UNIVERSITY OF CALGARY
FACULTY OF SCIENCE

Department of Mathematics & Statistics
MS 476
403 220-5210
mathinfo@ucalgary.ca

COURSE OUTLINE FOR REMOTE LEARNING

1. **Course:** STAT 205, Introduction to Statistical Inquiry - Summer 2020

   Lecture 01: MWF 12:00 - 13:50 - Online

Instructor	Email	Phone	Office	Hours
Claudia Mahler	claudia.mahler@ucalgary.ca	403 220-7717	MS 376	Tuesdays 15:00 - 16:00

   Remote Learning Supplemental Information:

   Some aspects of this course are being offered in real-time via scheduled meeting times. For those aspects you are required to be online at the same time. Please refer to the details below for more complete information.

   Remote Learning Details:

   - **Lectures** will take place via Zoom meetings during our regularly scheduled lecture times.**All Zoom lectures will be recorded and posted to D2L within 24 hours of being held.**

   - **Labs** will involve no scheduled Zoom meetings. It is expected that you complete the lab worksheets on your own time when it is convenient for you.

   - **Office hours** with TAs and/or your instructor will be held via scheduled Zoom meetings.

   Course Site:

   D2L: STAT 205 L01 - (Summer 2020) - Introduction to Statistical Inquiry

   WeBWorK: STAT 205 L01 (Mahler)

   Note: Students must use their U of C account for all course correspondence.

2. **Requisites:**

   See section 3.5.C in the Faculty of Science section of the online Calendar.

   Prerequisite(s):
   Mathematics 30-1 or 30-2 or Mathematics 2 (offered by Continuing Education).

   Antirequisite(s):
   Credit for Statistics 205 and any one of Statistics 211, 213, 217, 327, Political Science 399, Psychology 300, 301, 312, or Sociology 311 will not be allowed. Students may not register in, or have credit for, Statistics 205 if they have previous credit for one of Statistics 321 or Engineering 319 or are concurrently enrolled in Statistics 321 or Engineering 319.

3. **Grading:**

   The University policy on grading and related matters is described in F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %	Dates
Assignments (6)	40%	July 10, July 17, July 24, July 31, August 7, August 12 (all tentative)
Quizzes (4)	60%	July 15, July 22, July 29, August 10 (all tentative)

Assignments and quizzes will be completed and submitted through WeBWorK.

Quizzes are scheduled in a way that they can be taken during the tutorial times. This is to help avoid any conflicts with additional student commitments such as work, other classes, etc. However, due to the fact that there are likely other distractors that cannot be accounted for, **students will have a 24-hour window in which to access a quiz on WeBWorK. Once a quiz has been opened, it must be completed within 75 minutes.** For example, Quiz 1 will be accessible from 11:59 PM on July 14 to 11:59 PM on July 15. A student can open and start the quiz any time during that window. however, once the student opens the quiz, they must complete and submit it within 75 minutes.

Students with SAS accommodations are asked to contact their instructor as soon as possible to discuss any necessary quiz time accommodations. All other accommodations for students will be made on a case-by-case basis.

A passing mark (at least 50%) on at least two of the four quizzes is required to earn a minimum grade of C- in the course.

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D
Minimum % Required	95 %	90 %	85 %	80%	75%	70 %	65 %	60%	55%	54 %	50 %

This course has a registrar scheduled final exam.

4. **Missed Components Of Term Work:**

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, then the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course.

5. **Scheduled Out-of-Class Activities:**

There are no scheduled out of class activities for this course.

6. **Course Materials:**

Recommended Textbook(s):

James McClave & Terry Sincich, *Statistics with Custom Chapter MyStatLab & Minitab RVP (13th Edition).*: Pearson.

Online Course Components: WeBWorK will be used for online assignments, labs, and quizzes. There is no cost to use WeBWorK.

Statistical Package: Minitab 18 will be required for this course and is bundled with the text if the text is bought from the Bookstore. If you wish to obtain a copy without purchasing the textbook, you can download a 30-day free trial from **www.minitab.com.** You can also rent the software for six months or 12 months from **http://onthehub.com/minitab.** For Mac users, the equivalent software is Minitab Express.

7. **Examination Policy:**

Students are expected to work independently on all quizzes but can consider the quizzes "open book" (that is, students can use their notes, lecture videos, other online resources and calculators, etc.).

Students should also read the Calendar, Section G, on Examinations.

8. **Approved Mandatory And Optional Course Supplemental Fees:**

There are no mandatory or optional course supplemental fees for this course.

9. **Writing Across The Curriculum Statement:**

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section E.2 of the University Calendar.

10. **Human Studies Statement:**

Students will not participate as subjects or researchers in human studies.

See also Section E.5 of the University Calendar.

11. **Reappraisal Of Grades:**

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See Section I.3 of the University Calendar.

   a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **ten business days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections I.1 and I.2 of the University Calendar

   b. **Final Exam:** The student shall submit the request to Enrolment Services. See Section I.3 of the University Calendar.

12. **Other Important Information For Students:**

   a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, Mental Health Services Website) and the Campus Mental Health Strategy website (Mental Health).

   b. **SU Wellness Center:** For more information, see www.ucalgary.ca/wellnesscentre or call 403-210-9355.

   c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email (svsa@ucalgary.ca) or phone at 403-220-2208. The complete University of Calgary policy on sexual violence can be viewed at (https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf)

   d. **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under Section K. Student Misconduct to inform yourself of definitions, processes and penalties. Examples of academic misconduct may include: submitting or presenting work as if it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; collaborating in whole or in part without prior agreement of the instructor; borrowing experimental values from others without the instructor's approval; falsification/ fabrication of experimental values in a report. **These are only examples**.

   e. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical

condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at procedure-for-accommodations-for-students-with-disabilities.pdf.

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Associate Head of the Department of Mathematics & Statistics, Mark Bauer by email bauerm@ucalgary.ca or phone 403-220-4189. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See Section E.4 of the University Calendar.

f. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see Legal Services website.

g. **Student Union Information:** VP Academic, Phone: 403-220-3911 Email: suvpaca@ucalgary.ca. SU Faculty Rep., Phone: 403-220-3913 Email: sciencerep@su.ucalgary.ca. Student Ombudsman, Email: ombuds@ucalgary.ca.

h. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction (USRI) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

i. **Copyright of Course Materials:** All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or non-academic misconduct, in addition to any other remedies available at law.

Course Outcomes:

- Define a random variable; conceptualize its sample space, and calculate the likelihood of various events that random variable(s) could produce.
- Identify a targeted population and its corresponding target parameter. Display how various sampling methods can target a population, with minimal bias.
- Describe and analyze a random variable's properties through a visual and numeric examination of its distribution shape, measure of centre, and measure of spread
- Comprehend and display the Central Limit Theorem and its implications on statistical inference via confidence interval estimation and hypothesis testing. This is to include methodology for both qualitative and quantitative data types as well as for single and multiple population comparisons.
- Explain the correlation between bivariate data, again, for both qualitative and quantitative samples. Constructing the least-squares estimate when applicable.
- Demonstrate how to use critical thinking, formulae, and statistical software to provide solutions for both theoretical and practical applications of course material.

Electronically Approved - Jun 25 2020 14:49

Department Approval

Electronically Approved - Jun 28 2020 19:45

Associate Dean's Approval for arrangements for remote learning