

# Research Methods in Psychology

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**Instructor:** David Polson, PhD

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**Course Website:** Accessible through CourseSpaces.

**Teaching Assistant:** Abbi Graves <argraves@uvic.ca >

**Lecture Room / Day, Time:** COR A225 / MW, 10:30-12:20; R, 10:30-11:20

**Lab Instructor:** Hannah van Mook <hvanmook@uvic.ca>

**Lab Room / Day, Time:** B01: COR A129 (varies), F, 10:30-11:20; B02: CLE D125 (varies), F, 11:30-12:20

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## Course Content

This course deals with psychology as a science. You will be introduced to basic research techniques, with an emphasis on their conceptual rather than statistical rationale. You will be taken through all the stages of psychological research, from choosing the problem to publishing the results. Along the way you will be exposed to a wide variety of interesting topics in the psychological literature. I hope to convey to you the idea that designing and conducting research is an exercise in problem solving that can be exciting and creative.

## Course Materials

- (1) White, T. L. & McBurney, D. H. (2013). *Research methods* (9<sup>th</sup> ed.). Belmont, CA: Wadsworth/Thompson.
- (2) *THINK FAST* computer program (available at course website)
- (3) *Study Guide* (available at course website)

## Course Overview

On "lecture" days, I will focus on addressing the answers to selected study questions from the required reading (see *Study Questions* section), often supplementing the textbook discussion with my own examples and perspective. Marks will be assigned for attendance and participation (see *Lecture Quizzes / Exercises* section). On "test" days, a *THINKFAST* assignment is due before class starts (see *THINKFAST* section); the entirety of the class will be taken up by writing the test and reviewing the answers afterwards (see *Test* section).

On "lab" days (Fridays), you will meet with your lab instructor for 50 minutes at an assigned time and place (see *Laboratory* section). There will be a separate outline for the lab component of this course detailing planned activities and when lab assignments are due. While there are two lab sections (B01 and B02), you must attend only the section for which you are registered.

## Course Components

**Study Questions.** The *Study Guide* lists study questions for each chapter in this course. The study questions are important because they are the main focus of the lectures, and thus many of the test items are based on them. As a means of preparing for both the lectures and the tests, I encourage you to write out the answers to the study questions. Be sure to use them to direct your reading of the textbook.

**Lecture Quizzes / Exercises.** Attendance and participation is required on lecture days. Importantly, you will be submitting some type of written work at the end of class, for credit. With quizzes, you will be asked to answer multiple choice questions about the lecture content, sprinkled throughout my PowerPoint presentation. With exercises, you might be asked to plot data, conduct basic statistical analyses, watch and then answer questions about a video, etc. The protocol is informal in that comparing your answers with other students is fine, even encouraged. Regardless of the format, a score will be assigned out of 10, partly based on your attendance and partly based on the written work you submit. Overall, this component counts **60 points** toward your final grade.

**THINK FAST.** In order to think critically about research methods in psychology, you need to be fluent with the basic facts and concepts. *THINK FAST* is a computerized flashcard program designed to help you in this regard. It includes six decks of cards, one deck per unit. Deck size varies from about 20 to 40 cards. In *THINK FAST*, after you select a deck, a session begins: the program presents the cards one at a time and gives you two minutes to provide the answers to as many cards as possible. While there are several response options for learning the cards, you should work only in the *Type Keyword mode*. In this mode, flashcards are presented that are missing either the answer or a keyword or phrase, and you are required to type in the missing word(s). Note that *THINK FAST* involves typing; if you cannot type, then you must inform me on the first day of class so that alternative arrangements can be made.

Marks are assigned for practicing, and bonus marks are awarded for mastery. Specifically, for each deck, you will earn 10 points for practicing at least 15 sessions, totaling 30 minutes or more; you can also earn 2 bonus points if you achieve at least 5 sessions of mastery. The mastery criterion is at least 5 correct responses per minute with less than one incorrect response per minute. There is also an optional seventh deck called “201Bonus,” which contains all the cards for this course. If you achieve at least 15 sessions of mastery with this deck, you will earn 18 bonus points. The due dates for meeting the requirements for each deck are listed on pages 4-5. Overall, this component counts for **60 points** toward your final grade. In addition, you can earn up to **30 bonus points**.

*THINK FAST* keeps a record of your scores on the disk. To be graded, you must upload a copy of your progress report through the appropriate link at the course website prior to the start of class on the day it is due. At the end of the course you may be asked to submit a file on your disk containing all your data (details to be announced). If the data in that file do not match the reports you submitted earlier, then this will be investigated further and the rules and regulations concerning cheating at UVic will apply. For more detailed information about *THINK FAST*, including how to prepare a copy of progress report and submit it, see the document called “Using *THINK FAST*”, available at the course website.

Research indicates that, relative to students who are traditionally taught, students who are exposed to Precision Teaching—with an emphasis on developing fluency (high rate correct) with basic terms and facts—write more succinct and accurate essays (even though they are not specifically trained to do so), participate in more class discussions, and have better concentration and long-term retention. Students in my classes have reported that developing fluency also helped them better understand the course readings. Thus, working with *THINK FAST* should have positive benefits for you beyond merely memorizing the definitions.

**Assignments.** There are two out-of-class assignments, the deadlines for which are specified in the Class Schedule. Instructions for each assignment will be provided at the course website. Each assignment is worth 20 points, so overall this component counts for **40 points** toward your final grade.

**Tests.** There are three tests, one for every two units. Tests will consist of multiple choice items, fill-in-the-blank *THINK FAST* items, and written items. Overall, tests count for **600 points** toward your final grade. There is also an optional fourth test, scheduled on the last day of class. You might consider this option if you did poorly on one of the earlier tests. At least half of Test 4 will consist of a sample of questions from all previous tests. More details will be provided later. Your score on Test 4 will substitute for your lowest test score; if it is your lowest test score, it will not count.

**Laboratory.** The labs are designed to give you an opportunity to apply some of the concepts covered in lectures. Various activities are scheduled. For most labs, you will earn points for attending, participating, and submitting small assignments (**60 points**). In groups, you will design and conduct an observational study, and present a poster based on your study (**50 points**). Individually, over a six-week span, you will conduct a self-research study. You will be required to upload your self-data on a weekly basis to the course website (**30 points**), and submit a report based on your self-research study (**100 points**). Guidelines will be provided.

**Bonus Points.** Up to **30 bonus points** of extra credit can be earned by participating in research projects posted on the Psychology Research Participation System website (<http://uvic.sona-systems.com>) (excluding projects restricted to PSYC 100 students). You will earn **5 bonus points** for each 30 minutes (or portion thereof) of participation if you have the researcher complete and sign the top portion of the PSYC 201 Research Participation Form and you complete the lower portion and turn it in to me no later than June 27. To earn all 30 bonus points, you must participate in at least two different studies (i.e., a single 3-hour study is not acceptable). There is no penalty for not earning extra credit. The rationale for the extra credit policy is that participating gives you hands-on experience in psychological research, completing the form requires you to practice conceptual and writing skills relevant to this course, and participating gives you contact with upper-level students engaged in research. If you sign up to participate in a study, you **MUST** keep the appointment and be on time, and you **MUST** take with you a copy of the PSYC 201 Research Participation Form (available on the course website). In total (research participation plus *THINK FAST*), you can earn **up to 30 bonus points**.

## Evaluation

Lecture Quizzes / Exercises	60
THINK FAST (6)	60
Tests (3)	600
Homework Assignments (2)	40
Lab Assignments (5)	60
Poster	50
Self-Research Submissions (6)	30
Self-Research Report	100
<b>TOTAL</b>	1000
Bonus up to...	30

## Final Grade / Percentage Equivalents

A+	A	A-	B+	B	B-	C+	C	D	F
> 90%	85-89	80-84	77-79	73-76	70-72	65-69	60-64	50-59	< 50

## N grades

Students who have completed the following elements will be considered to have completed the course and will be assigned a final grade:

- 2 or more tests attempted
- 3 or more lab assignments submitted
- research report submitted

Failure to complete one or more of these elements will result in a grade of “N” regardless of the cumulative percentage on other elements of the course. An N is a failing grade, and it factors into a student’s GPA as zero. The maximum percentage that can accompany an N on a student’s transcript is 49.

## Notes

- The multiple choice section of your tests will not be returned to you, but you can review it with me during my office hours. The essay section of your test will be returned to you.
- Your scores will be frequently updated on the course website. You should check them regularly to ensure that they have been recorded correctly.
- Final grades that end with a decimal point of 0.5 or above will be rounded to the next higher whole number, and grades that end with a decimal point below 0.5 will be rounded to the next lower whole number. For example, if a final percentage grade is 89.5 – 89.9, the grade will be rounded to 90. The rounding criteria will only be used on the final assignment of the letter grade.
- Assignments are due, and tests must be taken, on the date indicated in the Class Schedule. It is not fair for some students to do work later than others, unless there is a valid excuse. Therefore, except in cases meeting the criteria for an academic concession (see below), there will be zero credit and no make-up for any assignments or quizzes not turned in on time. **Travel plans will not be accepted as an excuse.**
- Students who do not complete requirements on schedule due to extenuating circumstances (i.e., personal illness or accident, family affliction, official university activities) must contact me immediately upon their return to make arrangements for substitute work. Late contact (e.g., after the tentative final grades are posted) is unacceptable. Typically, I will require documentation of the circumstance.
- If, for some reason, you do not meet the deadline for properly submitting your *THINK FAST* progress report, all is not lost. If you complete it before the next assignment is due, then you will earn part marks when that next assignment is scored.

## Class Schedule

- May 9 (M) Introduction to course format  
Introduction to Self- Research Project
- May 11 (W) **UNIT 1: Psychology & Science; Variables; Ethics in Research**  
Required reading: White & McBurney (2013), Chapter 1  
➤ Lecture Quiz / Exercise
- May 12 (Th) Required reading: White & McBurney (2013), Chapter 5  
➤ Lecture Quiz / Exercise
- May 16 (M) Required reading: White & McBurney (2013), Chapters 5, 3  
➤ Lecture Quiz / Exercise  
❖ Homework Assignment 1 due (TCPS II Tutorial completed)
- May 18 (W) **UNIT 2: Validity; Control**  
Required reading: White & McBurney (2013), Chapter 6  
➤ Lecture Quiz / Exercise
- May 19 (Th) Required reading: White & McBurney (2013), Chapter 7  
➤ Lecture Quiz / Exercise
- May 23 (M) **VICTORIA DAY**
- May 25 (W) ★ (1) *THINK FAST*: Unit 1 and Unit 2 due; (2) Test 1
- May 26 (Th) **UNIT 3: Description of Data; Inferential Statistics**  
Required reading: White & McBurney (2013), Chapters 14, 15  
➤ Lecture Quiz / Exercise
- May 30 (M) Required reading: White & McBurney (2013), Chapters 14, 15  
➤ Lecture Quiz / Exercise
- June 1 (W) Required reading: White & McBurney (2013), Chapters 14, 15  
➤ Lecture Quiz / Exercise
- June 2 (Th) **UNIT 4: Nonexperimental Research**  
• Required reading: White & McBurney (2013), Chapter 8  
➤ Lecture Quiz / Exercise
- June 6 (M) Required reading: White & McBurney (2013), Chapter 9  
➤ Lecture Quiz / Exercise  
❖ Homework Assignment 2 due (Statistics Exercise completed)

June 8 (W) ★ (1) *THINK FAST*: Unit 3 and Unit 4 due; (2) Test 2

June 9 (Th) **UNIT 5: True Experiments**

Required reading: White & McBurney (2013), Chapter 10

➤ Lecture Quiz / Exercise

June 13 (M) Required reading: White & McBurney (2013), Chapter 11

➤ Lecture Quiz / Exercise

June 15 (W) **UNIT 6: Single-Participant Experiments; Quasi Experiments**

Required reading: White & McBurney (2013), Chapter 12

Lecture Quiz / Exercise

June 16 (Th) Required reading: White & McBurney (2013), Chapter 13

➤ Lecture Quiz / Exercise

June 20 (M) (1) *THINK FAST*: Units 5 and 6 due; (2) Test 3

June 22 (W) Self-Research Project Summary

June 23 (Th) (1) *THINK FAST*: 201Bonus (optional); (2) Test 4 (optional)

(2 hours)

**UNIVERSITY OF VICTORIA**  
**Department of Psychology**

**Important Course Policy Information**  
**Summer 2016**

***Prerequisites***

Students who remain in courses for which they do not have the prerequisites do so at their own risk. Students who complete courses without prerequisites ARE NOT exempt from having to complete the prerequisite course(s) if such courses are required for the degree program.

***Program Requirements***

For more information see pages 378-382 of the UVic Calendar 2015-2016.

***Registration Status***

Students are responsible for verifying their registration status. Registration status may be verified using My Page, View Schedule. Course adds and drops will not be processed after the deadlines set out in the current UVic Calendar.

***Commitment to Inclusivity and Diversity***

The University of Victoria is committed to promoting, providing and protecting a positive and supportive and safe learning and working environment for all its members.

***In the Event of Illness, Accident or Family Affliction (See UVic Calendar, 2015-16, p. 59)***

- ***What to do if you miss the final exam scheduled on the last day of classes***

Apply at Records Services for a "Request for Academic Concession", normally within 10 working days of the date of the exam. Records Services will forward the form to the instructor. If the concession is granted, the instructor will determine how to deal with the situation (for example, a deferred exam). Where a concession is not applied for or where such application is denied, an N grade will be entered on the student's academic record.

OR, you can download the Request for Academic Concession form here:

<http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf>

- ***What to do if you miss an exam other than one scheduled on the last day of classes***

Do not apply at Records Services for a "Request for Academic Concession". Instead submit documentation of the illness, accident or family affliction directly to your course instructor (or designated teaching assistant).

- ***What to do if you require additional time to complete course requirements***

Apply at Records Services for a "Request for Academic Concession", normally within 10 working days of the end of the course. Records Services will forward the form to the instructor. If the concession is granted, the instructor will determine how to deal with the situation. Where a concession is not applied for or where such application is denied, an N grade will be entered on the student's academic record.

OR, you can download the Request for Academic Concession form here:

<http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf>

## ***Policy on Academic Integrity including Plagiarism and Cheating***

The Department of Psychology fully endorses and intends to enforce rigorously the Senate Policy on Academic integrity (<http://web.uvic.ca/calendar2016-01/undergrad/info/regulations/academic-integrity.html> , p. 54-57, UVic Calendar 2015-16). It is of utmost importance that students who do their work honestly be protected from those who do not. Because this policy is in place to ensure that students carry out and benefit from the learning activities assigned in each course, it is expected that students will cooperate in its implementation.

The offences defined by the policy can be summarized briefly as follows:

1. **Plagiarism.** You must make sure that the work you submit is your work and not someone else's. There are proper procedures for citing the works of others. The student is responsible for being aware of and using these procedures.
2. **Multiple Submission.** Only under exceptional circumstances may a work submitted to fulfill an academic requirement be used to satisfy another similar requirement. The student is responsible for clarifying this with the instructor(s) involved.
3. **Falsifying Materials Subject to Academic Evaluation.** This includes falsification of data, use of commercially prepared essays, using information from the Internet without proper citation, citing sources from which material is not actually obtained, etc.
4. **Cheating on Assignments, Tests, and Examinations.** You may not copy the work of others in or out of class; you may not give your work to others for the purpose of copying; you may not use unauthorized material or equipment during examinations or tests; and you may not impersonate or allow yourself to be impersonated by another at an examination. The Department of Psychology has a policy of not making old examinations available for study purposes. Therefore, use of old exams without the express written permission of the instructor constitutes cheating by the user, and abetting of cheating by the person who provided the exam.
5. **Being an Accessory to Offences.** This means that helping another student to cheat (for instance, by showing or communicating to them answers to an assignment, or by allowing them to view answers on an exam) is an academic offence.

Instructors are expected to make every effort to prevent cheating and plagiarism. This may include the assignment of seating for examinations, asking students to move during examinations, requests to see student identification cards, and other measures as appropriate. Instructors also have available to them a variety of tools and procedures to check for Internet and electronic media-based cheating. In instances of suspected or actual plagiarism or cheating, instructors, following prescribed procedures, are authorized to take steps consistent with the degree of the offence. These measures will range from a zero on the test or assignment or a failing grade for the course, probation within a program to temporary or even permanent suspension from the University.

Rights of Appeal are described in the Policy on Academic Integrity in the University calendar (on p. 54-57 in 2015-2016).

**The definitive source** for information on Academic Integrity is the University Calendar (p. 54-57 in 2015-2016) (<http://web.uvic.ca/calendar2016-01/undergrad/info/regulations/academic-integrity.html>)

**Other useful resources on Plagiarism and Cheating include:**

1. The Study Solutions Office: <https://www.uvic.ca/services/counselling/success/study/index.php>
2. The Ombudsperson's office: <http://www.uvss.uvic.ca/ombudsperson/pubsguides/plagiarism.pdf>
3. The English Department: <http://web.uvic.ca/wguide/Pages/CitPlagiarism.html>