
MOS 2242B Statistics

Course Outline: Section – 002 / Winter 2017

1. Course Information:

1.1 Class Location and Time:

Room: SSC 3006

Time: Fridays, 9:30 AM – 12:30 PM

1.2 Contact Information:

Instructor: Dr. Stelian Medianu

Office: SSC 6300

Office Hours: By appointment

Email: smedian@uwo.ca

Website Address: <http://owl.uwo.ca/portal>

DAN Management and Organizational Studies strives at all times to provide accessibility to all faculty, staff, students and visitors in a way that respects the dignity and independence of people with disabilities. Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 519-661-2111 ext 82147 for any specific question regarding an accommodation. More information about "Accessibility at Western" is available at: <http://accessibility.uwo.ca>

2. Calendar Description

2.1 Course Description:

The purpose of this course is to introduce students to quantitative decision-making skills, with an emphasis on analysis techniques used in the business world. Topics include: descriptive statistics, probability, hypothesis testing, analysis of variance, correlation and regression, time series forecasting, and survey techniques.

3 lecture hours, 0.5 course.

Antirequisite(s): Biology 2244A/B, Economics 2122A/B, 2222A/B, Geography 2210A/B, Health Sciences 3801A/B, Psychology 2810, 2820E, 2830A/B, 2850A/B, 2851A/B, the former 2885, Social Work 2207A/B, the former 2205, Sociology 2205A/B, Statistical Sciences 2035, 2141A/B, 2143A/B, 2244A/B, 2858A/B and the former 2122A/B (and Statistical Sciences 2037A/B if taken before Fall 2010).

Prerequisite(s): 1.0 course or equivalent from Calculus 1000A/B, 1301A/B, 1501A/B, Mathematics 1225A/B, 1228A/B, 1229A/B, 1600A/B, and enrolment in BMOS.

2.2 Senate Regulations

Senate Regulations state, "unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you will 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."

3. Textbook

Required:

Bowerman, Aitken Schermer, Johnson, O'Connell & Murphree (2014). Business Statistics in Practice (3rd Canadian ed.). New York, NY: McGraw-Hill. [ISBN 978-0-07-133960-5]

4. Course Objectives and Format

4.1 Course objectives

This course is designed to introduce students to statistical applications related to the business world.

4.2 Course format

The course format will consist of lectures. Questions and discussions are desired and encouraged.

5. Evaluation

Exam #	Percentage of Course Grade
Exam 1	20%
Exam 2	35%
Exam 3	45%

Exams are **multiple-choice in format**. Each exam, in total, will be scheduled for **2 hours, consist of 60 questions**, and are **closed book examinations. Dictionaries are NOT allowed into the examinations.**

Only non-programmable calculators will be allowed into the exams. If you are unsure, please ask your professor to check your calculator (preferably BEFORE the exam date).

Each exam will have **both** conceptual and calculation questions. The following types of questions could come up:

- definitions/descriptions of terminology, theoretical concepts, analysis methods/procedures, formulas, assumptions, distributions, degrees of freedom, etc.
- graphs and charts: definitions, descriptions, components, process/method of building a graph/chart, interpretation of what the graph/chart shows, etc.
- calculation based on formulas
- interpretation of numbers (e.g., calculation result)
- interpretation of computer output (for Chapters 10, 11, 12 & 16 only)
- understanding of choice of formulas, methods, graphs/charts, etc. (e.g., when and why would you use one formula over another?): pay attention to the type of data/scenario/assumptions

Students are responsible for material covered in the lectures as well as the assigned chapters/sections in the text. Exams 1 and 2 will be in class time. The third exam will be scheduled during the exam period. Exams will not be returned to students but may be reviewed in the instructor's office.

Exams are **not cumulative** of previous exam coverage. Hence, students are **REQUIRED TO COMPLETE ALL THREE EXAMS** of this course. There are no exceptions to this. Extra assignments to improve grades **will NOT** be allowed.

Exams will be scored using the program Scan Exam which examines the answer sheets for unusual coincidences in the pattern of answers given which may be indicative and used as supporting evidence of cheating.

Grades will **not** be adjusted on the basis of need. It is important to monitor your performance in the course. Remember: *You* are responsible for your grades in this course.

6. Lecture and Examination Schedule

	Date	Chapters	Textbook sections (= exam coverage)
1	Jan. 06	<i>Introduction to the course</i> Chapter 1: Introduction to Business Statistics	1.1, 1.2, 1.3, 1.4, 1.5, 1.6
2	Jan. 13	Chapter 2: Descriptive Statistics Chapter 3: Probability	2.1, 2.2, 2.3, 2.4, 2.5, 2.7, 2.8 3.1, 3.2
3	Jan. 20	Chapter 4: Discrete Random Variables Chapter 5: Continuous Random Variables	4.1, 4.2, 4.3 5.1, 5.2, 5.3
4	Jan. 27	Exam 1 In class: 9:30AM-11:30AM SSC 3006	12 questions from <u>each</u> of Chapters 1, 2, 3, 4, 5 -60 questions in total -20% of final grade
5	Feb. 3	Chapter 6: Sampling Distributions Chapter 7: Hypothesis Testing	6.1 7.1, 7.2, 7.4
6	Feb. 10	Chapter 8: Comparing Population Means and Variances Using <i>t</i> Tests and <i>F</i> Ratios	8.1, 8.2, 8.3, 8.4
7	Feb. 17	Chapter 9: Confidence Intervals	9.1, 9.2
8	Feb. 24	Reading Week	
9	Mar. 03	Chapter 14: Chi-Square Tests	14.1, 14.2
10	Mar. 10	Exam 2 In class: 9:30AM-11:30AM SSC 3006	12 questions from <u>each</u> of Chapters 6, 7, 8, 9, 14 -60 questions in total -35% of final grade
11	Mar. 17	Chapter 10: Experimental Design and Analysis of Variance	10.1, 10.2, 10.4
12	Mar. 24	Chapter 11: Correlation Coefficient and Simple Linear Regression Analysis	11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9, 11.10, 11.11
13	Mar. 31	Chapter 12: Multiple Regression	12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8, 12.9
14	Apr. 07	Chapter 16: Time Series Forecasting	16.1, 16.2, 16.6, 16.7
Exam period (Apr. 9-30)		Exam 3 (Final) As scheduled by the Registrar's office (2 hours)	15 questions from <u>each</u> of Chapters 10, 11, 12, 16 -60 questions in total -45% of final grade

7. University Policy Regarding Illness

7.1 Illness

The University recognizes that a student's ability to meet his/her academic responsibilities may, on occasion, be impaired by medical illness. Illness may be acute (short term), or it may be chronic (long term), or chronic with acute episodes. The University further recognizes that medical situations are deeply personal and respects the need for privacy and confidentiality in these matters. However, in order to ensure fairness and consistency for all students, academic accommodation for work representing 10% or more of the student's overall grade in the course shall be granted only in those cases where there is documentation supplied (see below for process) indicating that the student was seriously affected by illness and could not reasonably be expected to meet his/her academic responsibilities.

Documentation shall be submitted, as soon as possible, to the appropriate Dean's office (the Office of the Dean of the student's Faculty of registration/home Faculty) together with a request for relief specifying the nature of the accommodation being requested. These documents will be retained in the student's file, and will be held in confidence in accordance with the University's Official Student Record Information Privacy Policy

http://www.uwo.ca/univsec/pdf/academic_policies/general/privacy.pdf

Once the petition and supporting documents have been received and assessed, appropriate academic accommodation shall be determined by the Dean's Office in consultation with the student's instructor(s). Academic accommodation may include extension of deadlines, waiver of attendance requirements for classes/labs/tutorials, arranging Special Exams or Incompletes, re-weighting course requirements, or granting late withdrawals without academic penalty.

Academic accommodation shall be granted only where the documentation indicates that the onset, duration and severity of the illness are such that the student could not reasonably be expected to complete his/her academic responsibilities. (Note: it will not be sufficient to provide documentation indicating simply that the student was seen for a medical reason or was ill.)

A form to be completed by off-campus physicians is available at:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. Students must follow up with their professors and their Academic Counselling office in a timely manner.

In the case of a final examination in the course, the student must arrange for a Special Examination or Incomplete through their Dean's office, for which you will be required to provide acceptable documentation.

If you feel that you have a medical or personal problem that is interfering with your work, you should contact your instructor and the Faculty Academic Counselling Office as soon as possible. Problems may then be documented and possible arrangements to assist you can be discussed at the time of occurrence rather than on a retroactive basis. In general, retroactive requests for grade revisions on medical or compassionate grounds will not be considered.

7.2 Make Up Examinations

Missed exams will receive **zero marks** unless a legitimate and documented excuse is presented by the student, and the student writes a make-up exam that is scheduled by the instructor. If you miss an exam, please follow the steps below:

Step 1: If you miss an exam for any reason, you must e-mail the instructor as soon as you are able about the reason why you missed the exam.

Step 2: You must report to the Social Science Academic Counselling (SSAC) Office (SSC 2105) as soon as you are able with proper documentation.

Step 3: After the instructor receives a notification from the SSAC Office, the instructor will then e-mail you to schedule a make-up exam.

There are no predetermined make-up dates in this course, and make-up exams will not be arranged prior to the original exam date.

A make-up exam will be arranged when there is an exam conflict. The university policy states that an exam conflict consists of having 3 exams within 23 hours.

If it is not feasible to schedule a make-up exam before the next exam, the make-up exam can be scheduled even after the next exam. For example, a make-up for Exam 1 should ideally be scheduled before the Exam 2 date; if that is not possible (e.g., prolonged illness), the make-up for Exam 1 can be written after the Exam 2 date or even after the Final Exam, as long as the student has SSAC Office approval.

Students are required to write all 3 exams in this course. The weight (i.e., % of course grade) of each exam will not be adjusted or shifted. A missed exam will receive zero marks unless the student writes a make-up exam.

7.3 Attendance

It is expected that students will attend all classes.

8. University Policy on Cheating and Academic Misconduct

Cheating on exams will not be tolerated; students are referred to the university policy on scholastic offenses (see section 9.0 below). Looking at the test of another student, allowing another student to view your exam, or obtaining information about a test in advance are all examples of cheating. Students found cheating will receive a zero (0%) on that exam. A number of safeguards will be employed to discourage cheating. For example, examination supervisors (proctors) of the tests may ask students to move to another seat during the exam, cover their paper, avert their eyes from other students' papers, remove baseball caps, etc. This is not meant as a personal affront nor as an accusation of cheating, rather as vigilant attempts at proctoring. A copy of guidelines about how to avoid cheating can be obtained from the office of the Ombudsperson, Room 3135 WSSB, (519) 661-3573.

Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offenses. Students are urged to read the section on Scholastic Offenses in the Academic Calendar. Note that such offenses include plagiarism, cheating on an examination, submitting false or fraudulent assignments or credentials, impersonating a candidate, or submitting for credit in any course without the knowledge and approval of the instructor to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course in the University or elsewhere. If you are in doubt about whether what you are doing is inappropriate, consult your instructor. A claim that "you didn't know it was wrong" will not be accepted as an excuse.

The penalties for a student guilty of a scholastic offense include refusal of a passing grade in the assignment, refusal of a passing grade in the course, suspension from the University, and expulsion from the University.

9. Procedures For Appealing Academic Evaluations

In the first instance, all appeals of a grade must be made to the course instructor (informal consultation). If the student is not satisfied with the decision of the course instructor, a written appeal must be sent to the Assistant Program Director or Designate of the BMOS program. If the response of the Assistant Director is considered unsatisfactory to the student, he/she may then appeal to the Dean of the Faculty in which the course of program was taken. Only after receiving a final decision from the Dean, may a student appeal to the Senate Review Board Academic. A Guide to Appeals is available from the Ombudsperson's Office.

10. Student Responsibilities

Before coming to the lecture, it is strongly recommended that students skim through the corresponding textbook sections. After each lecture, it is strongly recommended that students read the corresponding textbook sections and understand all concepts covered there. It is also strongly recommended that students promptly attempt the corresponding end-of-section exercise questions.

In this class, some students may be unaware that their private discussions are distracting to other people. If you feel that students are distracting your attention from the material, then you should ask them to be quiet. If you feel uncomfortable doing this (or the problem persists), then please see the instructor. In addition, please avoid engaging in private discussions with other students during the lectures.

To avoid unnecessary distractions, please arrive to each class on time.

11. Support Services

11.1 Support Services

The Registrar's office can be accessed for Student Support Services at <http://www.registrar.uwo.ca> Student Support Services (**including the services provided by the USC listed here**) can be reached at: <http://westernusc.ca/services/>
Student Development Services can be reached at: <http://www.sdc.uwo.ca/>
Students who are in emotional/mental distress should refer to Mental Health@Western http://www.health.uwo.ca/mental_health/ for a complete list of options about how to obtain help.

12. Other Issues

12.1 Grade Policy

The DAN Program has a grade policy which states that for courses in the 2000 range, the class average must fall between 65% and 70% for all sections of a course taught by the same instructor. In very exceptional circumstances only, class averages outside this range may be approved by the Undergraduate Chair or Chair. Class averages are not grounds for appeal.

12.2 Short Absences.

If you miss a class due to minor illness or other problems, check your course outlines for information regarding attendance requirements and make sure you are not missing a test or exam. Cover any readings and arrange to borrow the missed lectures notes from a classmate.

12.3 Extended Absences.

If you are absent more than approximately two weeks or if you get too far behind to catch up, you should consider reducing your workload by dropping one or more courses. The Academic Counsellors can help you to consider the alternatives. At your request, they can also keep your instructors informed about your difficulties.

12.4 Academic Concerns.

If you are in academic difficulty, it is strongly recommended that you see your academic counsellor.

12.5 Important Dates:

January 5, 2017	Winter session classes begin
January 13, 2017	Last day to add a second-term half course
February 20-24, 2017	Reading Week
March 7, 2017	Last day to drop a second term half course
April 7, 2017	Winter session classes end
April 8, 2017	Study Day
April 9-30, 2017	April examination period

13. Other Information

- Bring student identification to exams.
- Nothing is to be on/at one's desk during an exam except a pencil (preferable are quality HB pencils), a white eraser, and the individual's student card
- Do not wear baseball caps to exams
- Do not bring music players, cell phones, beepers, or other electronic devices to exams

For The University of Western Ontario Senate Regulations, please see the Handbook of Academic and Scholarship Policy at: http://www.uwo.ca/univsec/academic_policies/index.html

14. E-mail Policies

The following policies apply to all emails between students and the Professor. Please respect the fact that the Professor receives hundreds of emails from students and must deal with those emails in a fair and organized manner. Non-acceptable emails will receive a reply saying only "Please see Email Policies on the course outline".

14.1 Subject Line Must Include Course and Section Number

The subject line of emails must contain the name or number of the course, and the section number in which the student is enrolled. The Professor teaches different courses and sections and cannot properly respond to questions if he does not know which course or section you are enrolled in.

14.2 Acceptable Emails

- questions about the course content or materials
- asking to set up an appointment to ask questions or review an exam
- notification of illness or other special circumstances
- providing constructive comments or feedback about the course

14.3 Non-Acceptable Emails

- questions that may be answered on OWL or on this course outline
- asking when grades will be posted
- asking what grade a student received
- asking where or when an exam is scheduled or the material covered on an exam
- requests for grade increases, extra assignments, or reweighting of course components