

# Department of Psychology Psych 399

# Rsearch in Industrial & Oranizational Psychology Mondays and Wednesdays 9:30 - 11:20, PAS4032

## Instructor and T.A. Information

Instructor: Dr. PAUL WEHR

Office: PAS 4037

Office Phone: 519-888-4567, x35333

Office Hours: Monday - Wednesdays, 11:20am - 12:00pm

Email: pwehr@uwaterloo.ca

TA: Frank Mu

Email: xqmu@uwaterloo.ca

Office: PAS 4247

## **Course Description**

Psychology 399 further develops students ability to consume, evaluate, discuss, and conduct empirical research in the discipline of psychology by focusing on methods, designs, and issues most commonly encountered in the subarea of Industrial / Organizational (I/O) psychology.

## **Course Goals and Learning Outcomes**

Upon completion of this course, students should:

- A. Gain an enhanced appreciation for the role of research methods in science.
- B. Possess a comprehensive understanding of research methods applicable to the study of I/O psychology.
- C. Possess a heightened ability to read and critically evaluate research articles.
- D. Plan, design, and conduct basic research designs in psychology.
- E. Communicate their thoughts about research at an advanced level.
- F. Work effectively in a research group.

### **Background Reading**

Your Psychology 291 textbook (or any textbook of research methods for the social sciences). Also, you will need to use APA formatting in this course that adheres to the *Publication Manual of the American Psychological Association* (6<sup>th</sup> ed.). Posted on LEARN is a useful reference to basics of APA formatting from the library at University of British Columbia.

## **Course Assessment**

The central elements of this course include weekly seminars structured around a series of prescribed readings, and a group research project. The assigned readings for each week are organized around a particular methodology or issue, which students will explore through intensive discussion in the classroom. The group project will provide students the opportunity to apply what they have learned by designing and conducting their very own research investigation. In both cases, regular, meaningful participation and groupwork is required for success.

Assessment	Date	Weight
Discussion Participant		15%
Discussion Leader		15%
Examination	November 23 <sup>rd</sup>	25%
Project Report	December 2 <sup>nd</sup>	20%
Project Materials Project	December 2 <sup>nd</sup>	05%
Presentation	November 25 <sup>th</sup> & 30 <sup>th</sup>	10%
Poster	December 4 <sup>th</sup>	10%
Total		100%

#### **Seminar Discussions**

Seminars will take place on class dates with assigned readings. On these dates, the instructor will begin with a brief review (~10 min) of the basic concepts related to that week's topic. The review will be followed by a lively and engaging group discussion of the assigned readings. The discussion will be student led and should focus on the article's relevance to the weekly topic, but should also critically evaluate the article in general. For each seminar, a different group of students will act as discussion LEADERS while the rest of the class will contribute as discussion PARTICIPANTS. All students should take an active role in the discussion each and every week.

DISCUSSION PARTICIPANTS: Seminar courses are meant to enhance student learning through discussion of ideas. As such, it is critical that each student participate regularly in the conversation. In order to prepare for each session, students should:

- READ the assigned article(s) carefully and summarize in writing the major ideas, issues, and conclusions.
- REFLECT on the issues raised in the assigned reading(s), and on their implications for both future research and potential application in the workplace.
- PREPARE a few specific and insightful questions, observations, criticisms, endorsements, etc.

Students who read, reflect, and prepare for each session should have plenty to share with the class during each session. There are a total of 11 seminar class dates; each student will LEAD once and PARTICIPATE ten times. Thus, each class is worth 1.5% (or 15% total). Student participation will be assessed three ways:

• CONTRIBUTIONS to the DISCUSSION: Engaging in discussion is worth 1% each class; this includes both small and large discussion groups. After each session, either the instructor or the TA will evaluate each student on their contributions using the following rubric:

Absent	Present but no	Limited	Satisfactory	Meaningful
	Contribution	Contribution	Contribution	Contribution
0	.25	.50	.75	1.00

- PREPARED DISCUSSION QUESTION: Each student will prepare and bring one meaningful discussion
  question with them to each seminar class. The question will be submitted to the instructor at the
  beginning of class and is worth .25%. Questions will not be accepted after the class begins, so it is
  important to arrive on time. These questions should be utilized in the seminar that day.
- PEER EVALUATION: Each student will be responsible for evaluating the discussion leaders in the form of structured peer feedback. For each session a student provides complete peer evaluation, they will receive .25%.

DISCUSSION LEADERS: In groups of two or three, students will work together to be discussion leaders once during the term – topics to be assigned on the first day. You should meet with your group outside of class time to coordinate your content. Your written thoughts generated from READ, REFLECT, and PREPARE are a good base on which to build. This is not a presentation, although you might choose to present some information as part of your seminar (e.g., a brief summary of the article's main points). Instead, your goal is to generate discussion based on the assumption that everyone has READ, REFLECTED, and PREPARED for the seminar. Achieving success as a leader means stimulating the contributions of the other participants, not dominating the conversation yourself.

You should plan to lead the conversation for about one hour. There are many ways to accomplish this and you are free to be creative in your efforts. You should first create a lesson plan (examples available on LEARN) and then schedule an appointment with the instructor to refine your ideas. In developing your lesson plan, you should think carefully about what your learning outcomes are, and create activities and content tailored to achieve these outcomes. You should meet with the instructor no later than Thursday the week before if your seminar is on Monday, or on Monday if your seminar is on Wednesday. Students will be assessed as discussion leaders by their peers; an example of the rubric is available on LEARN.

## **Examination**

The examination will be composed of two parts and be based on two assigned research articles. Part one will test students' knowledge of one article using multiple-choice questions followed by a takehome discussion question. If the multiple-choice component is missed for a legitimate reason (e.g., hospitalization or kidnapping), contact the instructor as soon as possible and provide appropriate documentation to verify the absence (i.e., Verification of Illness Form or Ransom Note). Part two will require students to draft two discussion activities based on the second article. Articles will be assigned two weeks before part 1 of the exam but Part 2 will not be due until after the last seminar meeting.

#### **Projects**

Students working in teams of 2 or 3 will design, conduct, and report the results of their own psychological investigation of a topic relevant to I/O psychology. Five workshops throughout the semester will help students complete various aspects of their research project. It is critical that students attend all of these sessions, but workshops 1 through 3 are particularly important because they consist of the group work required to develop the project, and the session during which data will be collected; missing any of these workshops will prevent you from contributing to your group's project in a meaningful way. Consequently, missing any of these sessions will result in a 20% deduction (5 out of 25 marks) for EACH missed workshop. If you are unable to attend one of these workshops for a legitimate reason (e.g., severe illness or incarceration), then contact the instructor as early as possible and provide appropriate documentation to avoid the 20% deduction. However, even if excused, you remain responsible for coordinating with your group members to make up for lost time.

PROJECT REPORTS: The most important step in the scientific endeavour is to communicate one's findings to other scientists in a peer reviewed research journal. This not only allows others to learn about what you did and what you found, but to critically evaluate your research before it is published. Consequently, students will submit an eight-page scientific report in APA format, which will document and discuss their learning experience. Although students will work in groups and share data, and are encouraged to consult with one another and to proof read each other's work, each student will submit his or her own original report, which will be worth 25% of their final grade. A hard copy of the report is due at the beginning class on Dec 2<sup>nd</sup>.

PROJECT MATERIALS: This component should be submitted with your individual reports at the beginning of class on Dec 2<sup>nd</sup>. Each group will submit ONE collection of all experimental materials used. One clean (unused) copy of each material used in the project should be placed in a report cover. In this package you would include things like a consent form, debriefing form, demographics questionnaire, examples of stimuli, and any other materials used. In addition, include a title page in APA format identifying the group name and all of its members, and ALL COPIES OF ALL DATA collected.

PROJECT PRESENTATION: Each group will give a 20 minute presentation (plus 5 to 10 minutes for questions) sometime during the last two weeks of the course. The Exact date of your presentation will be determined later in the term. You should use PowerPoint or another presentation software and all members of the group must speak. Your presentation should review theoretical background, identify the research question, explain the methods utilized, report the results of your study, and discuss weaknesses and limitations of the project. Presentations will be assessed by your peers, who will rate your effort out of 10 using a rubric provided by the instructor. Your grade will reflect the average of the peer assessments.

PSYCH398 RESEARCH FAIR: Each group will also create a poster presentation of their research investigation that is worth 10% of your final grade. Posters will be presented together in conjunction with other sections of PSYCH39x on Friday December 4<sup>th</sup> between 4pm and 6pm. Your team will prepare a poster that summarizes your project's hypothesis, method, results, and conclusions. This kind of presentation is common at professional scientific conferences. During the poster session you will be asked to evaluate four of your peers' presentations from another section, and four students from the other section will evaluate your poster. The average of these ratings will provide a grade out of 5. A teaching assistant from the other section will also evaluate your poster out of 5. Both these grades combined will produce a score out of 10. More details about how to prepare for the poster session, and how to evaluate peer projects will be provided later in the term. THIS IS A MANDATORY COURSE EVENT. FAILURE TO PARTICIPATE WILL EARN A GRADE OF 0 ON THE POSTER PRESENTATION, SO MARK YOUR CALENDAR IMMEDIATELY.

#### Withdrawal Dates

Withdrawal deadline and receive no penalty: October 2<sup>nd</sup>, 2015 Withdrawal deadline to receive "WD" on transcript: November 20<sup>th</sup>, 2015 Withdrawal deadline to receive "WF" on transcript: December 7<sup>th</sup>, 2015

# **Concerns About the Course or Instructor (Informal Stage)**

We in the Psychology Department take great pride in the high quality of our program and our instructors. Though infrequent, we know that students occasionally find themselves in situations of conflict with their instructors over course policies or grade assessments. If such a conflict arises, the Associate Chair for Undergraduate Affairs (Dr. Myra Fernandes) is available for consultation and to mediate a resolution between the student and instructor. Dr. Fernandes' contact information is as follows: Email: <a href="mailto:mafernan@uwaterloo.ca">mafernan@uwaterloo.ca</a>, Phone: 519-888-4567, x32142. A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 and 71 below for further details.

# **Academic Integrity**

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 – Student Discipline.

https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-71

*Grievance:* A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Polic 70 – Student Petitions and Grievances, Section 4.

https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70

Appeals: A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 – Student Appeals.

https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-72

Other sources of information for students

Academic Integrity (Arts): <a href="https://uwaterloo.ca/arts/ethical-behavior">https://uwaterloo.ca/arts/ethical-behavior</a>

Academic Integrity Office (uWaterloo): <a href="https://uwaterloo.ca/academic-integrity/">https://uwaterloo.ca/academic-integrity/</a>

## **Accommodation for Students with Disabilities**

The AccessAbility Services office, located on the first floor of the Needles Hall extension, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

https://uwaterloo.ca/disability-services/

# **Counselling & Psychological Services**

The Counselling & Psychological Services office at the University of Waterloo, located on the second floor of the Needles Hall extension, offers a variety of resources for those struggling with the challenges of university life, including coping skills seminars and workshops, peer support, group therapy, and clinical referalls. Their home page is:

https://uwaterloo.ca/counselling-services/

## **Student Success Office**

The Student Success Office at the University of Waterloo, located on the second floor of South Campus Hall, offers tutoring, workshops, success coaching, and a variety of other resources for students looking for guidance to be successful in university. Their home page is:

https://uwaterloo.ca/student-success/

# **Writing Centre**

The Writing Centre, located on the second floor of South Campus Hall, is available to help students with critical reading, synthesizing and integrating research, citing, organizing and structuring their paper, writing style, etc. The Centre offers appointments with an instructor, drop-in sessions, and workshops. Their home page is:

https://uwaterloo.ca/writing-centre/

### Term Schedule

Week	Date	Topics	
1		Course Overview & How to Ask Meaningful Questions.	
	Sep 14	Icebreaker & Course Syllabus. Group assignment and scheduling.	
	Sep 16	Hardy, B., & Ford, L. R. (2014). It's not me, it's you: Misconprehension in Surveys. <i>Organizational Research Methods, 17</i> , 138 – 162.	
2		Generating Research Ideas.	
	Sep 21	Workshop 1: Scientific Process & Brainstorming a Topic.	
	Sep 23	<b>Library Orientation</b> : Performing a Literature Search at Dana Porter Library.	
3	3 Psychological Measurement: Reliability		
	Sep 28	Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. <i>Journal of Applied Psychology, 78</i> , 98 – 104.	
	Sep 30	Viswesvaran, C., Ones, D. S., & Schmidt, F. L. (1996). Comparative analysis of reliability of job performance ratings. <i>Journal of Applied Psychology, 81</i> , 557 – 574.	

4		Psychological Measurement: Validity
	Oct 05	Binning, J. F., & Barrett, G. V. (1989). Validity of personnel decisions: A conceptual analysis of the inferential and evidential bases. <i>Journal of Applied Psychology</i> , 74, 478 – 494.
	Oct 07	Arthur Jr., W., & Villado, A. J. (2008). The importance of distinguishing between constructs and methods when comparing predictors in personnel selection research and practice. <i>Journal of Applied Psychology</i> , 93, 435 – 442.
5		Research Project Proposals
	Oct 12	Thanksgiving (no class).
	Oct 14	Workshop 2: Project Proposals
6		Moderation and Mediation in Survey Design
	Oct 19	Witt, L. A., Burke, L. A., Barrick, M. R., & Mount, M. K., (2002). The interactive effects of conscientiousness and agreeableness on job performance. <i>Journal of Applied Psychology</i> , 87, 164 – 169.
	Oct 21	Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. <i>Academy of Management Journal</i> , 32, 115 – 130.
7		Meta-Analysis
	Oct 26	Joseph, D. L., Dhanani, L. Y., Shen, W., McHugh, B. C., & McCord, M. A. (2015). Is a happy leader a good leader? A meta-analytic investigation of leader trait affect and leadership. <i>The Leadership Quarterly</i> , <i>26</i> , 558-577.
	Oct 28	Workshop 3: Data Collection in CPH 3602
8		Experimental Design & Analysis
	Nov 02	Workshop 4: Data Analysis in PAS1237
	Nov 04	Howell, J. M., & Frost, P. J. (1989). A laboratory study of charismatic leadership Organizational Behavioir and Human Decision Processes, 43, 243 – 269.
9		Moderation and Mediation in Experimental Designs
	Nov 09	Greenberg, J. (1993). Stealing in the name of justice: Informational and interpersonal moderators of theft reations to underpayment inequity. Organizational Behavior and Human Decision Processes, 54, 81 – 103.
	Nov 11	Allen, T. D., & Rush, M. C. (1998). The effects of organizational citizenship behaviour on performance judgments: A field study and a laboratory experiment. <i>Journal of Applied Psychology</i> , 83, 247 – 260.
10		Contemporary Topics
	Nov 16	Vancouver, J. B., & Weinhardt, J. M. (2012). Modeling the mind and the milieu Computational modeling for micro-level organizational resarchers.  Organizational Research Methods, 15, 602 – 623.
	Nov 18	Workshop 5: Scientific Writing and APA Formatting

11		Exam
	Nov 23	Examination
	Nov 25	Group Presentations
12		Course Wrap-up
	Nov 30	Group Presentations
	Dec 02	Final Reflections, Papers Due, Exam returned, Course Evaluations.
	Dec 04	PSYCH39X Research Fair, 4pm – 6pm. Location TBD.