

**Psychology 399:  
RESEARCH IN INDUSTRIAL & ORGANIZATIONAL PSYCHOLOGY**

**Department of Psychology  
Fall 2010**

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*Office Hours:* Monday 2:30-3:30 p.m.

*Class Schedule/Location:* Monday & Wednesday: 10:00 – 11:20 a.m., PAS 3026.

*Background Reading:* Psychology 291 textbook: Stanovich, K. *How to think straight about psychology*. Allyn & Bacon Publishers.

*Reference Source:* American Psychological Association. (2001). *Publication Manual of the American Psychological Association* (5<sup>th</sup> ed.). Washington, DC: Author.

### **Course Objectives**

This course builds on earlier methods and statistics courses you have taken (e.g., PSYCH 291, 292). In this course, we will cover various designs and statistical issues commonly encountered in the study of I/O psychology. The primary goal of this course is to provide you with a comprehensive understanding of the concepts and procedures that researchers use to address questions in I/O psychology (and psychology more generally). As well, this course will enable you to develop the ability to critically evaluate research evidence and design your own research in I/O psychology.

### **Course Format**

The course is structured as a series of seminars and in-class discussions on prescribed readings will be the main format of the course. The readings of each class are selected to focus on a particular methodology in the context of I/O empirical research. These readings will provide a base to discuss complex methodological issues in the background of actual research. Meanwhile, you will be exposed to various research topics and theories in the field of I/O psychology.

### **Course Requirements and Value**

In-Class Participation:	15%
Discussion Leader:	15%
Test:	30%
Research Proposal:	40%

### 1. In-Class Participation

This is an advanced undergraduate seminar and whether the seminar is a valuable and rewarding learning experience is largely determined by your proactive participation in each class. You have a rare opportunity to actively involve yourself in discussions of the relevant weekly readings. During the discussion, you should illustrate your observations, thoughts, questions, and evaluations about the readings. In preparing for each discussion, I would suggest that you do the following: First, read the assigned article carefully and summarize (in writing) the main ideas, methods, and conclusions; Second, spend some time giving serious thoughts to the research ideas, methodologies, implications for future research and/or for management practices.

Your in-class participation **also includes a presentation** (in groups) of your preliminary research proposal (see point 4 below) in the last few weeks of class.

Everyone is expected to participate in discussions during each class. I will grade your participation in each session immediately following our class, and later create a composite of these grades, so as to avoid potential rater biases.

**Note on attendance:** Apparently, your in-class participation grade is affected by your attendance. That is, if you are not present in class, you have not participated, and so would receive **a zero for that session**. If you are away for medical reasons (or another emergency), please let me know before the class, and you will need to provide the appropriate documentation consistent with UW policy (see notes from Arts Faculty below).

### 2. Discussion Leader

Each week two-three students will take responsibility for leading class discussion. Obviously, your thoughts from point 1 above can serve as the basis for how you will lead the discussion. In leading discussion, you should not merely summarize the readings, as you should assume that all of us have read the readings. Rather, you should have questions, comments, observations, and critical evaluations. Note that everyone is expected to contribute in a meaningful way even when not serving as a discussion leader. Thus being a discussion leader does not mean that you should dominate the discussion; instead, you will be responsible for guiding the discussion, keeping it going, ensuring the discussion stays on topic and that it reflects the key issues addressed in the readings. You should aim to lead the discussion for about 50 minutes of the 80-minute class period. I will interject throughout and/or at the end of the discussion to cover methodological issues in greater depth (normally requiring 20-30 minutes). **Note: When you are the discussion leader, bring in two copies of your questions/comments.** One copy is for me to keep (The style of your comments is not particularly important as long as it is typed).

### 3. Test

Toward the end of the term (see topic list attached), you will write an exam that will test knowledge gained throughout the preceding weeks. More specifically, the exam will test whether you are able to formulate appropriate research designs, interpret data, depict data from results, and critique methodology.

### 4. Research Proposal

In this course, you will also develop a research proposal in small groups (size depends on the class size). You will need to work with your group members throughout the term outside of class. You and your group are free to choose a research question that you consider interesting and worthy of study. You will need to locate, review, and report on relevant literatures that pertain to the rationale for your research question. Eventually, you will need to design a study to investigate your research question. The proposal should contain no less than 4 references (and it need not be more than 10). The objective for the research proposal is not to conduct an exhaustive literature review; rather you need only a sufficient background to develop your idea. The main focus of the research proposal is on how you decide to test your question(s).

We will discuss your research questions/ideas throughout the term (see topic list attached) to make sure you are on the right track. In the last few weeks of class, you will present your initial proposal in groups to the class (**20-30 minute presentation** depending on class size) and receive feedback from the instructor and other class members. You should present the theoretical background and rationale, your hypotheses, operationalizations, design and method, expected results, and implications.

The proposal is due on Friday, Dec. 10<sup>th</sup> and the penalty for late submissions is 5% per day. Note that, although you will develop the research proposal in small groups, ultimately you will each write up the proposal individually.

Your proposal should:

- a) follow APA format .
- b) include: 1) an introduction section—in which your hypotheses are developed and proposed), 2) a method section—in which the research design, procedure, and measures are described, 3) a results section—in which the expected pattern of results is described, and 4) a discussion section—in which the implications of the results for theory, practice and future research, as well as the limitations are discussed. In addition, you will include an appendix, containing all the measures, questionnaires, or other materials needed to conduct your study.
- c) be no more than 10 standard pages (12 point font, double spaced, 1 inch margins all around), excluding references and tables, ect. Anything beyond 10 pages will not be considered.

Some of the major relevant scientific journals to which you may wish to refer (all available in the Dana Porter Library or most via Psych Info):

*Journal of Applied Psychology*  
*Personnel Psychology*  
*Organizational Behavior and Human Decision Processes*  
*Journal of Organizational Behavior*  
*Academy of Management Journal*  
*Journal of Personality and Social Psychology*  
*Personality and Social Psychology Bulletin*  
*Psychological Bulletin*

### **More Suggestions on Readings and Preparation for Class**

Here are some suggestions that you might find helpful in understanding the readings and preparing questions/comments for each class. Of course, depending on the nature/purpose of the readings, some of these suggestions may apply more or less readily. You may also find these suggestions useful in developing an effective research proposal.

1. Try to identify the major variables/constructs involved in the research, and then ask yourself whether these constructs make sense to you based on the explanations provided in the research. Why and why not?
2. After you identify the major constructs, try to figure out what role they are presumed to play in the research. Are they presumed to be antecedents, moderators, mediators, or outcomes? (If you are not clear on these terms, bring them up in class!) Is the role presumed about certain construct making sense to you? Why and why not?
3. Try to integrate point 1 and 2, and outline a theory or assumptions underlying the research. Ask yourself whether the theory or assumptions make sense to you. Why and why not?
4. Make connections to other scientific articles you have read during this course or previous courses you have taken. Do you see any inconsistencies or parallels? Could you provide competing theories, or can they be reconciled?
5. Think about whether the methodology adopted in the research is appropriate to address the corresponding research questions. Why and why not?
6. Even when the methodology is appropriate, are there any flaws or are there any aspects which could be done in a better way?
7. Think about whether there are some methodological concerns which make you skeptical about the results and conclusions obtained in the research.
8. In what way do you feel heartened and/or disheartened by the readings, in terms of facilitating your understanding about theory and research on behavior in the workplace?
9. What applications do you take away from the reading? Or, alternatively, are there any problems (or limits) that you see for application?
10. What's the next study you see as necessary?

### Messages from the Faculty of Arts Council (Fall, 2010)

#### **Cross-listed course:**

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

#### **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,

<http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>

**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 Policy 70 - Student Petitions and Grievances, Section 4,

<http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>

**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, <http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>

**Academic Integrity website (Arts):**

[http://arts.uwaterloo.ca/arts/ugrad/academic\\_responsibility.html](http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility.html)

**Academic Integrity Office (UW):** <http://uwaterloo.ca/academicintegrity/>

#### **Accommodation for Students with Disabilities:**

**Note for students with disabilities:** The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, 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 OPD at the beginning of each academic term.

#### **Accommodations to Course Requirements:**

**Students who are requesting accommodation for course requirements (*assignments, midterm tests, final exams, etc.*) due to illness** should do the following:

- seek medical treatment as soon as possible and obtain a completed UW Verification of Illness Form:

[http://www.healthservices.uwaterloo.ca/Health\\_Services/verification.html](http://www.healthservices.uwaterloo.ca/Health_Services/verification.html)

- submit that form to the instructor within 48 hours.
- (preferably) inform the instructor by the due date for the course requirement that you will be unable to meet the deadline and that documentation will be forthcoming.

In the case of a missed final exam, the instructor and student will negotiate an extension for the final exam which will typically be written as soon as possible, but no later than the next offering of the course.

In the case of a missed assignment deadline or midterm test, the instructor will either:

1. waive the course component and re-weight remaining term work as he/she deems fit according to circumstances and the goals of the course, or
2. provide an extension.

**In the case of bereavement**, the instructor will provide similar accommodations to those for illness. Appropriate documentation to support the request will be required.

Students who are experiencing extenuating circumstances should also inform their academic advisors regarding their personal difficulties.

**WEEKLY TOPIC AND READING LIST****Sept 13 & 15****Introduction**

Mon: Overview of course & Intro to I/O Psychology

Wed: Scientific Process & Overview of Methods

Judd, C. M., Smith, E. R., & Kidder, L. H. (1991). *Research methods in social relations* (6th ed.) Holt, Rinehart and Winston, Inc. Chapter 2: Examining Social Relations Research.

**Sept 20 & 22****Theory, Constructs, and Hypothesis Generation**

Mon: Sackett & Larson (1990) article. Research Strategies and tactics in I/O Psychology. **pp 420-428**

Daft, R.L. (1984). Antecedents of significant and not-so-significant organizational research. In Bateman, J.S., & Ferris, G.R. (Eds.) *Methods and analysis in organizational research*. (pp. 3-14). Reston, VA: Prentice Hall.

Wed: **Bring in your research ideas for discussion**

**Sept 27 & 29****Psychological Measurement and Construct Validity**

Mon: Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods, 1*, 104-121.

**(RCH 208) Wed:**

Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the workplace ostracism scale. *Journal of Applied Psychology, 93*, 1348-1366.

**Oct 4 & Oct 6****Survey Design and Analysis 1 (Mediation in Survey Design)**

Mon: Judge, T. A., & Higgins, C. A. (1998). Affective disposition and the letter of reference. *Organizational Behavior and Human Decision Processes, 75*, 207-221.

Wed: Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal, 3*, 617-635.

**Oct 11 & 13****Moderation in Survey Design**

Mon: Thanksgiving – no class

Wed: Ferris, D. L., Lian, H., Pang, F. X. J., Brown, D. J., & Keeping, L. M. (2010). Self-esteem level and job performance: The moderating role of self-esteem contingencies. *Personnel Psychology, 63*, 561-593.

- Oct 18 & 20**                    **Survey Design & Analysis 2: Longitudinal Analysis**
- Mon:                    **Research Workshop: Bring ideas and preliminary methods for discussion in class**
- Wed:                    Tay, C., et al. (2006). Personality, biographical characteristics, and job interview success: A longitudinal study of the mediating effects of interviewing self-efficacy and the moderating effects of internal locus of causality. *Journal of Applied Psychology*, 91, 446-454.
- Oct 25 & 27**                    **Experimental Design and Analysis 1**
- Mon:                    Howell, J. M. & Frost, P. J. (1989). A laboratory study of charismatic leadership. *Organizational Behavior and Human Decision Processes*, 43, 243-269.
- Wed:                    **Research Workshop: Bring hypothesis and proposed method for discussion in class**
- Nov 1 & 3**                    **Experimental Design and Analysis 2: Moderation & Mediation**
- Mon:                    Greenberg, J. (1993). Stealing in the name of justice: Informational and interpersonal moderators of theft reactions to underpayment inequity. *Organizational Behavior and Human Decision Processes*, 54, 81-103.
- Wed:                    Allen, T.D., & Rush, M.C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology*, 83, 247-260.
- Nov 8 & 10**                    **Quasi-Experimental Design**
- Mon:                    **Turn in 1 pg (max) synopsis of research idea(s) and proposed method Discussion - Writing a Research Proposal**
- Wed:                    Schmitt & Klimoski (1991), pp 386-391. (for background)
- Greenberg, J. (2006). Losing sleep over organizational injustice: Attenuating insomniac reactions to underpayment inequity with supervisory training in interactional justice. *Journal of Applied Psychology*, 91, 58-69.
- Nov 15 & 17**
- Mon:                    Q & A Review Session
- Wed:                    **Test**
- Nov 22 & 24**
- Mon:                    **Prepare presentations**



Wed: Presentations

**Nov 29 & Dec 1**

Mon: Presentations

Wed: Presentations

**Dec 6**

Mon: Presentations

**PROPOSAL DUE: Fri, Dec 10, 2010 (due by 4:00 pm)**

**Discussion Leaders**

<b>Wed, Sept 15</b>	Scientific Process & Overview of Methods
<b>Mon, Sept 20</b>	Theory, Constructs, Hypothesis Generation
<b>Mon, Sept 27</b>	Measurement and Construct Validity
<b>Wed, Sept 29</b>	Measurement and Construct Validity
<b>Mon, Oct 4</b>	Survey Design
<b>Wed, Oct 6</b>	Mediation in Survey Design
<b>Wed, Oct 13</b>	Moderation in Survey Design
<b>Wed, Oct 20</b>	Survey Design & Analysis II (Longitudinal)
<b>Mon, Oct 25</b>	Experimental Design & Analysis I
<b>Mon, Nov 1</b>	Experimental Design & Analysis II: Mediation & Moderation
<b>Wed, Nov 3</b>	Experimental Design & Analysis II: Mediation & Moderation
<b>Wed, Nov 10</b>	Quasi-Experimental Design

**Proposal due: Fri., Dec 10, 2010 (due by 4:00 pm)**