

**THE UNIVERSITY OF WESTERN ONTARIO  
LONDON CANADA**

**MOS 2242b**

**Section 001**

**Statistics for Management and Organizational Studies**

**2010**

**1.0 CALENDAR 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.

**Antirequisite(s):** All other University level statistics courses at the 2000 level or higher (or former 100-level or higher).

**Prerequisite(s):** 1.0 course or equivalent from Calculus 1000a/b, 1301a/b, 1501 a/b, Linear Algebra 1600a/b, Mathematics 1228a/b (or 1.0 course or equivalent from the former Calculus 050a/b, 051a/b, 081a/b; Linear Algebra 040a/b; Mathematics 028a/b, 030, 031) and enrolment in a BMOS/BACS Major. 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 lecture hours, 0.5 course

**2.0 COURSE INFORMATION**

Instructor:	Julie Aitken Schermer, Ph.D.
Office:	2215 Social Science Centre
E-mail:	<a href="mailto:jharris@uwo.ca">jharris@uwo.ca</a>
Office Hours:	Mondays 11am-2pm
Telephone:	661-2111 ext 84699
Day and Time of Lectures:	Tuesdays 10:30am - 1:30pm
Location of Lectures:	Social Science Centre 2110

**3.0 TEXTBOOK**

Bowerman, B. L., O'Connell, R. T., Schermer, J. A., & Adcock, J. (2008). Business statistics in practice (1<sup>st</sup> Canadian ed.). New York, NY: McGraw-Hill. [ISBN 0-07-098375-5]

**4.0 COURSE OBJECTIVES**

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

**4.5 COURSE FORMAT**

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

**5.0 EVALUATION**

There are 3 exams in this course.

Exam #	Percentage of Course Grade
1	25%
2	35%
3	40%

Exams are **multiple choice in format**. Each exam, in total, will be scheduled for **two 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.

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.

Students are **REQUIRED TO COMPLETE ALL COMPONENTS** 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.

**6.0 STUDY SCHEDULE**

January 5	<b>Introduction to the course</b>
January 12	<b>Chapter 1 - Introduction to Business Statistics (sections 1.1 to 1.6)</b>
January 19	<b>Chapter 2 - Descriptive Statistics (sections 2.1 to 2.5, 2.7, and 2.8) Chapter 3 - Probability (sections 3.1 and 3.2 only)</b>
January 26	<b>Chapter 4 - Discrete Random Variables (sections 4.1 to 4.3 only) Chapter 5 - Continuous Random Variables (sections 5.1 to 5.4, and 5.6) Exam review</b>

**February 2 - EXAM 1 - IN CLASS (12 questions per chapter =  $12 \times 5 = 60$  questions)**

February 9	<b>Chapter 6 - Sampling Distributions (section 6.1 only) Chapter 8 - Hypothesis Testing (sections 8.1 to 8.6)</b>
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*Reading Week = February 15 to 19, 2010*

February 23	<b>Chapter 9 - Statistical Inferences Based on Two Samples (sections 9.1 to 9.10) Chapter 7 - Confidence Intervals (sections 7.1 to 7.3 only)</b>
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March 2	<b>Chapter 14 - Chi-Square Tests (sections 14.1 and 14.2) Exam review</b>
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**March 9 - EXAM 2 - IN CLASS (12 questions per chapter =  $12 \times 5 = 60$  questions)**

March 16	<b>Chapter 10 - Experimental Design and Analysis of Variance (sections 10.1 to 10.4)</b>
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March 23	<b>Chapter 11 - Correlation Coefficient and Simple Linear Regression Analysis (sections 11.1 to 11.11)</b>
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March 30	<b>Chapter 12 - Multiple Regression and Model Building (sections 12.1 to 12.8 only)</b>
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April 6	<b>Chapter 16 - Time Series Forecasting (sections 16.1, 16.2, 16.6, and 16.7 only) Exam review</b>
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**EXAM 3 - SET BY REGISTRAR'S OFFICE - April 12-30, 2010  
(15 questions per chapter =  $15 \times 4 = 60$  questions)**

**7.0 UNIVERSITY POLICY REGARDING 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 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/handbook/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.”)**

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.

## **7.5 MAKE-UP EXAMINATIONS**

The student must write a make-up exam. The make-up exam differs in format from the original exam and would be scheduled before or at the completion of the course. Make-up examinations will be of the **true/false** nature **with guessing penalty** in which 0.5 marks are deleted from the number correct for *each* incorrect answer.

This format equates the grade a student would achieve if they randomly guessed on a multiple choice exam, which would result in a grade of approximately 20-25%. If a student randomly guessed on a true/false exam, they would achieve a grade of 50%. Thus the guessing penalty then equates the grade due to guessing alone to 25%.

## **ATTENDANCE**

It is expected that students will attend all classes. The professor does not provide access to lecture notes. Students are encouraged to obtain missed lecture notes from a fellow student.

## **8.0 UNIVERSITY POLICY ON CHEATING & 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 251 University Community Centre, (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. In writing scholarly papers, you must keep firmly in mind the need to avoid plagiarism. Plagiarism is the unacknowledged borrowing of another writer's words or ideas.

The following rules pertain to the acknowledgements necessary in academic papers: in using another writer's words, you must both place the words in quotation marks and acknowledge that the words are those of another writer; in adopting another writer's ideas, you must acknowledge that they are his/hers. 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.

## **9.0 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 Program Director or Designate of the BMOS/BACS program. If the response of the 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.

## **10.0 STUDENT RESPONSIBILITIES**

Material covered in lectures will not always be the same as material covered in the textbook. These two sources should be viewed as complimentary and not redundant. As such, students who want to do well in this course are **strongly encouraged** to attend lectures on a regular basis. Please note that the instructor will not be providing copies of lectures notes or overheads. Therefore, if you miss a lecture, you should try to obtain this material from another student.

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.

## 11.0 OTHER ISSUES

### 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.

### 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.

### Academic Concerns.

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

### Important Dates:

January 4, 2010	Winter Term classes begin.
January 12, 2010	Last day to add a second term half course
February 12, 2010	Last day to drop a second-term half course without academic penalty
February 15-19, 2010	Reading Week
April 9, 2010	Winter Session classes end.
April 10 & 11, 2010	Study Days.
April 12-30, 2010	April examination period.

## 12.0 OTHER INFORMATION

- ◆ Bring student identification to exams.
- ◆ Nothing is to be on/at one's desk during an exam except a pencil, an eraser, and the individual's student card
- ◆ Do not wear baseball caps to exams
- ◆ Do not bring cassette/CD players, cell phones, beepers, etc. 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/handbook/>**