Psychology 291 BASIC RESEARCH METHODS Fall 2006 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 Joanne V. Wood	Professor John G. Holmes		
PAS 3042	PAS 3047		
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			
you, please speak to the instructors about arranging an appointment.			

Teaching Assistants

Head TA:	TAs:			
Justin	Marc	Nadia	Jennifer	Emily
Cavallo	Hurwitz	Martin	McClellan	Schryer
PAS 3050	PAS 4214	PAS	PAS 3046	PAS 3041
Office hours:				

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: <u>http://uwace.uwaterloo.ca</u>. Provide your Quest/UWdir userid and password, and then click on PSYCH-291. **Problems? Read the instructions attached at the end of this outline.**

Lectures

You are responsible for all 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!**

Contacting Instructors

All students are encouraged to seek information and help from instructors and TAs <u>during</u> <u>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**.

Course Requirements

<u>Required Texts</u>:

Pelham, B. W. & Blanton, H. (2007). *Conducting research in psychology: Measuring the weight of smoke*. Third Edition. Thomson Wadsworth.

Note: Students may try getting by with the used copies of the 2^{nd} Edition. On the course web page, we have a handy table of corresponding page numbers from the 2^{nd} edition, as well as the page numbers from the 3^{rd} Edition that you should read.

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

Note: We are **not** using the new, Eighth edition, allowing you to purchase used copies from last year.

Assignments:

The assignments are designed to expose students to a procedure, a method, or an issue in the research methods of psychology. 38% 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**. Your assignment must be in Word format. The file name must have a ".doc" as a suffix. No other formats (e.g., WordPerfect) are acceptable. In class, a TA will demonstrate how to submit the assignment. In addition, you may get help submitting the assignment from a TA during office hours. You are personally responsible for getting confirmation from the ACE system that the paper has been received successfully. If your assignment has not been submitted properly, for whatever reason (e.g., you submitted the wrong file by mistake, you used the wrong format), you will receive a mark of 0 on the assignment, or, if you notify us of the mistake before the assignment marking is covered in class, it will be marked as a late assignment.

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.

On-Line Activities:

We have four on-line activities/tutorials that will be accessible through the ACE web page: (1) Correlations and third variables, (2) Interpreting Graphs, (3) Interactions, and (4) Mediation. 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 dates for completing the On-Line Activities will be announced.

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 24; 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.

	Date due	Weight in final grade
On-line activities:	Due dates for OAs to be announced	
Correlations	approx. early Oct.	1%
Interpreting Graphs	approx. late Oct.	1%
Interactions	approx. mid Nov	1%
Mediation	approx. late Nov	1%
Quiz on basics of research	Oct 3	4%
design		4%
Quiz on types of interactions in	Nov 23	
factorial designs		
Assignments:		
1 – evaluating newspaper	Oct 12	9%
description of research		
2 – correlational and	Nov 9	13%
experimental designs		
3 – designing a factorial	Dec 5	16%
experiment		
Midterm exam	Oct 26	25%
Final exam	exam period	25%

Weighting of requirements for course grades

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 <u>psych291@watarts.uwaterloo.ca</u> 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

Academic Offenses, continued

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.cg/infosce/Policies/policy70 html

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-	Торіс	Required reading	Labs, assignments, due dates
	ructor			
Sept 12	HS, JS,	Orientation for psych majors	Pelham Ch. 1	
	JH, JW	Introduction to course	Stanovich preface	
Sept 14				
&	JH	Philosophy and history of science	Stanovich Ch. 1, Ch. 2, Ch. 12	
Sept 19				
Sept 21			Pelham Ch. 2, pp.26-44,	Sept 21 – Materials for Basics Quiz
&	JW	Basics of research design	Ch.10, pp. 276-278,	will be distributed. Read these before
Sept 26			Ch. 3, pp. 59-64	the quiz on Oct. 3.
			Stanovich Ch. 6	
Sept 28				
&	JH	Nonexperimental designs	Pelham Ch. 6	Oct 3 – Basics Quiz – arrive at 8:30–
<u>Oct 3</u>			Stanovich Ch. 4	Bring the materials. Assignment #1
<u>8:30</u>			Stanovich Ch. 5 pp. 69 - 75	will be distributed.
<u>start</u>				
Oct 5,			Pelham Ch. 5, pp. 115–130,	Oct 10 – return of Quiz 1 results with
	JW	Threats to internal validity	Appendix 1, 336-338.	explanation
Oct 10,			Ch. 7 pp. 198 -202	
&			Stanovich Ch. 5 pp. 75 – 80	Oct 12 – <i>Assignment #1 due</i>
Oct.12				
Oct 17,			Pelham Ch. 3 pp. 64 – 76	
Oct 19	JH	Measurement		
<u>&</u>			Stanovich Ch. 3	
<u>Oct 24</u>				Oct 24 – LAB– arrive at 8:30– <i>return</i>
<u>8:30</u>				of Assignment #1 with explanation of
start				grading
Oct 26		MIDTERM EXAM from 93 Psychology Undergraduate Services Officer	<u>:00 – 10:20 in AL 116. Assignmen</u>	

HS = Heather Smith, Psychology Undergraduate Services Officer JS = Professor Jennifer Stolz, Undergraduate Chair JW = Professor Joanne Wood

JH = Professor John Holmes

Date	Inst- ructor	Торіс	Required reading	Labs, assignments, due dates
Oct 31,			Pelham Ch. 7, pp. 176-191,	
Nov 2,	JW	True experimental designs	& Appendix 2, pp. 352-354.	
&				
<u>Nov 7</u>			Pelham Ch. 5, pp. 130-144.	Nov 7 – LAB– arrive at 8:30– <i>return</i>
<u>8:30</u>				of midterm exams with explanation of
<u>start</u>			Stanovich Ch. 7	grading
Nov 9,			Pelham Ch.9	Nov 9–Assignment #2 due
Nov 14,	JH	Complex experimental designs		Nov 14 – Assignment #3 will be
&			Pelham Ch. 8, pp. 214-219.	distributed.
Nov 16				
			Stanovich Ch. 9	
			Pelham Ch. 8, pp. 211-214,	Nov 21 – return of Assignment #2
Nov 21	JW	Quasi-experimental designs	pp. 219-241.	with explanation of grading
Nov 23	JH,			Nov 23 – Quiz 2 on interaction types
&	JW	Mediation and confounds	Stanovich Ch. 8 &11	
Nov 28				
Nov 30			Pelham Ch. 2, pp. 50-58,	Dec 5 – Assignment #3 due
&	JW	Drawing conclusions	Pelham Ch. 7, 206-208.	-
Dec 5			Stanovich Ch. 10	
Exam				
period		FINAL EXAM – time to be sc	heduled by Registrar sometime be	etween 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 <u>http://www.registrar.uwaterloo.ca/exams/finalexams.html</u>).

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: <u>http://ego.uwaterloo.ca/~uwdir/UnLock.html</u>

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**.