here: www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_disabilities.pdf

The policy on Accommodation for Religious Holidays can be found here: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf