

**University of Guelph**  
**Department of Mathematics and Statistics**  
**College of Physical and Engineering Science**

**STAT\*4600: Advanced Research Project in Statistics (1.0 credit)**  
**Course Outline for Winter 2020**

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**Course description:** Each student in this course will undertake an individual research project in some area of statistics, under the supervision of a faculty member. A written report and a public presentation of the project will be required.

**Restrictions:** Approval of a supervisor and the course coordinator.

**Intended Students:** This course is intended for senior undergraduate students.

**Objectives:** The student will acquire a solid exposition of modern ideas in an area of statistics research. Along the way, the student will gain experience in research methods such as scientific writing and presentation delivery.

**Evaluation:**

Research Proposal: 15%. To be submitted as a PDF to the Courselink Dropbox folder labelled *Research Proposal* **by 11:59pm on Friday, January 31**; no more than 5 pages, excluding appendices and references, font equivalent in size to Times New Roman 12 point. Use double line spacing, except for references and appendices which should be single-spaced. The student will describe the work that will be conducted. The student will also include a time-line for the remainder of the project, with tasks to be completed and deadlines.

Instructor mark: 15%. The student is expected to meet at least every 2 weeks with the instructor. This portion of the mark will be based on attendance at and participation in meetings, demonstrated individual effort, critical thinking, and problem solving, and adherence to the time-line described above.

Final Mini Poster: 5%. To be submitted as both a PDF and Word document to the Courselink Dropbox folder labelled *Mini Poster* **by 11:59pm on Monday, April 13**. A mini poster on legal-sized (8.5" X 14") paper that provides a summary of your research project, some of your results (in text and/or graphs/figures), and a picture of you. You should also indicate who your Supervisor was, and in what semester the work was completed (i.e. Winter 2020). A template poster has been provided on Courselink. These mini posters will be displayed on a bulletin board on the 5th floor to encourage new ideas and connections by future STAT\*4600 students. As such, your submitted poster may be edited for spelling and/or grammar corrections before being displayed.

**Final Presentation:** 20%. To be given at a date to be agreed with the coordinator during the first week of the examination period (**April 6 – 10**). The presentation should last approximately 20 minutes, not including questions. Marks will be given for answering questions and asking questions of other students, if applicable.

**Final Written Project:** 45%. To be submitted as a PDF to the Courselink Dropbox folder labelled *Final Project* **by 11:59pm on Monday, April 13**. No more than 20 pages in length, excluding references and appendices, with font equivalent in size to Times New Roman 12 point and 1 inch margins all around. Use double line spacing, except for references and appendices which should be single-spaced. Computer code may be included at the discretion of the instructor as an appendix, single spaced, but does not figure in the page count.

**Note on Evaluation:** The supervisor and coordinator will grade the Research Proposal, Final Mini Poster, Final Written Project, and Presentation.

Students are expected to know how to properly cite and reference academic sources, and to realize that inadequate citing of sources is a form of academic misconduct. The Learning Commons has very good resources on this subject, including some quizzes:

<http://www.academicintegrity.uoguelph.ca/>

<http://www.academicintegrity.uoguelph.ca/plagiarism>

## **University Policies**

### **Email Communication:**

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

### **When You Cannot Meet a Course Requirement:**

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Graduate Calendar - Grounds for Academic Consideration

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions

<https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml>

**Drop Date:**

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

Graduate Calendar - Registration Changes

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml>

Associate Diploma Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml>

**Copies of Out-of-class Assignments:**

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

**Accessibility:**

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website <https://www.uoguelph.ca/sas>

For Ridgetown students, information can be found on the Ridgetown SAS website <https://www.ridgetownc.com/services/accessibilityservices.cfm>

## **Academic Integrity:**

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community-faculty, staff, and students-to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Graduate Calendar - Academic Misconduct

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

## **Recording of Materials:**

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

## **Resources:**

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars

<https://www.uoguelph.ca/academics/calendars>

## **Mental Health Services:**

One out of every five students in Canada experiences some sort of mental health issue at some point in their academic career. If you find yourself facing a mental health crisis, or just need to talk to someone, please consider taking advantage of one of the following resources available to University of Guelph students:

**Counseling Services:** (x53244) is located at Health Services (J.T. Powell Building) and offers individual and group counselling sessions by appointment or walk-in.

***Student Support Network:*** is located in Raithby House (across from the cannon and offers confidential, peer-based, drop-in support.

***Good2Talk:*** ([1-866-925-5454](tel:1-866-925-5454)) is a free, 24/7 student hotline that provides professional counselling and referrals for mental health, addictions and well-being.

***Here 24/7:*** ([1-844-437-3247](tel:1-844-437-3247)) specializes in assessment, referral and appointment booking and is available 24/7 for crisis support.

You are not alone and you will not be judged for asking for help.