Psychology 291 **BASIC RESEARCH METHODS**Fall 2005

Lectures/Labs: Tues. and Thurs. 8:30 – 10:20, AL 116

In PSYCH 291 we introduce you to the fundamental concepts and procedures that researchers use to address questions about psychological processes. This course will enable you to make more informed evaluations of research evidence, help you learn to design your own research, and prepare you for future courses in statistics and more advanced methods courses (e.g., PSYCH 392-398). This course is for second-year psychology students. All other students must have the permission of the course instructors and the psychology undergraduate advisor.

Instructors

Professor John Holmes	Professor Joanne Wood		
PAS 3047	PAS 3042		
Office hours: Each lecture will be followed by an open office hour (until			
11:20) by the instructor who presented the lecture. If these times do not suit			

Teaching Assistants

Head TA:	TAs:				
Karen Choi	Karl	Jonathan	Justin	Danielle	James
	Borgmann	Carriere	Cavallo	Gaucher	Schmidt
PAS 3046	PAS 4044	PAS 2247	PAS 3050	PAS 3046	PAS 4049
Office hours:					

you, please speak to the instructors about arranging an appointment.

Course UW-ACE Web Page

Postings on the course ACE page include: the course syllabus, office hours, handouts for lectures, on-line activities, announcements, and so forth. On your browser, type in: http://uwace.uwaterloo.ca. Provide your Quest/UWdir userid and password, and then click on PSYCH-291. **Problems? Read the instructions attached at the end of this outline.**

Contacting Instructors

All students are encouraged to seek information and help from instructors and TAs <u>during scheduled office hours</u>. We are here to help. We have scheduled a variety of office hours throughout the week, but if none of these suit your schedule, talk with an instructor or TA immediately before or after lecture to schedule an appointment. Any questions concerning lecture material, the readings, assignments, and administrative matters (e.g., exam timing conflicts) can be handled during office hours. Short, procedural questions can be sent to the course email address: psych291@watarts.uwaterloo.ca, but please save long, detailed questions for office hours. TAs will check email during their office hours. PLEASE DO NOT SEND EMAIL MESSAGES TO THE INSTRUCTORS' OR TAs' PERSONAL EMAIL ADDRESSES. **Due to the class size, we cannot handle email messages or visits to our offices outside of our scheduled office hours**.

Lectures

You are responsible for <u>all</u> material presented in lectures, including any announcements. You will get more out of the lectures if you read each of the readings before the class session for which it is assigned. At the same time, as in many senior courses, a significant amount of lecture material will *not* be covered in the texts. Thus, it is critical that you keep up with the lecture content.

Lab Sessions

Normally, class sessions will begin at 9:00, but when we have a lab session, class will begin at 8:30. In the lab sessions, demonstrations will be presented and graded exams and assignments will be returned to students. You are responsible for <u>all</u> material presented in lab sessions, including any announcements. Lab sessions are scheduled as indicated on the enclosed schedule. However, we may modify this schedule—rescheduling sessions or adding sessions—if necessary. Any such changes will be announced in class.

Graded assignments and exams will be returned to students either through ACE or during lab sessions. If you receive feedback through ACE, please print it out and bring it to the lab session. In the lab session, the correct answers and the marking scheme will be presented. If materials are distributed in lab session and you fail to pick them up, you may pick them up during TA office hours, but the TAs will not review the marking schemes with individual students. **Attend the lab sessions if you want to understand the marking!**

Course Requirements

Required Texts:

Stanovich, K. (2003). *How to think straight about psychology*. Seventh Edition. Allyn & Bacon Publishers.

Pelham, B. & Blanton, H. (2002). *Conducting research in psychology: Measuring the weight of smoke*. Second Edition. Pacific Grove, CA: Brooks/Cole Publishing Company.

Assignments:

The assignments are designed to expose students to a procedure, a method, or an issue in the research methods of psychology. 40% of the final grade in this course is associated with the three assignments. On the assignment due date, you must **SUBMIT AN ELECTRONIC COPY THROUGH THE COURSE ACE PAGE BY 1:00 PM**.

Late assignments—Assignments submitted electronically after 1 pm but before 5 pm on the due date will be deducted 5%. Beyond that, marks will be deducted at a rate of 10% per day past the due date (that's 10% of the possible total). A late assignment will <u>not</u> be accepted after corrected versions of the assignment have been handed back to the class.

Assignments, continued On-line activities:

We have two on-line activities/tutorials that will be accessible through the ACE web page: (1) Interpreting Graphs and (2) Interactions. We will announce in class when these are available. All students must access these activities (ACE will record who accesses these activities), and complete the quizzes that are presented. However, students will vary in how much time they spend using these activities, depending on their prior exposure to these topics and on their motivation to learn the topics. The due date for completing the Graphing On-Line Activity is Oct. 20 and for the Interaction On-Line Activity is Nov 23.

Quizzes:

Two in-class, short, multiple-choice or short-answer quizzes will assess students' knowledge of (1) Basic Concepts and (2) Interactions. These quizzes together count for 8% of the final grade.

Exams:

Midterm and final exams will consist of multiple choice questions and short essay questions. The midterm will cover all lectures and assigned readings from the beginning of the course through October 25; the final will cover all lectures and assigned readings after the midterm (i.e., the final will not be cumulative).

For each exam, you will receive a list of possible short essay questions about one week before the exam date. We will select the actual questions for the exam from this list.

Questions about exam <u>content</u> (e.g., "will x be on the exam?") should be asked (1) during class or (2) to the instructors (not the TAs) during office hours <u>prior</u> to the last class before the exam, so that answers can be given to the whole class. The reason for this restriction is that it is unfair for some students to have information about exam content that is not available to the rest of the class.

Weighting of requirements for course grades

		Weight in
	Date due	final grade
On-line activities:		
Interpreting Graphs	Oct 20	1%
Interactions	Nov 23	1%
Quiz on basics of research design	Oct 4	4%
Quiz on types of interactions in factorial designs	Nov 24	4%
Lab assignments:		
1 – evaluating newspaper description of research	Oct 13	10%
2 – correlational and experimental designs	Nov 10	14%
3 – designing a factorial experiment	Dec 1	16%
Midterm exam	Oct 27	25%
Final exam	exam period	25%

Illness/Emergencies

In case of illness that interferes with your presence for a quiz, exam, or assignment due date, consult the undergraduate calendar -- it explains how you are responsible for getting a physician's note before you miss an exam. In case of a crisis in your personal life or family, you must provide some type of documentation. It is imperative that you inform us of any illness or crisis **before** the exam or assignment due date takes place. If you must cancel at the last minute, please leave a message at psych291@watarts.uwaterloo.ca or at 888-4567, x6512. **If you run into difficulties with course material, or keeping up with deadlines, talk with a TA or with the instructors as soon as possible; do not wait until it becomes a crisis.** For example, if you tell us during Week 8 that you're having trouble, it is more credible and we can be more helpful than if you suddenly ask for an exam postponement in Week 12.

Academic Offenses

Plagiarism is the use of someone else's words or ideas as if they are one's own. It includes the use of quotations without proper referencing. All students must complete their assignments and papers on their own. Copying someone else's assignment (or portion thereof), or allowing another to copy your assignment, is prohibited. Cheating on examinations or assignments and plagiarism will result in a grade of zero for the course and will be reported to the Chair of the Department of Psychology and to the Dean of the Faculty of Arts. Additional disciplinary action could include probation, suspension, or expulsion.

We suggest you read, carefully, Academic Policy #71 which can be found on the university's web site at the following address:

<u>http://www.adm.uwaterloo.ca/infosec/Policies/policy71.html</u>. The Faculty of Arts now requires that the following message be included on all syllabi distributed in the Faculty of Arts:

All students registered in the courses of the Faculty of Arts are expected to know what constitutes an academic offence, to avoid committing academic offences, and to take responsibility for their academic actions. When the commission of an offence is established, disciplinary penalties will be imposed in accord with Policy #71 (Student Academic Discipline). For information on categories of offences and types of penalties, students are directed to consult the summary of Policy #71 which is supplied in the Undergraduate Calendar (section 1; on the Web at http://www.adm.uwaterloo.ca/infoucal/UW/policy_71.html). If you need help in learning how to avoid offences such as plagiarism, cheating, and double submission, or if you need clarification of aspects of the discipline policy, ask your TA or course instructor for guidance. Other resources regarding the discipline policy are your academic advisor and the Undergraduate Associate Dean. Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance, http://www.adm.uwaterloo.ca/infosec/Policies/policy70.html.

How to Avoid Plagiarism and Other Written Offences: A Guide for Students and Instructors (http://watarts.uwaterloo.ca/~sager/plagiarism.html).

Message from Heather Smith

Psychology majors should check the Psychology Undergraduate Web Site (http://www.psychology.uwaterloo.ca/ugradprog/) regularly for important notices, postings for research positions, course information for the coming year, etc.

All students should activate their UW computer accounts each term. The accounts give students access to applications such as word processing, statistical and graphics packages, and electronic email as well as access to the Internet. For those who are not planning to use their UW email addresses, please do one of the following things: (1) change your email address on QUEST to the one that you want posted on the University Directory, or (2) activate your UW account and forward your email from your UW account to your alternate email address.

Schedule for Term

Class begins at 8:30 on Lab days and at 9:00 on all other days.

Date	Inst-	Topic	Required reading	Labs, assignments, due dates	
	ructor				
Sept 13	HS, JS	Orientation for psych majors	Pelham Ch. 1		
	JH,	Introduction to course			
	JW		Stanovich preface		
Sept 15					
&	JH	Philosophy and history of science	Stanovich Ch. 1, Ch. 2, Ch. 12		
Sept 20					
Sept 22			Pelham Ch. 2	Sept 22 – Materials for Basics Quiz	
&	JW	Basics of research design	Pelham Ch. 3 pp. 60 – 66	will be distributed. Read these before	
Sept 27			Stanovich Ch. 6	the quiz on Oct. 4.	
Sept 29			Pelham Ch. 3 pp. 66 – 83	Sept 29 – LAB– arrive at 8:30–	
<u>8:30</u>	JH	Measurement		Observation and interrater	
<u>start</u>			Stanovich Ch. 3	agreement.	
&					
<u>Oct 4</u>				Oct 4 – Basics Quiz – arrive at 8:30–	
<u>8:30</u>				Bring the materials. Assignment #1	
<u>start</u>				will be distributed.	
Oct 6,			Pelham Ch. 4 pp. 84 – 99 &	Oct 11 – return of Quiz 1 results with	
Oct 11,	JW	Threats to internal validity	111 – 114	explanation	
&			Pelham Ch. 6 pp. 176 -181		
Oct 13			Stanovich Ch. 5 pp. 75 – 80	Oct 13 –Assignment #1 due	
Oct 18,			Pelham Ch. 5		
<u>Oct 20</u> ,	JH	Nonexperimental designs		Oct 20 – LAB– arrive at 8:30– return	
<u>8:30</u>			Stanovich Ch. 4	of Assignment #1 with explanation of	
<u>start</u>				grading	
&			Stanovich Ch. 5 pp. 69 - 75		
Oct 25					
Oct 27	MIDTERM EXAM from 9:00 – 10:20 in AL 116. Assignment #2 will be distributed				

HS = Heather Smith, Psychology Undergraduate Services Officer JW = Professor Joanne Wood

JS = Professor Jennifer Stolz, Undergraduate Chair JH = Professor John Holmes

Date	Inst- ructor	Topic	Required reading	Labs, assignments, due dates
Nov 1,	Tuctor		Pelham Ch. 6 pp. 153 –169,	
Nov 3,	JW	True experimental designs	pp. 182-183	
&				
<u>Nov 8</u>			Pelham Ch. 4 pp. 99 – 111	Nov 8 – LAB– arrive at 8:30– <i>return</i>
8:30				of midterm exams with explanation of
<u>start</u>			Stanovich Ch. 7	grading
Nov 10,			Pelham Ch. 8	Nov 10–Assignment #2 due
Nov 15,	JH	Complex experimental designs		Nov 15 – Assignment #3 will be
&			Pelham Ch. 7. pp. 187 – 192	distributed.
Nov 17				Nov 17 – LAB– arrive at 8:30—
<u>8:30</u>			Stanovich Ch. 9	interaction types.
<u>start</u>				
			Pelham Ch. 7. pp. 184 – 187,	Nov 22 – return of Assignment #2
Nov 22	JW	Quasi-experimental designs	bottom of 192 – 217.	with explanation of grading
Nov 24	JH,			Nov 24 – Quiz 2 on interaction types
&	JW	Mediation and confounds	Stanovich Ch. 8 &11	
Nov 29				
			Pelham Ch. 9 pp. 272 - 278	Dec 1 – Assignment #3 due
Dec 1	JW	Drawing conclusions	Stanovich Ch. 10	
Exam				
period	FINAL EXAM – time to be scheduled by Registrar sometime between December 8 and 22*			

*According to the Faculty of Arts, student travel plans are not acceptable grounds for granting an alternative final examination time (see http://www.registrar.uwaterloo.ca/exams/finalexams.html).

Information for Students Using UW-ACE (University of Waterloo ANGEL Course Environment)

ANGEL is a web-based course management system that enables instructors to manage course materials (posting of lecture notes etc.), interact with their students (drop boxes for student submissions, on-line quizzes, discussion boards, course e-mail etc.), and provide feedback (grades, assignment comments etc.). The degree to which UW-ACE is utilized in a particular course is left to the discretion of the instructor and therefore, you may find a large variance in how UW-ACE is being used from one course to another.

Logging Into UW-ACE

Since UW-ACE is a web-based system, you will need a browser. Although you may have success with other Web browsers, we strongly recommend that you use the following for best access results.

PCs

<u>Netscape 7.1</u> or higher or <u>Internet Explorer 6.0</u> or higher or <u>Mozilla</u> 1.4 or higher. We have had the best success with Netscape 7 or higher.

Macintoshes

Mozilla 1.4 or higher for OS X

Note: Internet Explorer for the Mac will not work with ANGEL.

Once you have started up your browser, type in the following URL:

http://uwace.uwaterloo.ca

Provide your Quest/UWdir userid and password. Once you have logged in, you should see a list of your UW-ACE courses under the Courses header bar. Clicking on the course name will take you to that course.

Checking Your Userid and Password

Your password can be checked by going to: http://ego.uwaterloo.ca/~uwdir/UW-Passwd.html

If your password check fails, you can unlock your password and receive a new one by going to: http://ego.uwaterloo.ca/~uwdir/UnLock.html

If you still can not get on after checking and resetting your password, please confirm with your instructor that you are on the class roster. Only students with courses using UW-ACE will have access to the site.

Getting Help

A UW-ACE student guide can be found by selecting **Help** on left hand panel of the UW-ACE home page, and selecting the hyperlink **UW-ACE (ANGEL 6.2) Student Quickstart Guide**. Additional queries can be sent to **uwacehelp@ist.uwaterloo.ca**.