

# Department of Mathematics & Statistics STAT4600

## Advanced Research Project in Statistics Fall 2024

## **Calendar Description:**

## STAT\*4600 Advanced Research Project in Statistics F,W (0-6) [1.00]

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. Restriction(s): Approval of a supervisor and the course coordinator.

**Intended Students:** This course is intended for senior undergraduate students with research aptitude. The prerequisite for this course is 1.00 credit in Statistics at the 3000 level or above. The prerequisite sets the minimum qualification; however, the course is not intended for all students meeting that qualification. It is primarily the supervisor's responsibility to determine if the student has sufficient potential aptitude for research prior to giving their approval.

## Learning Outcomes:

- 1. The student will acquire a solid exposition of modern ideas in an area of statistics research.
- 2. The student will gain experience in research methods such as scientific writing.
- 3. The student will gain experience in formal presentation of research results.

## **Evaluation:**

- <u>Research Proposal</u>: 20%. To be submitted to the instructor AND coordinator by 4 PM on **Friday 20 September**; no more than 5 pages, <u>excluding</u> 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. <u>The student will also include</u> <u>a time-line for the remainder of the project, with tasks to be completed and deadlines.</u>
- <u>Instructor mark</u>: 15%. Student is expected to meet at least weekly with the instructor. This portion of the mark will be based on attendance at meetings, participation at meetings, and adherence to the time-line described above.
- <u>Final Written Project</u>: 45%. To be submitted to the instructor AND coordinator by 4 PM on **Friday 29 November**. No more than 20 pages in length, <u>excluding</u> 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.

• <u>Final Presentation</u>: 20%. To be given at a date to be agreed with the coordinator during the second week of the examination period (i.e. **Monday December 9 to Friday December 13**). The presentation should last 15-20 minutes, not including questions. Marks will be given for answering questions and asking questions of other students.

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

Late Policy: Deadlines for the proposal and the final written project will not be extended except under very exceptional circumstances.

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.cfm

Students are expected to be familiar with the section on Academic Misconduct in the Undergraduate Calendar

http://www.uoguelph.ca/undergrad\_calendar/c08/c08-amisconduct.shtml

### From http://www.vpacademic.uoguelph.ca/avpa/checklist/:

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 discourages misconduct. 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

The Academic Misconduct Policy is detailed in the Undergraduate Calendar: http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-

#### amisconduct.shtml

#### **E-mail Communication**

As per university regulations, all students are required to check their uoguelph.ca 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. See the undergraduate calendar for information on regulations and procedures for Academic Consideration.

### **Drop Date**

Courses that are one semester long must be dropped by the end of the last day of classes; two-semester courses must be dropped by the last day of classes in the second semester. The regulations and procedures for Dropping Courses are available in the Undergraduate Calendar.

#### **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 make a booking at least 10 business days in advance, and no later than the first business day in November, March or July as appropriate for the semester. Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time. More information: www.uoguelph.ca/sas.

Link to all Standard Statements posted to Mathematics & Statistics department website https://mathstat.uoguelph.ca/node/534

### Accommodation due to Illness:

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g. final exam or major assignment).