

**THE UNIVERSITY OF WESTERN ONTARIO
LONDON, ONTARIO, CANADA
MOS 2242B**

Section 002

STATISTICS FOR MANAGEMENT AND ORGANIZATIONAL STUDIES

2012

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

Prerequisite(s): 1.0 course or equivalent from Calculus 1000A/B, 1100A/B, 1301A/B, 1501 A/B, Mathematics 1225A/B, 1228A/B, 1229A/B, 1600A/B and enrolment in BMOS.

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: | Ashley Grau, BA, MSc. |
| Office: | SSC 2233 |
| E-mail: | agrau2@uwo.ca |
| Office Hours: | By Appointment |
| Telephone: | 519-661-2111 ext. 82298 |
| Day and Time of Lectures: | Tuesdays 6:00pm - 9:00pm |
| Location of Lectures: | SEB 2100 |

3.0 TEXTBOOK

Bowerman, B. L., O'Connell, R. T., Schermer, J. A., & Adcock, J. (2011). Business statistics in practice (2nd Canadian ed.). New York, NY: McGraw-Hill. [ISBN 0-07-000237-1]

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 | 20% |
| 2 | 35% |
| 3 | 45% |

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. 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.

6.0 STUDY SCHEDULE

| | |
|-------------------|---|
| January 10 | Introduction to the course Chapter 1 - Introduction to Business Statistics (sections 1.1 to 1.6) |
| January 17 | 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) |
| January 24 | Chapter 4 - Discrete Random Variables (sections 4.1 to 4.3 only) Chapter 5 - Continuous Random Variables (sections 5.1 to 5.4 only) Exam review |
| January 31 | EXAM 1 - IN CLASS (12 questions per chapter = $12 \times 5 = 60$ questions) |
| February 07 | Chapter 6 - Sampling Distributions (section 6.1 only) Chapter 8 - Hypothesis Testing (sections 8.1 to 8.6) |
| February 14 | Chapter 9 - Statistical Inferences Based on Two Samples (sections 9.1 to 9.6) |
| February 21 | READING WEEK |
| February 28 | Chapter 7 - Confidence Intervals (sections 7.1 and 7.2 only) Chapter 14 - Chi-Square Tests (sections 14.1 and 14.2) |
| March 06 | EXAM 2 - IN CLASS (12 questions per chapter = $12 \times 5 = 60$ questions) |
| March 13 | Chapter 10 - Experimental Design and Analysis of Variance (sections 10.1, 10.2, and 10.4) |
| March 20 | Chapter 11 - Correlation Coefficient and Simple Linear Regression Analysis (sections 11.1 to 11.11) |
| March 27 | Chapter 12 - Multiple Regression (sections 12.1 to 12.8 only) |
| April 03 | Chapter 16 - Time Series Forecasting (sections 16.1, 16.2, 16.6, and 16.7 only) |
| April 10 | Exam review |

EXAM 3 - SET BY REGISTRARS OFFICE - April 14-30, 2012

(15 questions per chapter = $15 \times 4 = 60$ questions)

7.0 UNIVERSITY POLICY REGARDING ILLNESS

If, on medical or compassionate grounds, you are unable to meet your academic responsibilities, i.e., unable to write term tests or final examinations or complete course work by the due date, you should follow the instructions listed below. You should understand that academic accommodation will not be granted automatically on request. You must demonstrate that there are compelling medical or compassionate grounds that can be documented before academic accommodation will be considered. Read the instructions carefully. In all cases, action must be taken at the earliest possible opportunity, preferably prior to the scheduled examination, test or assignment.

1. Check the course outline to see if the instructor has a policy for missed tests, examinations, late assignments or attendance. The course outline should include the preferred method of contact (e-mail, phone, etc.).
2. Inform the instructor prior to the date of the scheduled time of the test or examination or due date of the assignment. If you are unable to contact the instructor, leave a message for him/her at the department office.
3. Bring your request for accommodation to the Academic Counselling Office, Room 2105, Social Science Centre, telephone 519 661-2011 or fax 519 661-3384. Be prepared to submit documentation of your difficulties.
4. If you decide to write a test or an examination you should be prepared to accept the mark you earn. Rewriting tests or examinations or having the value of the test or examination reweighted on a retroactive basis is not permitted.

TERM TESTS and MID-TERM EXAMS

1. If you are unable to write a term test, inform your instructor (preferably prior to the scheduled date of the test). If the instructor is not available, leave a message for him/her at the department office.
2. Be prepared, if requested by the instructor, to provide supporting documentation (see below for information on acceptable forms or documentation). Submit your documentation to the Academic Counselling Office.
3. Make arrangements with your professor to reschedule the test.
4. The Academic Counselling Office will contact your instructor to confirm your documentation.

FINAL EXAMINATIONS

1. You require the permission of the Dean, the instructor, and the Chair of the department in question to write a special final examination.
2. If you are unable to write a final examination, contact the Academic Counselling Office in the first instance to request permission to write a special final examination and to obtain the necessary form. You must also contact your instructor at this time. If your instructor is not available, leave a message for him/her at the department office.

3. Be prepared to provide the Academic Counselling Office and your instructor with supporting documentation (see below for information on documentation).
4. You must ensure that the Special Examination form has been signed by the instructor and Department Chair and that the form is returned to the Academic Counselling Office for approval without delay.

Note: Make sure you know the date, time and location of the special examination. For more information see Examinations - Common Situations.

LATE ASSIGNMENTS

1. Advise the instructor if you are having problems completing the assignment on time (prior to the due date of the assignment).
2. Submit documentation to the Academic Counselling Office.
3. If you are granted an extension, establish a due date.
4. Extensions beyond the end of classes must have the consent of the instructor, the Department Chair and Dean. A Recommendation of Incomplete form must be filled out indicating the work to be completed and the date by which it is due. This form must be signed by the student, the instructor, the Department Chair, and the Dean's representative in the Academic Counselling Office.

SHORT ABSENCES

If you miss a class due to a minor illness or other problems, check your course outlines for information regarding attendance requirements and make sure you are not missing a test or assignment. Cover any readings and arrange to borrow 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. This must be done by the appropriate deadlines. (Refer to the Registrar's website for official dates.) The Academic Counsellors can help you to consider the alternatives. At your request, they can also keep your instructors informed of your difficulties.

DOCUMENTATION

- Personal Illness: If you consult Student Health Services regarding your illness or personal problem, you should request a Student Medical Certificate from the physician. Once your documentation has been assessed, the academic counsellor will inform your instructor that academic accommodation is warranted.
- If you were seen by an off-campus doctor, obtain a certificate from his/her office at the time of your visit. The off-campus medical certificate form must be used. <http://www.uwo.ca/univsec/handbook/appeals/medicalform.pdf>. The doctor must provide verification of the severity of the illness for the period in question. Notes stating "For Medical Reasons" are not considered sufficient.
- In Case of Serious Illness of a Family Member: Obtain a medical certificate from the family member's physician.

- In Case of a Death: Obtain a copy of the newspaper notice, death certificate or documentation provided by the funeral director.
- For Other Extenuating Circumstances: If you are not sure what documentation to provide, ask an Academic Counsellor.

Note: Forged notes and certificates will be dealt with severely. To submit a forged document is a scholastic offense (see below) and you will be subject to academic sanctions.

ACADEMIC CONCERNS

- You need to know if your instructor has a policy on late penalties, missed tests, etc. This information may be included on the course outline. If not, ask your instructor.
- You should also be aware of attendance requirements in courses such as Business and English. You can be debarred from writing the final examination if your attendance is not satisfactory.
- If you are in academic difficulty, check the minimum requirements for progression in your program. If in doubt, see your Academic Counsellor.
- If you are registered in Social Science courses but registered in another faculty (e.g., Arts or Science), you should immediately consult the Academic Counselling Office in your home faculty for instructions.

FAILED YEAR

Procedures for completing a Waiver of the Progression Requirements (DEADLINE IS JUNE 30).
Click here for BMOS Waiver of Progression Requirements.

In your petition letter, you must address all of the following questions:

- What were the extenuating circumstances which contributed most significantly to your poor academic performance.) When did the problem(s) arise? Appropriate supporting documentation (eg. medical note from a doctor to document problems, or a letter from a family member or close personal friend to support compassionate grounds) must be submitted with the petition. If you need more information regarding the submission of appropriate documentation, please contact the Dean's Office.
- Answer the following questions:
 1. What attempts did you make at the time you were encountering problems that affected your academic performance to contact your instructors, Academic Counsellors, the staff in Student Development Centre (Learning Skills Counsellors), the Ombudsperson, or Student Health Services?
 2. What academic accommodation did you request at the time you were experiencing major problems that were affecting your academic performance?
 3. What steps did you take to minimize the impact on your academic work of the difficulties that you were encountering?
 4. Approximately what percentage of classes did you attend in each course?
 5. What assignments/tests/labs/quizzes/exams did you complete in each course?
 6. Please record the grades you received for assignments/labs/tests/quizzes/exams, etc in each course. If you failed to complete all the course requirements, explain and provide reasons.
 7. Please list the final grade earned in each course in which you were registered during the past academic year.

- Why do you think you would be successful in University-level academic studies, if your petition was granted?
- What are your academic goals?
 - What is your long-term degree/program objective?
 - In what specific program do you wish to register during the coming year?
 - What specific courses do you wish to take during the coming year?

NOTE: In (b) and (c), do not list courses or programs for which you are not currently eligible. You must check the prerequisites for the program and courses you wish to take.

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. 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 ACCESSIBILITY

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 wish to contact Services for Students with Disabilities (SSD) at

661-2111 #82147 for any specific questions regarding an accommodation. More information about "Accessibility at Western" is available at: <http://accessibility.uwo.ca>.

12.0 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.

13.0 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/>**