

## PSYO 373: 2018 Winter Term 2 Course Outline (Final Version)

(January – April, 2019)

### Advanced Research Methods and Statistics

Class Times: Tuesday & Thursday, 12:30 - 1:50  
Lab Times: Wednesday, 8:30 - 11:20 am  
Instructor: Brian O'Connor, Ph.D.  
Office: ART 330  
Office Hours: After class, or by appointment  
E-mail: [brian.oconnor@ubc.ca](mailto:brian.oconnor@ubc.ca)  
Lab Instructors: Kimberly Kaseweter ([kkaseweter@alumni.ubc.ca](mailto:kkaseweter@alumni.ubc.ca))  
Zak Draper ([zakary.draper@ubc.ca](mailto:zakary.draper@ubc.ca))  
Course Info: <https://students.canvas.ubc.ca>

**CONTENT:** Potential topics include: philosophy of science; statistical reasoning; psychological measurement; multiple regression; multivariate analysis of variance; discriminant analysis; canonical correlation; factor analysis; structural equation modeling; and meta-analysis.

**FORMAT:** This will be a seminar course with required readings and/or data analysis assignments for each class that will be discussed by the group.

**COURSE MATERIALS:** Some of the course readings will be from Field, Miles, and Field (2012), *Discovering statistics using R* (Sage). Other readings may be from the internet, from course-packs at the UBCO bookstore, or from the reserve section of the library. Most of the data analysis assignments will be conducted using R.

**EXAMINATIONS:** There will be two examinations based on the class readings and discussions: one in February and one in April.

**LABS:** The laboratory portion of the course will focus on data analyses using modern statistical software. Grades for the laboratory portion of the course will be earned in two ways: assignments and participation. There will be five assignments, worth 3% each, for a total of 15% of the course grade. Four of the assignments will be in the form of lab write-ups (2-page max) and the fifth will be a group presentation. The assignments will assess the ability to use statistical software, run appropriate analyses, and correctly interpret program output. There will be no make-up assignments. Additionally, 5% of the course grade will be based on lab attendance and on contributions to lab discussions. If you are to miss a lab for a legitimate reason, please notify Kimberley Kaseweter before the lab at [kkaseweter@alumni.ubc.ca](mailto:kkaseweter@alumni.ubc.ca) (do not use Canvas email).

**TERM PAPER:** The term paper will involve writing a research proposal for a study that involves at least three statistical methods that are covered in the class readings.

**GRADING SCHEME:**

February Exam	30%
April Exam	30%
Labs	20%
Term Paper	5%
Class Participation	15%

Grades for class participation require verbal contributions to class discussions and demonstrations of familiarity with the course readings. Grades for class participation cannot be given for missed classes, for whatever reason, and will be adjusted accordingly.

**COURTEOUS BEHAVIOR IS REQUIRED:** Repeated late-arrivals to class, early departures from class, talking to others while the instructor or other students are speaking, and eating during class are disruptive and rude forms of classroom behavior. Other instructors may attempt to ignore and talk over these disruptions but they will not be tolerated in this course. Students who engage in such behaviors will have points subtracted from their grades for class participation.

**FINAL EXAMINATIONS:** Except in the case of examination clashes and hardships (three or more formal examinations scheduled within a 24-hour period) or unforeseen events, students will be permitted to apply for out-of-time final examinations only if they are representing the University, the province, or the country in a competition or performance; serving in the Canadian military; observing a religious rite; working to support themselves or their family; or caring for a family member. Unforeseen events include (but may not be limited to) the following: ill health or other personal challenges that arise during a term and changes in the requirements of an ongoing job. Further information on Academic Concession can be found under Policies and Regulation in the *Okanagan Academic Calendar* <http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,48,0,0>

**ACADEMIC INTEGRITY:** The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at

<http://okanagan.students.ubc.ca/calendar/index.cfm?tree=3,54,111,0>.

**DISABILITY RESOURCE CENTRE.** The Disability Resource Centre ensures educational equity for students with disabilities, injuries or illness. If you are disabled, have an injury or illness and require academic accommodations to meet the course objectives, please contact Earllene Roberts, the Diversity Advisor for the Disability Resource Centre located in Commons Corner in the University Centre building (UNC 227). UNC 227A 250.807.9263  
email [earllene.roberts@ubc.ca](mailto:earllene.roberts@ubc.ca) Web: [www.ubc.ca/okanagan/students/drc](http://www.ubc.ca/okanagan/students/drc)

**OMBUDS OFFICE:** The Ombuds Office offers independent, impartial, and confidential support to students in navigating UBC policies, processes, and resources, as well as guidance in resolving concerns related to fairness. **UNC 227B** 250.807.9818

email: [ombuds.office.ok@ubc.ca](mailto:ombuds.office.ok@ubc.ca) Web: <http://ombudsoffice.ubc.ca/ubc-okanagan-2/>

**EQUITY AND INCLUSION OFFICE:** UBC Okanagan is a place where every student, staff and faculty member should be able to study and work in an environment that is free from discrimination and harassment. UBC prohibits discrimination and harassment on the basis of the following grounds: age, ancestry, colour, family status, marital status, physical or mental disability, place of origin, political belief, race, religion, sex, sexual orientation or unrelated criminal conviction. If you require assistance related to an issue of equity, discrimination or harassment, please contact the Equity and Inclusion Office. **UNC 227C** 250.807.9291

email: [equity.ubco@ubc.ca](mailto:equity.ubco@ubc.ca) Web: [www.ubc.ca/okanagan/equity](http://www.ubc.ca/okanagan/equity)

**HEALTH & WELLNESS – SAFEWALK:** Don't want to walk alone at night? Not too sure how to get somewhere on campus? Call Safewalk at **250-807-8076**. **For more information, see:** <http://www.ubc.ca/okanagan/students/campuslife/safewalk.html>