Research Methods in I/O Psychology

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Enrollment Restrictions

Enrollment in this course is restricted to graduate students in Department of Psychology, I/O graduate program, as well as any student that has obtained special permission to enroll in this course from the course instructor as well as the Graduate Chair (or equivalent) from the student’s home program.

Course Description:

The purpose of this course is to familiarize students with the research methods used in the science and practice of industrial and organizational psychology. We will begin with a discussion of how to develop research questions and to select the research methodology best suited to answering these questions. We will then discuss specific research methods and data analytic strategies use by I/O psychologists. Discussion will focus on assumptions underlying the use of these methods and strategies, and on their strengths and limitations. Upon completion of the course, students should be in a better position to critically evaluate research in which these methods have been applied and to assess whether, and how, they can be applied in their own research.

Course Format / Location

Face-to-face
Rm. 8438/40
Tuesdays, 1:00 – 4:00pm
Course Learning Outcomes/Objectives

Upon completion of this course, students should:

1. Be familiar with the research method commonly used in the science and practice of I/O psychology.
2. Be able to develop research questions and identify the methods and analytic techniques best suited to addressing those questions.
3. Understand the strengths and limitations of the major methods and analytic techniques used in I/O psychology.
4. Be able to critically evaluate research in I/O psychology and its implications for theory and application.

Course Materials:

See Course Schedule below for a list of required and optional readings. Course readings will be made available on-line through the course website on OWL.

Methods of Evaluation

Grades will be based on participation in classroom discussion (20%), short written reports and student-led discussion of special issues (20%), a written research proposal (50%), and an in-class presentation of the proposal (10%).

Participation. Students are required to complete assigned readings prior to the class in which they are discussed, and to participate actively in discussion. Discussion questions or exercises (e.g., critiques of research articles) may be assigned one week in advance and students will be called upon to share their thoughts on these questions.

Written Reports and Student-led Discussion. Students will be required to write two short (800 word) reports. For one of these reports, the student will also be required to lead an in-class discussion of the issue (i.e., provide a brief overview of the issue and facilitate discussion). The discussion should last approximately 20 minutes. The first written report is due on Monday, September 19 by 12 noon – more detail on the assignment will be provided in class.

The second report will address one of the special issues to be discussed between October 4 and November 8. The special issues will be assigned in advance and students will be required to submit a short written report and lead the in-class discussion. A list of topics will be provided in class and will be assigned on September 20. All reports must be submitted by 12 noon on the Monday before class. All reports should be submitted by email to the instructor at meyer@uwo.ca. Late reports will be penalized 10%; reports will not be accepted after the class in which the issue is discussed.
The special issue reports and discussion should focus on the following questions: 1) what is the problem, 2) why is it important, what difficulties can it cause, and 3) what are the potential solutions? For purposes of the written report, students may be required to focus on a specific aspect of the problem to meet the space restrictions.

**Research Proposal:** Students will be required to develop a research proposal in an area of their choosing. The proposal can be related to the student’s thesis research but should extend that research in some way. The written proposal should not exceed **4000 words** (excluding references). Although the report should include a brief summary of the theoretical background and/or applied context for the research, the emphasis should be placed on describing the research question(s) and the rationale for the strategy proposed to answer the question(s) (and possibly why other strategies were not selected). The proposal can focus on a single study, but students are encouraged to consider outlining a program of research that might include the application of more than one of the methods discussed in this course. **Proposals are due on Tuesday, Dec 13, 2022. Late papers will be penalized at a rate of 5% per day.** Students are strongly encouraged to meet with the instructor at least once to discuss the nature and scope of the project before preparing their written proposal (and in-class presentation).

**In-class Presentation.** Students will be required to make a 45-minute presentation of their research proposal during the last three weeks of class (specific dates to be determined within the first few weeks of class). Again, the report should include a brief summary of the theoretical background and/or applied context for the research, but the emphasis should be placed on describing the research question(s) and the rationale for the strategy proposed to answer the question(s). Students should view this presentation as an occasion to elaborate on, and provide an illustration of, methodological issues discussed in class. It is also an opportunity to get feedback to be incorporated into the written proposal.

**Course Schedule:**

* Readings available on-line
**Readings available in the DNJ library (8420 SSC)

**Note.** Assigned readings are listed in the **suggested order for reading.** Primary readings are intended to treat methodological and statistical issues largely at a conceptual level, with the objective of providing students with an understanding of the basic methods and analytic tools used in I/O psychology research. **Optional readings** are provided for students who are interested in more in-depth treatment of methodological and/or statistical issues.

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<tr>
<th>Date</th>
<th>Topic / Reading</th>
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<tr>
<td>Sept. 13</td>
<td>Organizational Meeting</td>
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Sept. 20 Getting Started: Research Questions, Objectives, Standards, & Ethics


Optional.


Sept. 20 Concept Development and Measurement


Optional.


Oct. 4 Experimental and Quasi-Experimental Designs


Optional


Oct. 11 Exploratory and Confirmatory Factor Analysis


**Oct. 18**

**Multiple Regression and Structural Equation Modeling**


**Optional**


**Oct. 25**

**Testing for Mediation and Moderation**


**Optional**


**Nov. 1**

**Reading Week**
Nov. 8  Advanced Multivariate Analytic Strategies


Optional


Mar. 10  Person-centred Research Methods and Analyses


Optional


Nov. 22  Meta-analysis and Qualitative Methods


Optional


Nov. 29 - Student Presentations
Dec. 6

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 Web site: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf

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).

Health/Wellness Services

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.
Accessible Education Western (AEW)

Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program.

Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are strongly encouraged to register with Accessible Education Western (AEW), a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both AEW and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.