Renison University College Land Acknowledgement

With gratitude, we acknowledge that Renison University College is located on the traditional territory of the Attawandaron (also known as Neutral), Anishinaabe, and Haudenosaunee peoples, which is situated on the Haldimand Tract, the land promised to the Six Nations that includes ten kilometres on each side of the Grand River.

Fall 2018

Course Code: SDS 250R / SWREN 250R (Section 1 & 2)
Course Title: Social Statistics
Class Times/Location: 
   Section 1: Mondays & Wednesdays 10:30-12:20 at REN 2106
   Section 2: Mondays & Wednesdays 2:30-4:20 at REN 2106
Instructor: Dr. Hsiao d’Ailly
Office: REN 1606
Office Phone: 519.884.4404 ext. 28643
Office Hours: Mondays & Wednesdays 1:30-2:20 or by appointment
Email: hdailly@uwaterloo.ca

Course Description

The primary goal of this course is to help students become informed consumers of quantitative information in social science research. Emphasis will be placed on understanding basic principles of statistics and learning when and how to apply them.
Course Objectives and Learning Outcomes

Upon completion of this course, students should be able to:

- explain how statistics are used in social science research to organize quantitative information, test hypotheses, and report research findings
- identify variables in a data set and the level of measurement for each variable
- use various descriptive statistics, tables, and graphs to summarize quantitative information, including data that you collect yourself, or data presented to you through different sources
- describe the logic of hypothesis testing procedures and the use of inferential statistics in social research
- use appropriate statistics to answer different research questions and test different hypotheses involving one or two variables
- read with ease basic quantitative information, including tables and graphs, and research "findings", including hypothesis testing results in academic journals and general media

Required Text and Online Course Environment:


LEARN Course Environment: https://learn.uwaterloo.ca/ with a link to Mobius

Grading and Due Dates:

<table>
<thead>
<tr>
<th>Components</th>
<th>Weight</th>
<th>Date</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>5%</td>
<td>September 24</td>
<td>Posted on Learn</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>5%</td>
<td>October 24</td>
<td>Posted on Learn</td>
</tr>
<tr>
<td>On-line Activities/Quizzes</td>
<td>10%</td>
<td>Weekly on Learn/Mobius</td>
<td>Posted on Learn</td>
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<tr>
<td>Review Modules</td>
<td>10%</td>
<td>Weekly on Learn/Mobius</td>
<td>Posted on Learn</td>
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### Course Outline

An outline of the term’s work follows. For various reasons, however, it is sometimes necessary to deviate from this schedule. Such deviations in the scheduling or nature of tests or other work will be announced in class and/or posted on LEARN. *Missing such announcements is not an excuse for being unaware of the changes.*

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Textbook Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sept 10-14</td>
<td>Introductory, Research Methodology, Frequency Distributions</td>
<td>Chapter 1 &amp; 2</td>
</tr>
<tr>
<td>2</td>
<td>Sept 17-21</td>
<td>Central Tendency, Variability</td>
<td>Chapter 3 &amp; 4</td>
</tr>
<tr>
<td>3</td>
<td>Sept 24-28</td>
<td>Normal Curve, Z-Score, Sampling Distributions</td>
<td>Chapter 5</td>
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**Assignment 1 Due (5%) Monday (Sept 24)**

| 4    | Oct 1-5    | More on the Normal Curve, Review – Alternate schedule (see below)     | Chapter 5                          |

**First Exam (20%) Wednesday (Oct 3)**

| 5    | Oct 8-12   | Correlation (class on Oct 12)                                         | Chapter 10-1; 10-2                 |

*Oct 8 Thanksgiving Day – University closed  
Oct 9-10 Study Days – No classes  
Oct 12 Make-up Day for Oct 10*

| 6    | Oct 15-19  | More on Correlation, Regression (10-5; 10-6)                          | Chapter 10-5; 10-6                 |
| 7    | Oct 22-26  | Basic Probability (Appendix 3), Hypothesis Testing (10-3; 10-4)       | Appendix 3; Chapter 10-3; 10-4      |

**Assignment 2 due (5%) Wednesday (Oct 24)**

<p>| 8    | Oct 29-Nov 2 | Z-tests, Errors, Directionality, t-test | Chapter 7 &amp; 8                      |</p>
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Textbook Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Nov 5-9</td>
<td>Confidence Intervals, Applying t-tests</td>
<td>Chapter 8</td>
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<tr>
<td></td>
<td></td>
<td><em>Second Exam (20%) Wednesday (Nov. 7)</em></td>
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<tr>
<td>10</td>
<td>Nov 12-16</td>
<td>t-test with 2 Samples</td>
<td>Chapter 9</td>
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<tr>
<td>11</td>
<td>Nov 19-23</td>
<td>ANOVA</td>
<td>Chapter 11</td>
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<tr>
<td>12</td>
<td>Nov 26-30</td>
<td>Chi-Square &amp; Other Non-parametric Tests</td>
<td>Chapter 13</td>
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<tr>
<td>13</td>
<td>Dec 3</td>
<td>Last Day of Classes: Review</td>
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*The first week of classes begins on Thursday and includes only Thursday and Friday September 6 and 7. Regular Thursday and Friday schedules are followed on both of these days.

**The loss of a Tuesday class on October 9 (study day) is made up by following a Tuesday schedule on Thursday, October 11

***The loss of a Wednesday class on October 10 (study day) is made up by following a Wednesday schedule on Friday, October 12

****The loss of a Monday class clas on October 8 will be made up by following a Monday schedule on December 3.

**Late Work**

Assignments are due on the listed due date. Online activities and quizzes will be closed on the due dates specified on Learn. Tests must be written on the scheduled date at the scheduled time (please see below the UW practices on Accommodation for Illness or Unforeseen Circumstances). Missed tests or assignments will receive a grade of zero.

**Final Examination Policy**

For Fall 2018, the established examination period is December 6-21, 2018. The schedule will be available in October. Students should be aware that student travel plans are not acceptable grounds for granting an alternative final examination time (see: https://uwaterloo.ca/registrar/final-examinations)
Accommodation for Illness or Unforeseen Circumstances:

The instructor follows the practices of the University of Waterloo in accommodating students who have documented reasons for missing quizzes or exams. See http://www.registrar.uwaterloo.ca/students/accom_illness.html

Academic Integrity:

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. See the UWaterloo Academic Integrity webpage (https://uwaterloo.ca/academic-integrity/) and the Arts Academic Integrity webpage (https://uwaterloo.ca/arts/current-undergraduates/student-support/ethical-behaviour) for more information.

Discipline: Every student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for their own actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration, should seek guidance from the course professor, academic advisor, or Academic Dean. When misconduct has been found to have occurred, disciplinary penalties are imposed under the University of Waterloo Policy 71 – Student Discipline. For information on categories of offences and types of penalties, students should refer to Policy 71 - Student Discipline. For typical penalties check Guidelines for the Assessment of Penalties (https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/guidelines/guidelines-assessment-penalties).

Students should also be aware that copyright laws in Canada prohibit reproducing more than 10% of any work without permission from its author, publisher, or other copyright holder. Waterloo’s policy on Fair Dealing is available here: https://uwaterloo.ca/copyright-guidelines/fair-dealing-advisory Violation of Canada’s Copyright Act is a punishable academic offence under Policy 71 – Student Discipline.

Grievance: A student who believes that a decision affecting some aspect of university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4 (https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70). When in doubt, please be certain to contact the department’s administrative assistant,
who will provide further assistance.

**Appeals:** A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there are grounds. Students who believe they have grounds for an appeal should refer to [Policy 72, Student Appeals](https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-72).

**Academic Integrity website (Arts):**
http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility.html

**Academic Integrity Office (uWaterloo):**
http://uwaterloo.ca/academic-integrity/

**Accommodation for Students with Disabilities:**

**Note for Students with Disabilities:** The AccessAbility Services office, located on the first floor of the Needles Hall extension (NH 1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities, without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AAS office at the beginning of each academic term.

**Intellectual Property.** Students should be aware that this course contains the intellectual property of the instructor, which can include:

- lecture handouts and presentations (e.g., PowerPoint slides)
- lecture content, both spoken and written (and any audio or video recording thereof)
- questions from various types of assessments (e.g., assignments, quizzes, tests, final exams)
- work protected by copyright (i.e., any work authored by the instructor)

Making available the intellectual property of instructors without their express written consent (e.g., uploading lecture notes or assignments to an online repository) is considered theft of intellectual property and subject to disciplinary sanctions as described in Policy 71 – Student Discipline. Students who become aware of the availability of what may be their instructor’s intellectual property in online repositories are encouraged to alert the instructor.
Mental Health Support

All of us need a support system. The faculty and staff in Arts encourage students to seek out mental health supports if they are needed.

**On Campus**
- Counselling Services: counselling.services@uwaterloo.ca / 519-888-4567 xt 32655
- **MATES**: one-to-one peer support program offered by Federation of Students (FEDS) and Counselling Services
- Health Services Emergency service: located across the creek form Student Life Centre

**Off campus, 24/7**
- **Good2Talk**: Free confidential help line for post-secondary students. Phone: 1-866-925-5454
- Grand River Hospital: Emergency care for mental health crisis. Phone: 519-749-433 ext. 6880
- **Here 24/7**: Mental Health and Crisis Service Team. Phone: 1-844-437-3247
- **OK2BME**: set of support services for lesbian, gay, bisexual, transgender or questioning teens in Waterloo. Phone: 519-884-0000 extension 213

Full details can be found online at the Faculty of ARTS [website](#)
Download [UWaterloo and regional mental health resources (PDF)](#)
Download the [WatSafe app](#) to your phone to quickly access mental health support information

**A respectful living and learning environment for all**

1. It is expected that everyone living, learning or working on the premises of Renison University College will contribute to an environment of tolerance and respect by treating others with sensitivity and civility.

2. Harassment is unwanted attention in the form of jokes, insults, gestures, gossip, or other behaviours that are meant to intimidate. Some instances of harassment are against the law in addition to Renison University College policy.

3. Discrimination is treating people differently because of their race, disability, sex, sexual orientation, ancestry, colour, age, creed, marital status, or other personal characteristics. The Ontario Human Rights Code considers actions and behaviours rather than intentions.