

# Psychology 3830G – Computers and Research in Psychology Section 550

Winter 2022

Course delivery with respect to the COVID-19 pandemic

Although the intent is for this course to be delivered in-person, the changing COVID-19 landscape may necessitate some or all of the course to be delivered online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any assessments affected will be conducted online as determined by the course instructor.

#### 1.0 Course Information

Course Number: Psychology 3830G

Section: 550

Course Name: Computers and Research in Psychology

Instructor: Ana C. Ruiz Pardo (she/her/hers)

Office: V104

Contact Information: Please contact me through email anytime: aruizpar@uwo.ca (please include the

class course number in the Subject line). If possible, responses will be returned within 24 hours (Monday to Friday, 9am to 5pm). Zoom meetings can be scheduled

upon request.

Office Hours: Wednesdays 12:30pm-1:30pm. Please email ahead of time if you plan to attend.

Class Location: W3 (Computer Lab)
Course website: <a href="https://owl.uwo.ca/">https://owl.uwo.ca/</a>

**Scheduled Class Times:** 

550 - Wednesdays: 10:30-12:30 and Fridays: 11:30-12:30

# 2.0 Course Description

Topics include: fundamentals of operating microcomputers, use of statistical packages (e.g., SPSS/PC+), interpretation of computer output from univariate and multivariate statistical analyses.

#### 2.1 Antirequisite(s)

Psychology 3800F/G or the former Psychology 381E.

#### 2.2 Prerequisite(s)

Psychology 2830A and registration in an Honours Specialization or Major in Psychology or permission of the Department.

#### 2.3 Course Operation

This is an in-person course with two components:

- 1. Lectures designed to help students understand the rationale behind statistical procedures, including in-class activities with SPSS.
- Hands-on computer analysis sessions (labs) to help provide practice with application of knowledge of statistical procedures.

Each week, a lecture with that week's topic will be covered, followed by a lab session. Each lecture/lab has a corresponding chapter in the textbook and slides (available on OWL). Most lab sessions will include a short assignment (see <a href="Section 6.0">Section 6.0</a> for schedule). You are expected to 1) come to class with lecture notes printed in hardcopy or open on your computer to follow along and take notes, and 2) participate fully in activities. You can take notes by hand or on a laptop. The topics can be found on the left menu bar on OWL. Click on a topic, open the topic page and you will find:

- The assigned readings in the text
- Additional reading as needed
- Learning outcomes for the topic
- PowerPoint slides

### 2.4 Copyright and Intellectual Property

PowerPoint lecture slides and notes, lists of readings, in-class activities, assignment guidelines, and other components of the course materials are typically the intellectual property of the instructor. Unauthorized reproduction through audio-recording, videorecording, photographing, sharing on social media, or posting on course-sharing websites is an infringement of copyright and is prohibited. Such action may be considered a Code of Conduct violation and lead to sanctions.

#### 2.5 Course Calendar

You can subscribe to the Course Outlook calendar using the ics link, or the html to view the calendar in your browser. The calendar can be added to your own Outlook / Google / Apple calendar and will updated weekly. All assignments, readings, and deadlines will be listed here.

- ICS link, to subscribe to the calendar: <a href="https://outlook.office365.com/owa/calendar/ac08b092bd9c4625970ca50e59f0e63b@uwo.ca/3bd485425f344325ab2453a275427ef545868370079021240/calendar.ics">https://outlook.office365.com/owa/calendar/ac08b092bd9c4625970ca50e59f0e63b@uwo.ca/3bd485425f344325ab2453a275427ef545868370079021240/calendar.ics</a>
- HTML link, to view the calendar in-browser:
   <a href="https://outlook.office365.com/owa/calendar/ac08b092bd9c4625970ca50e59f0e63b@uwo.ca/3bd485425f344325ab2453a275427ef545868370079021240/calendar.html">https://outlook.office365.com/owa/calendar/ac08b092bd9c4625970ca50e59f0e63b@uwo.ca/3bd485425f344325ab2453a275427ef545868370079021240/calendar.html</a>

# 3.0 Readings and Resources

#### 3.1 Textbook

There is one required textbook for this course.

Field, A. (2018). Discovering Statistics Using IBM SPSS Statistics, North American edition. Sage: London.

The text is available at the university bookstore. If you do not wish to buy the text, it is available at the library as an e-book. This text is highly recommended for anyone who likes a funny stats book (yes, really) and who may be a bit nervous about stats or feel they would like additional background on the

analyses we will cover. Also, students who plan to go on to graduate school of any kind are encouraged to own a copy. The text is also available for purchase from online sellers such as amazon.ca and chapters.ca.

#### 3.2 Software: SPSS:

A license for SPSS software can be purchased to use on your own laptop: <a href="https://computerstore.uwo.ca/product/spss25lic">https://computerstore.uwo.ca/product/spss25lic</a>

 SPSS can also be accessed free via MyVLab at UWO, although some students find it slow.
 Accessing MyVLab takes a little bit of setup on your laptop: https://myvlab.uwo.ca/setup\_instructions/index.html

# 4.0 Course Objectives

This course covers thought and knowledge. We will study how people think and how psychologists study thinking and reasoning. The course will be taught as a combination of lectures and labs.

### 4.1 Student Learning Outcomes

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

- The assigned readings in the text
- 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
- design and conduct an empirical research study

#### 5.0 Evaluation

# 5.1 Assignments

There are 8 assignments. They will involve the analysis of data using SPSS. They may also involve summarizing the material, generating questions, critical thought exercises, etc. Each assignment is worth 5% of your final grade, which make up 40% of your final grade. Details for all assignments will be discussed during class.

#### 5.2 Lab Report

There is one final lab report. It will require individualized analysis of a data set and will be written up in an APA-style report. The lab report is worth 30% of your final grade. More details will be made available at the start of class.

#### **5.3 Exam**

There is one exam in the course. It will be held during the April exam period. It will consist of short answer, multiple choice, and short essay items based on conceptual information from the course, SPSS outputs and datasets, and research scenarios. The final exam is worth 30% of your final grade.

#### 5.4 Deadlines

Assignments will be assigned at the end of their respective lab day. Completed assignments must be uploaded to OWL and are due on OWL the following class before the start of class. Late assignments will be subject to a 10% per 24-hour penalty, starting at the due date. Work will not be accepted later than 10 days after the initial due date (mark will be 0). Any extensions for legitimate reasons (see Appendix below) should be requested before the due date, and appropriate documentation submitted in a timely fashion. If accommodation is granted, an extension will be given at the discretion of the instructor.

#### 5.5 Evaluation Breakdown

The final grade will be calculated according to the components shown in the breakdown. No grades will be rounded.

Component	Breakdown
Assignments (8)	40% of final grade
Lab Report (1)	30% of final grade
Exam (1)	30% of final grade

### 5.6 Statement Regarding Grades in Psychology at Huron University College

Students at Huron University College should consider a grade in the range from 75-79 to be evidence of satisfactory performance in a 3000-level Psychology course. Grades in the A (80-90%) range will only be awarded for performance that is demonstrably superior to the third or fourth-year standard associated with the Major or Minor modules. A grade of A+ (90-100%) will only be awarded rarely and only for work that is exceptional.

#### 6.0 Class and Evaluation Schedule

Topics will be covered in the order listed and any dates listed are meant as a guideline.

Unit	Date	Topic	Chapter	Assessment	<b>Due Date</b>
1	Jan 5, 7, 12, 14	Introduction	1-3		
2	Jan 19, 21	Correlation, Linear Regression	8, 9	A01	Jan 28
3	Jan 26, 28	Multiple Regression	9	A02	Feb 4
4	Feb 2, 4	t-Test	10	A03	Feb 11
5	Feb 9, 11	One-way & Two-way ANOVA	12, 19	A04	Feb 18
6	Feb 16, 18	Repeated ANOVA	15	A05	Mar 4
	Feb 21-27	Reading week			
	Mar 2, 4	How to write an APA report			
7	Mar 9, 11	Mixed ANOVA	16	A06	Mar 18
8	Mar 16, 18	Factor Analysis	18	A07	Mar 25
9	Mar 23, 25	Chi-Square	19	A08	Apr 1
	Mar 30, Apr 1	Writing Workshop & Review			
		Lab Report		Lab Report	Apr 1
1-9	TBA	Final Exam	All		

# 7.0 FASS Appendix



Appendix to Course Outlines: Academic Policies & Regulations 2021 - 2022

#### **Mandatory Use of Masks in Classrooms**

Students will be expected to wear triple layer non-medical masks at all times in the classroom as per Huron policy and public health directives. Students are now permitted to drink water in class by lifting and replacing the mask each time a drink is taken. Students will be able to eat and drink outside of the classroom during scheduled breaks.

Students unwilling to wear a mask as stipulated by Huron policy and public health directives will be referred to the Dean's Office, and such actions will be considered a violation of the Huron Student Code of Conduct.

#### **Pandemic Contingency**

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, typically using a combination of synchronous instruction (i.e., at the times indicated in the timetable) and asynchronous material (e.g., posted on OWL for students to view at their convenience). Any remaining assessments will also be conducted online at the discretion of the course instructor. In the unlikely event that changes to the grading scheme are necessary, these changes will be clearly communicated as soon as possible.

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

#### **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: <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/exam/attendance.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/exam/attendance.pdf</a>.

#### **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: <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_undergrad.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_undergrad.pdf</a>. The appeals process is also outlined in this policy as well as more generally at the following website: <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/appeals/appealsundergrad.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/appeals/appealsundergrad.pdf</a>.

#### 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, 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**

Students who are seeking academic consideration for missed work during the semester may submit a self-reported absence form online provided that the absence is **48 hours or less** and the other conditions specified in the Senate policy at

https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_illness.pdf are met.

Students whose absences are expected to last **longer than 48 hours**, or where the other conditions detailed in the policy are not met (e.g., work is worth more than 30% of the final grade, the student has already used 2 self-reported absences, the absence is during the final exam period), may receive academic consideration by submitting a Student Medical Certificate (for illness) or other appropriate documentation (for compassionate grounds). The Student Medical Certificate is available online at <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf</a>.

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 <u>Medical Grounds</u> 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, and if the student has exceeded the maximum number of permissible Self-Reported absences, 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 <u>Student Medical Certificate</u>. The instructor may <u>not</u> 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) Consideration on Non-Medical Grounds: Consult Huron Support Services/Academic Advising, or email <a href="mailto:huronsss@uwo.ca">huronsss@uwo.ca</a>.

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation where the conditions for a Self-Reported Absence have not been met, including where the student has exceeded the maximum number of permissible Self-Reported. All consideration requests must include a completed <a href="Consideration Request Form">Consideration Request Form</a>. 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: <a href="https://www.uwo.ca/univsec/pdf/academic policies/appeals/accommodation illness.pdf">https://www.uwo.ca/univsec/pdf/academic policies/appeals/accommodation illness.pdf</a>. Consult <a href="https://www.uwo.ca/univsec/pdf/academic">https://www.uwo.ca/univsec/pdf/academic policies/appeals/accommodation</a> in the properties of the second o

#### **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 <a href="https://buronatwestern.ca/student-life/student-services/">https://buronatwestern.ca/student-life/student-services/</a>.

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: <a href="https://huronatwestern.ca/contact/faculty-staff-directory/">https://huronatwestern.ca/contact/faculty-staff-directory/</a>.

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, <a href="https://huronatwestern.ca/student-life/student-services/academic-advising/">https://huronatwestern.ca/student-life/student-services/academic-advising/</a> or review the list of official Sessional Dates on the Academic Calendar, available here: <a href="http://www.westerncalendar.uwo.ca/SessionalDates.cfm">http://www.westerncalendar.uwo.ca/SessionalDates.cfm</a>.

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: <a href="http://academicsupport.uwo.ca/">http://academicsupport.uwo.ca/</a>

Huron University College Student Council: <a href="https://huronatwestern.ca/student-life/beyond-">https://huronatwestern.ca/student-life/beyond-</a>

classroom/hucsc/

Western USC: <a href="http://westernusc.ca/your-services/#studentservices">http://westernusc.ca/your-services/#studentservices</a>

#### Mental Health & Wellness Support 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. Please visit <a href="https://huronatwestern.ca/student-life-campus/student-services/wellness-safety">https://huronatwestern.ca/student-life-campus/student-services/wellness-safety</a> for more information or contact staff directly:

Wellness Services: <a href="mailto:huron.uwo.ca">huron.uwo.ca</a> Community Safety Office: <a href="mailto:safety@huron.uwo.ca">safety@huron.uwo.ca</a>

Chaplaincy: <a href="mailto:gthorne@huron.uwo.ca">gthorne@huron.uwo.ca</a>

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