PSYC 300A – Summer 2020
Statistical Methods in Psychology I

Dates: May 11th – June 26th, 2020
Class Times: Mondays (12:30-2:20pm), Wednesdays (12:30-2:20pm), and Fridays (12:30 – 1:20pm)
Instructor: Myles A. Maillet, (maillet.teach@gmail.com)
TA: Peter Sugrue, (petersugrue@uvic.ca) CRN: 31188 Location: Online

Course Description:
To provide a conceptual and practical understanding of descriptive and inferential statistical analysis as applied to experimental research in psychology. To maximize learning in this course I believe it is your responsibility be prepared and engaged for each class, and it is my responsibility to provide you with feedback and resources to facilitate your comprehension.

In this course we will focus on visual and numerical description of univariate and bivariate data, correlation and regression, probability theory as it relates to inferential analysis, hypothesis testing, application of z-tests and t-tests to single sample designs, and communication of statistical findings.

Prerequisites:
The prerequisites include PSYC201 (Research Methods) and the Academic Writing Requirement fulfilled. It is recommended that students have completed Math 12 (Pre-Calculus) or an equivalent math course.

Registration:
Please note that it is your responsibility to ensure you are registered in the course. Having access to the CourseSpaces page does not necessarily mean you are registered. Registered students who do not attend at least one of the first two scheduled online iClicker sessions may be dropped from the class. Students will not be added to the course after May 17th.

Online Course Format:
Course material will be presented in 4 sections through lecture slides, lecture recordings, graded assignments and quizzes, and graded lab exercises.

As a student enrolled in this online course, you are expected to:

▪ Review lecture slides and recordings as outlined on the course schedule (see p. 4)
▪ Complete each homework assignment and submit your answers
▪ Complete the online quizzes
▪ Attend and participate in online iClicker sessions
▪ Attend and engage in the online lab sessions
▪ Complete the online exams

The course is scheduled to take place Mondays (12:30pm-2:20pm), Wednesdays (12:30pm-2:20pm) and Fridays (12:30pm-1:30pm). There will be online iClicker sessions during some of these times, where all students are expected to attend and participate (see course schedule). During the days and times when there is nothing scheduled, I will be available online for questions and to discuss any course concepts. Online meetings, office hours, iClicker sessions, and lab sessions will take place using Blackboard Collaborate, and an access link will be posted to the CourseSpaces page.
Required Text:
There is no required textbook for this course. All course content will be delivered through lectures, assignments, and discussion of course concepts.

Optional Text:

Course Policies:
- This course outline contains general information about the course objectives, evaluation, and schedule. It is the student’s responsibility to regularly check the course website for any updates.
- Attending online sessions and actively participating is strongly encouraged. The course material posted on CourseSpaces can only compliment the content from lectures and discussions.
- It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students’ learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, skin color, sexuality, disability, age, socio-economic status, ethnicity, language, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups.

Evaluation:
Your understanding of course material will be assessed through the following:
- Performance on 4 exams (each worth 15%, for 60% total)
  - There will be exams on (1) May 22nd, (2) June 5th, (3) June 12th, and (4) June 26th
- Online CourseSpaces quizzes (worth 10%)
- Homework (worth 10%)
- In-class participation via iClicker (worth 10%)
- Lab assignments (worth 10%)

Notes. All deadlines and grades submitted for exams and class exercises are final. There are no make-up assignments, no make-up exams, and no bonus or extra assignments that you can do post hoc to alter your grades. Your final grade for this class will be given as a rounded percentage (e.g., 74.50% will be rounded to 75%, and 74.40% will be rounded to 74%).

A minimum grade of fifty percent (50%) is required to continue on to PSYC300B.

Student Forum and Forming Study Groups:
If you have a question that you feel other students would benefit by hearing the answer, please post the question on the Student Forum on CourseSpaces. I encourage you to answer your classmates’ questions on this forum whenever possible. I will monitor this forum to answer student questions and ensure there is no misinformation. You can also use the Student Forum to form study groups.

R Software:
R is a freely available software for statistical analysis. In this course, it is expected that you will gain some familiarity and comfort in interpreting R output and using R for statistical analysis.
Exams:
There are four exams. Each exam will be completed on CourseSpaces (each 60 minutes in length, each worth 15%). All grades will be posted on CourseSpaces following each exam. It is your responsibility to check this posting to be sure the grade is correct. Each exam will cover material from the lecture slides, lecture recordings, lab exercises, iClicker sessions, quizzes, and homework assignments.

Missing an Exam:
No make-up exams will be given. If you miss an exam due to illness, accident, or family affliction, you must email me as soon as possible indicating that you have missed the exam and the reason for doing so. Then, you must supply me with documentation for your absence within 10 days of missing the exam.

In the case of illness, documentation should be dated within two days of the missed exam, or earlier indicating that you are likely ill for a couple of days, including the date of the exam. If you are too sick to write the exam, then you should see a doctor that day. Except in extreme circumstances (e.g., life-threatening illness) medical documentation dated more than two days after the exam date will not be accepted. Your note must indicate that you are ill and unable to write the exam. Notes indicating that you were examined that day without indication of illness will not be accepted.

If your documentation is accepted for the missing exam, then a grade for that exam will be generated by weighting your grades from the remaining exams. Students who miss more than one exam will receive a grade of “N” in the course as they will be deemed to have missed too much of the course material to have met course completion requirements.

Online Quizzes:
There will be 12 quizzes on CourseSpaces to regularly evaluate your understanding of the material, worth a total of 10% of your final grade. For each quiz, you will be allowed up to five attempts, and the average grade of these attempts will be used as your final grade for this quiz. Each quiz will be weighted equally, and your lowest quiz grade will be dropped.

Lab Exercises:
To further facilitate your integration of the course material, you will be asked to participate in graded lab exercises. For each lab session, you will be randomly assigned to a group with 4-5 members, whom you will work with to complete the exercise. Each group member is expected to contribute equally to the final product. If a person has concerns regarding the contribution of one or more members of the group she or he should speak to the course instructor.

- You must attend the lab section you are registered in (either 10:30am or 11:30am on Thursdays).
- You are expected to attend all lab sessions (6 in total).
  - The TA will be recording attendance during the lab sessions.
  - Any student who misses more than 2 lab sessions will receive an “N” in the course.
- Each assigned exercise is worth equal points, and comprises 10% of your course grade.
- I will take your best 5 of 6 lab exercises when computing your final lab grade.

Homework:
You will be given 12 graded homework assignments worth a total of 10% of your final grade. The homework will provide you with opportunities to test your comprehension of the material as well as to introduce you to R. It is incredibly helpful to practice and work through the problems. You will be required to enter your answers to the homework questions on CourseSpaces. Once the submission portal has closed, answer keys will be provided. The grade for your lowest homework assignment will be dropped.
**iClicker Sessions:**

There will be 8 iClicker sessions across the course, which are designed to foster discussion and assess students’ understanding of course concepts.

- These sessions will always start at 12:30pm and will last one hour.
- See schedule (below) for session dates.
- To avoid random or careless responding, you will be graded on your correct responses.
- Each correct response will be worth 0.2%, up to a maximum of 10%.
- There will be approximately 60 iClicker questions distributed throughout the term.

The iClicker Reef system is much like the traditional (physical) iClicker system, except it is all done online using the app, on either your laptop or a mobile device. You will need to register for an iClicker Reef account, which costs about $20 for 6 months. Keep in mind that if you are also enrolled in PSYC300B (A01) this summer, we will be using iClicker Reef system in that course as well.

You can create an account at [https://app.reef-education.com](https://app.reef-education.com). For more information on how to create an iClicker Reef account, watch this [YouTube video](https).

**Tentative Schedule: (see CourseSpaces for any updates or changes)**

<table>
<thead>
<tr>
<th>Wk.</th>
<th>Day</th>
<th>Date</th>
<th>Topic(s)</th>
<th>Due</th>
<th>Online Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mon.</td>
<td>May 11</td>
<td>Course Introduction; Syllabus</td>
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<tr>
<td></td>
<td>Wed.</td>
<td>May 13</td>
<td>Measurement Concepts</td>
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<td>iClicker Session 1</td>
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<td></td>
<td>Fri.</td>
<td>May 15</td>
<td>Frequency Distributions</td>
<td>HW1+2, Q1+2</td>
<td>iClicker Session 2</td>
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<td>2</td>
<td>Mon.</td>
<td>May 18</td>
<td>Central Tendency</td>
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<td></td>
<td>Wed.</td>
<td>May 20</td>
<td>Variability</td>
<td>HW3+4, Q3+4</td>
<td>iClicker Session 3</td>
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<td></td>
<td>Fri.</td>
<td>May 22</td>
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<td>3</td>
<td>Mon.</td>
<td>May 25</td>
<td>Correlation</td>
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<td></td>
<td>Wed.</td>
<td>May 27</td>
<td>Correlation</td>
<td>HW5, Q5</td>
<td>iClicker Session 4</td>
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<td></td>
<td>Fri.</td>
<td>May 29</td>
<td>Regression</td>
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<td>4</td>
<td>Mon.</td>
<td>June 1</td>
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<tr>
<td></td>
<td>Wed.</td>
<td>June 3</td>
<td>Partitioning Variability; Error in Prediction</td>
<td>HW6, Q6</td>
<td>iClicker Session 5</td>
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<td></td>
<td>Fri.</td>
<td>June 5</td>
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<td>5</td>
<td>Mon.</td>
<td>June 8</td>
<td>Empirical Distributions + Probability</td>
<td>HW7+8, Q7+8</td>
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<td>Wed.</td>
<td>June 10</td>
<td>Hypothesis Testing (HT)</td>
<td>HW9, Q9</td>
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<td></td>
<td>Fri.</td>
<td>June 12</td>
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<tr>
<td>6</td>
<td>Mon.</td>
<td>June 15</td>
<td>Sampling Distributions</td>
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<td></td>
<td>Wed.</td>
<td>June 17</td>
<td>HT with Empirical Sampling Dist.</td>
<td>HW10, Q10</td>
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<td>Fri.</td>
<td>June 19</td>
<td>Single-Sample z-Test</td>
<td>HW11, Q11</td>
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<tr>
<td>7</td>
<td>Mon.</td>
<td>June 22</td>
<td>HT with Theoretical Sampling Dist.</td>
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<td></td>
<td>Wed.</td>
<td>June 24</td>
<td>Single-Sample t-Test</td>
<td>HW12, Q12</td>
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<td>Fri.</td>
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**Notes.**

iClicker sessions will include questions on the topics up to and including the session day (e.g., iClicker session 3 will include questions on both central tendency and variability). Therefore, it is recommended that you review the associated lecture slides and recordings before each iClicker session.

On days and during class times with nothing scheduled, I (Myles) will be available to meet online to answer any questions and discuss course concepts.
Prerequisites

Students who remain in courses for which they do not have the prerequisites do so at their own risk. Students who complete courses without prerequisites ARE NOT exempt from having to complete the prerequisite course(s) if such courses are required for the degree program.

Program Requirements

For more information see the UVic Calendar May 2020 (https://www.uvic.ca/calendar2020-05/undergrad/index.php#/content/5db888a563f365001a66a44b).

Registration Status

Students are responsible for verifying their registration status. Registration status may be verified using My Page, View Schedule. Course adds and drops will not be processed after the deadlines set out in the current UVic Calendar.

Commitment to Inclusivity and Diversity

The University of Victoria is committed to promoting, providing and protecting a positive and supportive and safe learning and working environment for all its members.

In the Event of Illness, Accident or Family Affliction

- What to do if you miss the final exam scheduled during the last day of classes

Apply at Records Services for a “Request for Academic Concession”, normally within 10 working days of the date of the exam. Records Services will forward the form to the instructor. If the concession is granted, the instructor will determine how to deal with the situation (for example, a deferred exam). Where a concession is not applied for or where such application is denied, an N grade will be entered on the student’s academic record. OR, you can download the Request for Academic Concession form here:
  http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf

- What to do if you miss an exam other than one scheduled during the last day of classes

Do not apply at Records Services for a “Request for Academic Concession”. Instead submit documentation of the illness, accident or family affliction directly to your course instructor (or designated teaching assistant).

- What to do if you require additional time to complete course requirements

Apply at Records Services for a “Request for Academic Concession”, normally within 10 working days of the end of the course. Records Services will forward the form to the instructor. If the concession is granted, the instructor will determine how to deal with the situation (for example, a deferred exam). Where a concession is not applied for or where such application is denied, an N grade will be entered on the student’s academic record. OR, you can download the Request for Academic Concession form here:
  http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf
Policy on Academic Integrity including Plagiarism and Cheating

The Department of Psychology fully endorses and intends to enforce rigorously the Senate Policy on Academic integrity [link](https://www.uvic.ca/calendar2020-05/undergrad/index.php#policy/Sk_0xsM_V?bc=true&bcCurrent=08%20Policy%20on%20Academic%20Integrity&bcGroup=Undergraduate%20Academic%20Regulations&bcItemType=policies). It is of utmost importance that students who do their work honestly be protected from those who do not. Because this policy is in place to ensure that students carry out and benefit from the learning activities assigned in each course, it is expected that students will cooperate in its implementation.

The offences defined by the policy can be summarized briefly as follows:

1. **Plagiarism.** You must make sure that the work you submit is your work and not someone else’s. There are proper procedures for citing the works of others. The student is responsible for being aware of and using these procedures.

2. **Unauthorized Use of an Editor.** The use of an editor is prohibited unless the instructor grants explicit written authorization.

3. **Multiple Submission.** Only under exceptional circumstances may a work submitted to fulfill an academic requirement be used to satisfy another similar requirement. The student is responsible for clarifying this with the instructor(s) involved.

4. **Falsifying Materials Subject to Academic Evaluation.** This includes falsification of data, use of commercially prepared essays, using information from the Internet without proper citation, cites sources from which material is not actually obtained, etc.

5. **Cheating on Assignments, Tests, and Examinations.** You may not copy the work of others in or out of class; you may not give your work to others for the purpose of copying; you may not use unauthorized material or equipment during examinations or tests; and you may not impersonate or allow yourself to be impersonated by another at an examination. The Department of Psychology has a policy of not making old examinations available for study purposes. Therefore, use of old exams without the express written permission of the instructor constitutes cheating by the user, and abetting of cheating by the person who provided the exam.

6. **Being an Accessory to Offences.** This means that helping another student to cheat (for instance, by showing or communicating to them answers to an assignment, or by allowing them to view answers on an exam) is an academic offence.

Instructors are expected to make every effort to prevent cheating and plagiarism. This may include the assignment of seating for examinations, asking students to move during examinations, requests to see student identification cards, and other measures as appropriate. Instructors also have available to them a variety of tools and procedures to check for Internet and electronic media-based cheating. In instances of suspected or actual plagiarism or cheating, instructors, following prescribed procedures, are authorized to take steps consistent with the degree of the offence. These measures will range from a zero on the test or assignment or a failing grade for the course, probation within a program to temporary or even permanent suspension from the University.

Rights of Appeal are described in the Policy on Academic Integrity in the University calendar.

The **definitive source** for information on Academic Integrity is the University Calendar

Other useful resources on Plagiarism and Cheating include:

1. The Study Solutions Office: [link](https://www.uvic.ca/services/counselling/success/study/index.php)

2. The Ombudsperson’s office: [link](https://uvicombudsperson.ca/tips/plagiarism/)

   The**Office of the Ombudsperson** is an independent and impartial resource to assist with the fair resolution of student issues. A confidential consultation can help you understand your rights and responsibilities. The Ombudsperson can also clarify information, help navigate procedures, assist with problem-solving, facilitate communication, provide feedback on an appeal, investigate and make recommendations. Phone: 250-721-8357; Email: ombuddy@uvic.ca; Web: uvicombudsperson.ca.

3. UVic Library Resources: [link](http://www.uvic.ca/library/research/citation/plagiarism/)

A note to remind you to take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress. All of us benefit from support during times of struggle. You are not alone.

Social Life, Friends, & Community at UVic:
Having a social network is an extremely important foundation for positive mental health. There are lots of benefits to joining clubs, course unions, intramurals and teams on campus.
https://www.uvic.ca/mentalhealth/undergraduate/connecting/index.php

Counselling Services:
Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students. www.uvic.ca/services/counselling/

Health Services:
University Health Services (UHS) provides a full service primary health clinic for students, and coordinates healthy student and campus initiatives.
www.uvic.ca/services/health/

Centre for Accessible Learning:
The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations www.uvic.ca/services/cal/. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

Elders’ Voices:
The Office of Indigenous Academic and Community Engagement (IACE) has the privilege of assembling a group of Elders from local communities to guide students, staff, faculty and administration in Indigenous ways of knowing and being.
www.uvic.ca/services/indigenous/students/programming/elders/

Mental Health Supports and Services:
Mental health supports and services are available to students from all areas of the UVic community: www.uvic.ca/mentalhealth/undergraduate/
Sexualized Violence Prevention and Response at UVic

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out:

Where: Sexualized violence resource office in EQHR, Sedgewick C119

Phone: 250.721.8021

Email: svpcoordinator@uvic.ca

Web: www.uvic.ca/svp