

**Psychological Statistics Using Computers
Psychology 3800f-530**

Fall 2014

Class Meetings:

Lecture + Lab: Wednesdays 1:30 PM – 4:30 PM, St. James Room 206 (computer lab)

Course Instructor Dr. Jennifer Sutton
Office: St. James portable room P2
Email: jennifer.sutton@uwo.ca
Tele: 519-432-8353 ext 28120
Office Hours: TBA

Required Materials:

Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics, 4th edition*. Sage: London.
Available from the UWO bookstore and online sellers such as amazon.ca.

Course Website

Registered students will see the course listed on their Owl page.

Course Description and Information

This course covers the most common statistical procedures used in psychological research, and the use and interpretation of SPSS for Windows. Topics covered include the *t* test, various forms of analysis of variance, bivariate and multiple regression and correlation, factor analysis, and multivariate analysis of variance.

Prerequisite(s): Psychology 2800E or Psychology 2856F/G, Psychology 2810 or Psychology 2886, and registration in third or fourth year of the Honors Specialization Psychology program or permission of the department.

Learning Objectives

By the end of this course, students should be able to

- determine the appropriate statistical test for various types of data in psychology
- conduct a variety of statistical tests using SPSS software
- interpret the output of statistical tests conducted with SPSS
- write an APA-style results section reporting the outcomes of common statistical tests

Lectures and Lab meetings

Each week, the lecture and lab will run in adjacent time slots; after lecture we will have a short break and then come back for lab. Homework assignments to complete for the next week will be available after our weekly course meeting.

Evaluation

Student evaluation will be based on:

Homework Reports (6 reports x 9% each = 54%)

Quizzes (2 quizzes x 5% each = 10%)

Final Exam (32%)

Lab participation (4%)

Homework Reports: You will be required to perform a specific statistical test using SPSS and write a Results-type section in APA format. You will also be required to submit your SPSS output.

Report assignments will be available on the Owl site after our Wednesday meeting (see schedule below), and will be due at the beginning (no later than 1:45 pm) of the next class meeting. Late reports will be subject to a 10% per day penalty, starting at 1:45 pm on the due date. Thus, a report handed in on:

the Wednesday due date anytime after 11:45 am: -10%

the Thursday following the due date (anytime): -20%

the Friday following the due date (anytime): -30%

the Monday following the due date (anytime): -60% (weekends count as 2 days!)
and so on.

Reports handed in after the lab meeting must be given to the registrar's receptionist with a request to time/date stamp the assignment and place it in Dr. Sutton's mailbox. Please note that the registrar's office closes at 4pm.

If you are concerned you may be late to or miss a lab meeting, it is completely acceptable and even advisable to turn your report in early using the registrar's office procedure, above. Please inform me via email so I know to check my box for your report.

In addition, the text of your written report (i.e., not the SPSS output) should be submitted to **turnitin.com** via the Owl course page by 1:45 pm on the due date. Please do this before class starts to avoid disruption (a good habit is to submit it while your paper prints). While there is no mark penalty for a late turnitin submission, marked hard copies of reports will not be handed back without such a submission.

Quizzes: Short, in-class quizzes will be conducted twice during the semester. The quizzes will be held at the beginning of class and will cover the topics discussed since the last quiz. Missed quizzes may not be made up; students who miss a quiz and provide documentation for accommodation through the academic advisor will have the remaining quiz re-weighted. Students who miss a quiz and do not provide documentation through the academic advisor will receive a zero for the quiz.

Final Exam: The final exam will be held during the December exam period. It will consist of short answer and multiple choice questions based on conceptual information from the text, sample SPSS outputs and datasets, and descriptions of studies.

Accommodation for handing in late or failing to hand in any assignment, missing a quiz, or failure to complete the final exam in this course requires supporting documentation that is verified by an Academic Advisor. Please see the policy section below on academic accommodation for more information.

Please note that your final mark in this course is based exclusively on your performance in the above assessments. Marks will not be adjusted based on requests, and students will not be given the opportunity to improve their marks by completing additional assignments. Also note that the make-up exam may consist, in part or exclusively, of essay, short-answer, and/or multiple-choice items.

LECTURE/LAB SCHEDULE – subject to change, see Owl and announcements in class and lab for updates

Date	Topic	Field Chapter	Homework Assignment Due
Sept 10	Basic concepts review, problems with NHST, effect size	1 - 2	--
Sept 17	Correlation	7	--
Sept 24	Linear Regression	8	--
Oct 1	Multiple Regression	8	Linear Reg. Report
Oct 8	Quiz 1 , <i>t</i> -test	9	Mult. Reg. Report
Oct 15	Oneway Analysis of Variance	11	<i>t</i> - test Report
Oct 22	Completely Randomized Factorial Analysis of Variance	13	Oneway Report
Oct 29	Repeated Measures Analysis of Variance	14	-----
Nov 5	Mixed Analysis of Variance	15	-----
Nov 12	Quiz 2 , Multivariate Analysis of Variance	16 (16.1 – 16.3 only)	Mixed ANOVA Report
Nov 19	Factor Analysis	17	-----
Nov 26	Nonparametrics	6 & 18 (Chi square)	Factor Analysis Report
Dec 3	Review: Q & A session, Factor Analysis returned		
Finals Period	Final Exam date TBA		

⇒ **A note of caution:** Technical failure (e.g., my printer broke/is out of toner, my usb drive is lost/won't work, Word/SPSS/Excel/my laptop broke/exploded/is giving me the screen of death/was stolen out of my car, etc.) is not considered grounds for accommodation. **Develop the habits of 1) backing up your work frequently (even better: saving to the**

cloud with software like Google Drive or Dropbox) and 2) not waiting until the last minute to print. Your stress levels, and likely your marks, will thank you.

BRESCIA UNIVERSITY COLLEGE ACADEMIC POLICIES AND REGULATIONS

1. POLICY REGARDING MAKEUP EXAMS AND EXTENSIONS OF DEADLINES

When a student requests academic accommodation (e.g., extension of a deadline, a makeup exam) for work representing 10% or more of the student's overall grade in the course, it is the responsibility of the student to provide acceptable documentation to support a medical or compassionate claim. All such requests for academic accommodation **must** be made through an Academic Advisor and include supporting documentation. Academic accommodation on medical grounds will be granted only if the documentation indicates that the onset, duration and severity of the illness are such that the student could not reasonably be expected to complete her academic responsibilities. Appropriate academic accommodation will be determined by the Dean's Office in consultation with the student's instructor(s). Please note that personal commitments (e.g., vacation flight bookings, work schedule) which conflict with a scheduled test, exam or course requirement are not grounds for academic accommodation.

A UWO Student Medical Certificate (SMC) is **required** if a student is seeking academic accommodation on medical grounds. This documentation should be obtained at the time of the initial consultation with the physician/nurse practitioner or walk-in clinic. A SMC can be downloaded under the Medical Documentation heading of the following website: <https://studentservices.uwo.ca/secure/index.cfm> . If it is not possible to have an SMC completed by the attending physician/nurse practitioner, the student must request documentation sufficient to demonstrate that her ability to meet academic responsibilities was seriously affected. Please note that under University Senate regulations documentation stating simply that the student "was seen for a medical reason" or "was ill" is **not** adequate to support a request for academic accommodation. All documentation is to be submitted to an Academic Advisor.

Whenever possible, requests for academic accommodation should be initiated in advance of due dates, examination dates, etc. Students must follow up with their professors and Academic Advisor in a timely manner.

The full statement of University policy regarding extensions of deadlines or makeup exams can be found at <http://www.westerncalendar.uwo.ca/2014/pg117.html>

2. ACADEMIC CONCERNS

If you feel that you have a medical or personal problem that is interfering with your work, contact your instructor and Academic Advisor 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. Retroactive requests for academic accommodation on medical or compassionate grounds may not be considered.

If you think that you are too far behind to catch up or that your work load is not manageable, you should consult an Academic Advisor. If you consider reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines (refer to the Registrar's website, www.registrar.uwo.ca, for official dates). 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 eligibility and/or Entrance Scholarship eligibility.*

The Dean may refuse permission to write the final examination in a course if the student has failed to maintain satisfactory academic standing throughout the year or for too frequent absence from the class or laboratory.

3. ABSENCES

Short Absences: If you miss a class due to a minor illness or other problems, check your course outline 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. Contact the course instructor if you have any questions.

Extended Absences: If you have an extended absence, you should contact the course instructor and an Academic Advisor. Your course instructor and Academic Advisor can discuss ways for you to catch up on missed work and arrange academic accommodations, if appropriate.

4. POLICY ON CHEATING & ACADEMIC MISCONDUCT

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 Web site:

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

Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offences. Students are urged to read the section on Scholastic Offences in the Academic Calendar. Note that such offences 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. Students are advised to consult the section on Academic Misconduct in the Western Academic Calendar.

If you are in doubt about whether what you are doing is inappropriate or not, consult your instructor, the Student Services Centre, or the Registrar. A claim that "you didn't know it was wrong" is not accepted as an excuse.

The penalties for a student guilty of a scholastic offence (including plagiarism) 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.

Plagiarism:

Students must write their essays and assignments in their own words. Whenever students take an idea or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar).

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.

Computer-marked Tests/exams:

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating. Software currently in use to score computer-marked multiple-choice tests and exams performs a similarity review as part of standard exam analysis.

5. PROCEDURES FOR APPEALING ACADEMIC EVALUATIONS

All appeals of a grade must be directed first to the course instructor. If the student is not satisfied with the decision of the course instructor, a written appeal signed by the student must be sent to the Department Chair. If the response of the department is considered unsatisfactory to the student, she may then submit a signed, written appeal to the Office of the Dean. 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, or you can consult an Academic Advisor. Students are advised to consult the section on Academic Rights and Responsibilities in the Western Academic Calendar.

6. PREREQUISITES AND ANTIREQUISITES

Unless you have either the prerequisites for a course or written special permission from your Dean to enroll in it, you will be removed from the 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.

Similarly, you will also be deleted from a class list if you have previously taken an antirequisite course unless this has the approval of the Dean. These decisions may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course because you have taken an antirequisite course.

7. SUPPORT SERVICES

The Brescia University College Registrar's website, with a link to Academic Advisors, is at http://www.brescia.uwo.ca/academics/registrar_services/index.html . The Western Registrar's website is at <http://www.registrar.uwo.ca/index.cfm> . The website for the Student Development Centre at Western is at <http://www.sdc.uwo.ca/> . Students who are in emotional/mental distress should refer to Mental Health @ Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.

Portions of this document were taken from the Academic Calendar, the Handbook of Academic and Scholarship Policy and the Academic Handbook of Senate Regulations. This document is a summary of relevant regulations and does not supersede the academic policies and regulations of the Senate of the University of Western Ontario.