Faculty of Science | Department of Mathematics and Statistics
David Turpin Building Room A425 PO Box 1700 STN CSC Victoria BC V8W 2Y2 Canada
T 250-721-7437| F 250-721-8962 | msrecept@uvic.ca | uvic.ca/science/math-statistics/

Course Outline
STAT 450: Mathematical Statistics II
CRN: 22945

Instructor

Lecturer   Prof. Mary Lesperance, Ph.d., P.Stat.

Research Area Biostatistics, Mixture models, Bayesian methods, applications in Medicine, Genomics

Email   mlespera@uvic.ca

Phone   250-721-7461

Office   David Turpin Building A-449

General Course Information

Number of Units   1.5

Pre-requisites   STAT 256 or STAT 261 AND STAT 350

Office Hours and Assistance

Day   Will be posted on CourseSpaces after the class has been polled for times.

By appointment (send email to book one)

The Mathematics & Statistics Assistance Centre is a large space where students can go to work, on their own or in groups, and to discuss math & stats problems. The Centre is staffed with talented Teaching Assistants who are happy to discuss primarily first and second year course material with you. Please see http://www.math.uvic.ca/~msassist/index.html for more information.

Math Club Students in Undergraduate Mathematics and Statistics (SUMS) was founded in 2014 as the reincarnation of a previous undergraduate course union that had been inactive for a few years. Please see http://www.uvic.ca/science/math-statistics/current-students/undergraduate/sums/index.php for more information.

Course Materials and Online Resources

Textbook "Introduction to Probability and Mathematical Statistics, 2nd edition" by Bain and Engelhardt

Course webpage We will use CourseSpaces (http://coursespaces.uvic.ca/my/) for our on-line course material: homework, due dates, solutions, formula sheets, statistical tables, sample tests and your grades.

Calculator If a calculator is allowed in tests and examinations in a course offered by the Department, then the only acceptable calculator is the Sharp EL-510, EL-510RN or EL-510RNB models. It may be purchased at the UVic Bookstore or elsewhere for about $12. A calculator is permitted in this course.

Statistical Software: We may use the state-of-the-art statistical software, R and RStudio in this course for computations and simulations. They are available for Mac, Windows and Linux and are free to download from: http://cran.stat.sfu.ca/ and https://www.rstudio.com/. We may also use R Markdown, http://rmarkdown.rstudio.com/, a notebook interface which weaves together narrative text and code to produce elegantly formatted output.

Computer Facilities: The Student Computing Facilities are located in BEC, HSD and CLE and are available for drop-in usage. Their hours are posted here: http://www.uvic.ca/systems/facilities/ .

Class Meetings

All classes will be held in the classroom, COR A221, Monday's and Thursday's from 11:30 – 12:50. Attendance is REQUIRED as students will presenting some worked solutions to homework problems to the rest of the class. Presentations skills are vital to success in the workplace and I believe that a part of my job is to help prepare you for your career by giving you the opportunity to develop those skills in a friendly classroom environment.

Specific Topics

We will progress through the text material starting with Chapter 7. You are expected to have mastered the material in Chapters 1-6. Topics include: Limiting distributions, Statistics and their Sampling Distributions, Point Estimation, Sufficiency and Completeness, Interval Estimation and Tests of Hypotheses.

Evaluation and Grading

Your final percentage grade will be computed according to the following scheme.

Problem presentations	Homework Assignments	Midterms	Final Exam
Bi-Weekly	Bi-weekly	Thursday, February 9, 2017	TBA

5%	20%	25%	50%

Missing work   Regardless of the reason, there will be **no make-up midterm exams**. If you miss a midterm or assignment due to illness, accident, or family affliction, you should notify me as soon as possible, and provide a written request to be excused as well as supporting documentation. Your percentage allocation for a missed assignment will be divided evenly among those you did write, and for a missed midterm, divided between assignments and exam (with maximum 60% weight for the exam). If you miss an assignment or midterm and the absence is not excused, zero marks will be awarded.

Accessibility   Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Resource Centre for Students with a Disability (RCSD) as soon as possible. The RCSD staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations http://rcsd.uvic.ca/. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Grading   Percentage scores will be converted to letter grades according to the university-wide standard table

(Undergraduate: http://web.uvic.ca/calendar2017-01/undergrad/info/regulations/grading.html# Graduate: http://web.uvic.ca/calendar2017-01/grad/academic-regulations/grading.html#)

Final Examination   Off-schedule final examinations (i.e., deferred examinations) are given only in accordance with the university policy as outlined in the Calendar. If you are unable to write a final examination due to illness, accident or family affliction, please refer to the following webpages for detailed instructions how to proceed: http://web.uvic.ca/calendar2017-01/undergrad/info/regulations/concessions.html#
 Students are strongly advised not to make plans for travel or employment during the final examination period as special arrangements will not be made for examinations that conflict with such plans.

Supplemental Examinations The Department of Mathematics and Statistics does not award 'E' grades or offer Supplemental Examinations in any of its courses.

Policies and Ethics

Attendance   The university Calendar states 'Students are expected to attend all classes in which they are enrolled.' Our courses are conducted on that basis. If you miss an announcement (information concerning midterms, corrections to assignment, etc.) because you did not attend class, you must accept the consequences of not having learned of the change. (see http://web.uvic.ca/calendar2017-01/undergrad/info/regulations/attendance.html#).

Guidelines on Religious Observances   Where classes or examinations are scheduled on the holy days of a religion, students may notify their instructors, at least two weeks in advance, of their intention to observe the holy day(s) by absenting themselves from classes or examinations. Instructors will provide reasonable opportunities for such students to make up work or missed examinations.

Academic Integrity   Academic integrity is intellectual honesty and responsibility for academic work that you submit individual or group work. It involves commitment to the values of

honesty, trust, and responsibility. It is expected that students will respect these ethical values in all activities related to learning, teaching, research, and service. Therefore, plagiarism and other acts against academic integrity are serious academic offenses.

The responsibility of the institution Instructors and academic units have the responsibility to ensure that standards of academic honesty are met. By doing so, the institution recognizes students for their hard work and assures them that other students do not have an unfair advantage through cheating on essays, exams, and projects.

The responsibility of the student Plagiarism sometimes occurs due to a misunderstanding regarding the rules of academic integrity, but it is the responsibility of the student to know them. If you are unsure about the standards for citations or for referencing your sources, ask your instructor. Depending on the severity of the case, penalties include a warning, a failing grade, a record on the students transcript, or a suspension.

It is your responsibility to understand the University's policy on academic integrity:
http://web.uvic.ca/calendar2017-01/undergrad/info/regulations/academic-integrity.html#

Course Experience Survey

I value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey you will receive an email inviting you to do so. You will need to use your UVic netlink ID to access the survey, which can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

How to Succeed in This Course

As with any course in Statistics, it is important to read the course material and do the exercises/homework to succeed!