

## COURSE OUTLINE, SUMMER 2020

### STAT 260: Introduction to Probability and Statistics I (CRN: 30841)

#### Instructor and Coordinator

**Instructor** Chi M. Kou. Email: [cmrkou@uvic.ca](mailto:cmrkou@uvic.ca)<sup>1</sup>

**Coordinator** Dr. Min Tsao.

#### General Course Information

**Number of Units** 1.5.

**Pre or Co-requisites** Math 101 or Math 208.

**Credit Limit** Credit will be granted for only one of STAT 260, STAT 254, STAT 250.

#### Class Meetings

Tuesday, Wednesday and Friday: 8:30 am – 9:20 am via Zoom.

#### Office Hours

TBA (via Zoom).

#### Learning Objectives

(i) To develop an understanding of the reasoning by which findings from sample data can be extended to general cases, (ii) To develop familiarity with some basic statistical methods, and (iii) to emphasize examples and applications from engineering and the sciences.

#### Course Material and Online Resources

**Required Textbook** Introduction to Probability and Statistics by Tim Swartz.

**Optional Material** Student's Solution Manual by Myers and Ye.

**Course Webpage** Visit the course webpage ([coursespaces.uvic.ca](http://coursespaces.uvic.ca)) for homework assignment questions and solutions, announcements, sample tests and other information. If you have a general question about the course, please check this course webpage first before asking the instructor. Chances are that you can find the answer there.

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<sup>1</sup>Emails should be used primarily for administrative purposes/questions. For technical questions about the course material or homework, face-to-face discussions through online office hours are the most effective.



**Calculator** Students will need a calculator for this course. The recommended calculators are Sharp Calculators with a model number starting with “EL-510R”, for example, Sharp EL-510R, Sharp EL-510RN or EL-510RNB.

**Computer and Software** You will need to use a computer and the statistical software R for some of the assignments throughout the term. Visit <https://www.r-project.org/> to download and install R on your computer for free.

**Math & Stats Assistance** The Mathematics & Statistics Assistance Centre is staffed with talented Teaching Assistants who are happy to discuss 100- and 200-level mathematics and statistics concepts with you, whether you are struggling with a course or aiming for an A+! Please see <http://www.uvic.ca/msac> for more information, including how to access our supports remotely during the Summer 2020 term.

## Specific Topics

Introduction and Descriptive Statistics (Chapter 1, 2), Probability (Chapter 3), Discrete Random Variables and Probability Distributions (Chapter 4), Continuous Random Variables and Probability Distributions (Chapter 5), Joint Probability Distributions and Random Samples (Chapter 5), Estimation and Hypothesis Tests based on a Single Sample (Chapter 6), Estimation and Hypothesis Tests based on Two Samples (Chapter 7).

## Homework Assignments

The Homework Assignment Handout contains 31 reading/exercise sets. These sets will be assigned in order throughout the term at the rate of approximately one set per lecture. Numerical answers for all assigned exercises can be found in the back of the required text. Longer explanations are given in the optional Student’s Solution Manual. These exercises are for practice only and should not be submitted for marking. Students should maintain an organized notebook of solutions to assigned exercises for convenient review of tests.

There are three R Assignments that are to be submitted for marking. The due dates for these assignments will be announced in class and posted on Coursespaces. These assignments will be submitted electronically, through the Coursespaces page.

## Evaluation and Grading

For most weeks throughout the semester, there will be quizzes during Fridays’ lectures. These quizzes are between 15 to 25 minutes in length, and the coverage of each quiz will be announced two or three days before the quiz. There will also be an one-hour final exam at the end of the term. The weighting of the course components are:

R Assignments: 6%; Weekly Quizzes: 80%; Final (Time TBA): 14%.

All quizzes and the final exam will be conducted via Zoom and CourseSpaces online and assignments submitted online. Students must learn by themselves to scan their written



answers into PDF files and submit them online through CourseSpaces. Only PDF files will be accepted. It is students' responsibility to check their PDF files before submission. A submitted file that cannot be opened or can be opened but unreadable will receive a score of zero, and late submissions will not be accepted.

**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/calendar/undergrad/info/regulations/concessions.html> and

<http://web.uvic.ca/calendar/undergrad/info/regulations/exams.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.

## Policies and Ethics

**Department Policies** Can be found at <https://www.uvic.ca/science/math-statistics/current-students/undergraduate/course-policies/index.php>

**Online Academic Integrity** Work in this course is to be done individually. For assignments, you are encouraged to discuss problems, but your final write-up must be in your own words. Any form of collaboration or communication during quizzes and the final exam between persons is not permitted. Answers must be written in your own words in a way that reflects your own understanding. The Policy on Academic Integrity can be found at [web.uvic.ca/calendar2020-01/undergrad/info/regulations/academic-integrity.html](http://web.uvic.ca/calendar2020-01/undergrad/info/regulations/academic-integrity.html). By submitting your answer paper you agree that you have read and understood the Policy on Academic Integrity, and that you have not in any way violated the Policy in constructing or presenting your solutions. Please note that ALL course materials provided throughout the term, including course notes communicated during lectures, tutorial materials, assignments, and all examinations are intellectual properties provided to you for instructional purposes only. You are not permitted to distribute any of this material, such as through note-sharing or other online sites, without written permission from the instructor. To do so would be in violation of UVic's Policy on Academic Integrity.

**Missing work** If you miss a quiz and/or an assignment due to illness, accident, or family affliction, you should notify the instructor as soon as possible and provide a written request to be excused as well as supporting documentation. Once your request is approved, the weight of the missed assignment will be divided evenly among the remaining assignments, and that of the missed quiz will be divided among the remaining quizzes. **Important: the above policy only applies to the first missed assignment and the first three missed quizzes. Request to miss more assignments or quizzes above these limits will not be approved regardless the reasons. Missing assignments or quizzes above the limits will receive scores of zero.**



**Important dates**

Classes begin – Monday, May 4, 2020  
Drop (100% Fee Reduction) – Saturday, May 16, 2020  
Last Day to Add Courses – Saturday, May 16, 2020  
Drop (50% Fee Reduction) – Saturday, June 6, 2020  
Academic Drop Date – Wednesday, July 1, 2020  
Reading Break (no classes) – July 1-2, 2020  
Last day of classes – Friday, July 31, 2020  
Examination period – August 4 to August 17, 2020

