

## **MOS 2242A – Statistics Fall 2022 – Section 551**

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### **1. Course Information**

**Instructor:** Federico Pasini

**Email:** fpasini@uwo.ca

**Office:** A105

**Office Hours:** by appointment (via Zoom or in person)

**Class Location:** HC-H111

**Scheduled Class Times:** Monday 8:30am-10:30am and Wednesday 8:30am-9:30am

**Antirequisites:** Biology 2244A/B, Economics 2122A/B, Economics 2222A/B, Geography 2210A/B, Health Sciences 3801A/B, Psychology 2811A/B, the former Psychology 2810, the former Psychology 2820E, Psychology 2830A/B, Psychology 2850A/B, Psychology 2851A/B, Social Work 2207A/B, Sociology 2205A/B, Statistical Sciences 2035, Statistical Sciences 2141A/B, Statistical Sciences 2143A/B, Statistical Sciences 2244A/B, Statistical Sciences 2858A/B.

### **2. Course Description**

The ability to extract useful information from data is one of the most important and marketable skills a student of business can acquire. The purpose of this course is to introduce quantitative decision-making skills, with an emphasis on analysis techniques used in management. Topics include: descriptive statistics, probability, hypothesis testing, analysis of variance, correlation and regression analysis, time series forecasting, and survey techniques.

### **3. Course Learning Outcomes**

As a result of this course, students will be able to:

- Calculate descriptive statistics as used in business decisions.
- Use statistical procedures that are applicable to business decisions.
- Use statistical analysis methods and interpret statistical outputs.

#### 4. Textbooks and Course Materials

**Suggested textbook:** Douglas A. Lind, William G. Marchal, Samuel A. Wathen, Carol Ann Waite, Kevin Murphy, *Basic Statistics for Business and Economics* - 7th Canadian Edition. Print text (ISBN: 9781260326963) or eBook (ISBN: 9781264966486), according to the student's personal preference.

**Course Notes and data files:** To be found on the course website at <https://owl.uwo.ca>.

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**Course Software:** Microsoft Excel, included in MS Office 365, which is available for free to Huron students. If you are interested in installing it on your personal computer, visit:

<https://wts.uwo.ca/sitelicense/microsoft/homeuse.html>

#### 5. Methods of Evaluation

|   |     |
|---|-----|
| Quizzes (via OWL)                               | 16% |
| Weekly Excel exercises (to be submitted on OWL) | 12% |
| Midterm test                                    | 32% |
| Final Exam                                      | 40% |

#### Course policies regarding assessments:

- Students are expected to follow the instructions posted on the course website to submit their weekly exercises/quizzes before each deadline.
- Students should always make sure they have a backup of your exercises.
- If a student is unable to meet a course requirement (final exam, midterm, or assignment due date) due to illness or other serious circumstances, they must provide valid medical or supporting documentation to your Academic Counselling Office as soon as possible.
- Generally, late submissions will not be accepted and no mark will be given after the deadlines, except through the recommendation of Academic Counselling. If a student has serious medical or compassionate grounds for a due date extension, they should take supporting documentation to Academic Counselling who will contact the instructor. If a student misses an assignment for a legitimate reason and presents valid documentation to the Academic Counselling (or uses a Self-Reported Absence), the instructor will either grant an extension, or distribute the weight of the assignment over the other assignments.
- There will be no makeup Midterm test. If a student misses the Midterm test for a legitimate reason, and present valid documentation to the Academic Counselling Office or Dean's office, the Final Exam mark will be reweighed to include the weight of the Midterm test. The student must notify the course instructor within a week of the missed Midterm, and documentation must be received by the Academic Counselling Office or Dean's office within 2 weeks of the missed Midterm.

- The final exam will encompass the whole course. Accordingly, if a student gets a higher mark in the Final Exam than in the Midterm test, the Midterm grade will be automatically raised to the Final Exam grade.
- If a student is not satisfied with the grading of an assignment or test, they may request a review within 1 week of grade posting. They should indicate in writing (e.g., via email) where and why they feel the marks are unjustified. Note that the entire assignment will be re-graded, and the grade can go up or down (or stay the same).

## 6. Tentative Class Schedule

| week         | dates              | topics  |
|--------------|--------------------|---|
| 0            | September 8 to 9   | /   |
| 1            | September 12 to 16 | Introduction. Describing Data, Frequency tables, Graphic Presentation |
| 2            | September 19 to 23 | Describing Data: numerical Measures, Probability                      |
| 3            | September 26 to 30 | A Survey of Probability concepts                                      |
| 4            | October 3 to 7     | Discrete Probability distributions                                    |
|              | October 10         | Thanksgiving Holiday  |
| 5            | October 11 to 14   | Continuous Probability Distributions                                  |
| 6            | October 17 to 21   | Continuous Probability Distributions (cont.).<br>Midterm review.      |
| 7            | October 24 to 28   | <b>Midterm test.</b> Sampling, Estimation and Confidence intervals.   |
| Reading Week | Oct 31 to Nov 6    |   |
| 8            | November 7 to 11   | Confidence intervals (cont.). One, Two sample hypothesis.             |
| 9            | November 14 to 18  | Analysis of Variance (ANOVA)  |
| 10           | November 21 to 25  | Linear Regression/Correlation   |
| 11           | Nov 28 to Dec 2    | Multiple Regression/Correlation                                       |
| 12           | December 5 to 8    | Review  |

## 7. FASS Appendix



### Appendix to Course Outlines: Academic Policies & Regulations Fall/Winter 2022

#### Pandemic Contingency

Huron will continue to follow the guidance of public health and government officials. It is anticipated that there will be no further disruptions to in-person instruction. This is subject to change.

#### Student Code of Conduct

Membership in the community of Huron University College and Western University implies acceptance by every student of the principle of respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it. Upon registration, students assume the responsibilities that such registration entails. While in the physical or online classroom, students are expected to behave in a manner that supports the learning environment of others. Please review the Student Code of Conduct at:

<https://huronatwestern.ca/sites/default/files/Res%20Life/Student%20Code%20of%20Conduct%20-%20Revised%20September%202019.pdf>.

### **Prerequisite and Antirequisite Information**

Students are responsible for ensuring that they have successfully completed all course prerequisites and that they have not completed any course antirequisites. Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

### **Attendance Regulations for Examinations**

A student is entitled to be examined in courses in which registration is maintained, subject to the following limitations:

- 1) A student may be debarred from writing the final examination for failure to maintain satisfactory academic standing throughout the year.
- 2) Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course will be reported to the Dean of the Faculty offering the course (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean of that Faculty, the student will be debarred from taking the regular examination in the course. The Dean of the Faculty offering the course will communicate that decision to the Dean of the Faculty of registration.

Review the policy on Attendance Regulations for Examinations here: [Academic Calendar - Western University \(uwo.ca\)](#)

### **Statement on Academic Offences**

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website: [Academic Calendar - Western University \(uwo.ca\)](#). The appeals process is also outlined in this policy as well as more generally at the following website:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/appealsundergrad.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/appealsundergrad.pdf).

### **Turnitin.com**

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

### **Statement on Use of Electronic Devices**

It is not appropriate to use electronic devices (such as, but not limited to, laptops, tablets, cell phones) in the classroom for non-classroom activities. Such activity is disruptive and distracting to other students and to the instructor, and can inhibit learning. Students are expected to respect the classroom environment and to refrain from inappropriate use of technology and other electronic devices in class.

### **Statement on Use of Personal Response Systems (“Clickers”)**

Personal Response Systems (“clickers”) may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning. Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else’s clicker in class constitutes a scholastic offence
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

### **Academic Consideration for Missed Work**

All students pursuing academic consideration, regardless of type, must contact their instructors no less than 24 hours following the end of the period of absence to clarify how they will be expected to fulfill the academic responsibilities missed during their absence. **Students are reminded that they should consider carefully the implications of postponing tests or midterm exams or delaying submission of work, and are encouraged to make appropriate decisions based on their specific circumstances.**

Students who have conditions for which academic accommodation is appropriate, such as disabilities or ongoing or chronic health conditions, should work with Accessible Education Services to determine appropriate forms of accommodation. Further details concerning policies and procedures may be found at: <http://academicsupport.uwo.ca/>.

### **Policy on Academic Consideration for a Medical/ Non-Medical Absence**

#### **(a) Consideration on Medical Grounds for assignments worth *less than 10%* of final grade: **Consult Instructor Directly and Contact Academic Advising****

When seeking consideration on **medical grounds** for assignments worth *less than 10%* of the final course grade, the student should contact the instructor directly. The student need only share broad outlines of the medical situation. The instructor **may** require the student to submit documentation to the academic advisors, in which case she or he will advise the student and inform the academic advisors to expect documentation. If documentation is requested, the student will need to complete and submit the [Student Medical Certificate](#). The instructor may not collect medical documentation. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation.

#### **b) Medical Grounds for assignments worth 10% or more of final grade: **Go Directly to Academic Advising****

University Senate policy, which can be found at [Academic Calendar - Western University \(uwo.ca\)](https://www.uwo.ca/academic_calendar/) requires that all student requests for accommodation on medical grounds for assignments worth 10% or more of the final grade be made directly to the academic advising office of the home faculty (for Huron students, the “home faculty” is Huron), with supporting documentation in the form (minimally) of the Senate-approved Student Medical Certificate found at: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

The documentation is submitted in confidence and will not be shown to instructors. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. The instructor will not normally deny accommodation where appropriate medical documentation is in place and where the duration it describes aligns with the due date(s) of assignment(s). Before denying a request for accommodation on medical grounds, the instructor will consult with the Dean. The instructor’s decision is appealable to the Dean.

**c) Consideration on Non-Medical Grounds: Consult Huron Support Services/Academic Advising, or email [hurousss@uwo.ca](mailto:hurousss@uwo.ca).**

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation. All consideration requests must include a completed [Consideration Request Form](#). Late penalties may apply at the discretion of the instructor.

Please review the full policy on Academic Consideration for medical and non-medical absence at: [accommodation\\_medical.pdf \(uwo.ca\)](#). Consult [Huron Academic Advising](#) at [hurousss@uwo.ca](mailto:hurousss@uwo.ca) for any further questions or information.

**Support Services**

For advice on course selections, degree requirements, and for assistance with requests for medical accommodation, students should email an Academic Advisor in Huron’s Student Support Services at

[hurousss@uwo.ca](mailto:hurousss@uwo.ca). An outline of the range of services offered is found on the Huron website at: <https://huronatwestern.ca/student-life/student-services/>.

Department Chairs, Program Directors and Coordinators are also able to answer questions about individual programs. Contact information can be found on the Huron website at: <https://huronatwestern.ca/contact/faculty-staff-directory/>.

If you think that you are too far behind to catch up or that your workload is not manageable, you should consult your Academic Advisor. If you are considering reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines. Please refer to the Advising website, <https://huronatwestern.ca/student-life/student-services/academic-advising/> or review the list of official Sessional Dates on the Academic Calendar, available here: <http://www.westerncalendar.uwo.ca/SessionalDates.cfm>.

You should consult with the course instructor and the Academic Advisor who can help you

consider alternatives to dropping one or more courses. Note that dropping a course may affect OSAP and/or Scholarship/Bursary eligibility.

Huron Student Support Services: <https://huronatwestern.ca/student-life/student-services/> Office of the Registrar: <https://registrar.uwo.ca/>  
Student Quick Reference Guide: <https://huronatwestern.ca/student-life/student-services/#1> Academic Support & Engagement: <http://academicsupport.uwo.ca/>  
Huron University College Student Council: <https://huronatwestern.ca/student-life/beyond-classroom/hucsc/>  
Western USC: <http://westernusc.ca/your-services/#studentservices>

### **Wellness and Health Supports at Huron and Western**

University students may encounter setbacks from time to time that can impact academic performance. Huron offers a variety of services that are here to support your success and wellbeing. All Huron staff and faculty have received training on responding to disclosures of Gender-Based Sexual Violence (GBSV); students should know that the Community Safety Office is a resource for survivors, providing support and, if desired, guidance while referring them to the further supports that they may require. Please visit <https://huronatwestern.ca/student-life-campus/student-services/wellness-safety> for more information or contact staff directly:

Wellness Services:

[huronwellness@huron.uwo.ca](mailto:huronwellness@huron.uwo.ca) Community

Safety Office: [safety@huron.uwo.ca](mailto:safety@huron.uwo.ca)

Additional supports for Health and Wellness may be found and accessed at Western through, <https://www.uwo.ca/health/>.

Western Calendar - Policy Pages -

[Academic Calendar - Western University \(uwo.ca\)](#)