Research Methods in Psychology

**Instructor:** David Polson, PhD  
**Email:** dpolson@uvic.ca  
**Office / Hours:** COR A214 / TBA  
**Phone:** 721-7525 (leave message)

**Course Website:** Accessible through CourseSpaces.

**Lecture Room / Day, Time:** David Turpin Building A104 / MR, 1:00-2:20

**Teaching Assistant:** Connor MacRae <cmacrae23@gmail.com>

**Lab Sections / Day, Time:**  
- B05: T, 8:30-9:20;  
- B06: T, 9:30-10:20;  
- B07: W, 8:30-9:20;  
- B08: W, 9:30-10:20

**Lab Instructor:** Chad Williams <cwilliams.uca@gmail.com>

**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**

2. *Study Guide* (available at course website)
3. *Think Fast* computer program (optional; 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 Class Exercises section). On “test” days, an optional Think Fast bonus assignment is due before class (see Think Fast section); you will have the full class time to write the test (see Test section).

On “lab” days (Tuesdays or Wednesdays), you will meet with your lab instructor (Chad) 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 four lab sections (B05 and B06 and B07 and B08), you must attend only the section for which you are registered.

**Course Components**

*Study Guide.* 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. The *Study Guide* also includes other sources of course-specific valuable information.

*Pre-Class Chapter Quizzes.* On “lecture” days, a certain chapter from the textbook is assigned as required reading. At least 30 minutes prior to class you are required to complete an online quiz corresponding to that chapter, accessible from the course website. The answers to each quiz become available once its deadline expires. There are 11 chapter quizzes, each one consisting of 10 multiple choice items with a 30-minute time limit. The lowest of the 11 scores will be dropped. Overall, this component counts **50 points** toward your final grade.

*Class Exercises.* Attendance and participation is required on lecture days. Importantly, you will be submitting some type of written work at the end of most lectures, for credit. The work will vary, including writing in-class quizzes about lecture and
video content, plotting and analyzing data, 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 50 points toward your final grade. An opportunity will be provided to complete most class exercises online during lectures. Should you not have an electronic device available, pen and paper is still an option. An answer key for each class exercise will be posted after class at the course website. For study purposes, it is worthwhile reviewing these answer keys.

**Tests.** There are three tests, one for every two units. Tests will consist of both multiple choice and open-ended items. Overall, tests count for 570 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. Test 4 will consist of a sampling of questions from previous tests, some verbatim and some not. 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.

**Homework Assignments.** There are three out-of-class assignments, the deadlines for which are specified in the Class Schedule. Instructions for each assignment are provided at the course website. The first assignment is worth 20 points and the other two are worth 30 points each; so overall this component counts for 80 points toward your final grade.

**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 (70 points). In groups, you will design and conduct both an observational and survey study, and present a poster based on your work (50 points). Individually, over a six-plus week span, you will conduct a self-research study, including uploading your self-data on a weekly basis to the course website (30 points), and submitting a report based on your self-research study (100 points). Guidelines will be provided.

**Research Participation Bonus.** 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 April 6. 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 Bonus Research Participation Form (available on the course website).

**Think Fast Bonus.** 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).

For each unit deck, you can earn 5 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. The due dates for meeting the requirements for each deck are listed on pages 4-5. Because there are six decks, 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 specified file to the appropriate link at the course website at least 30 min prior to the start of class on the day it is due. For more detailed information about **Think Fast**, including how to submit your work, 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. It is worth using even if you are unable to achieve mastery for bonus points.
**Bonus Quiz.** At the course website you will find a link to a journal article, a summary of self-monitoring research in assessment and treatment (related to your self-research project). You will also find a quiz based on that article, worth up to 15 bonus points. See course website for details.

### Evaluation

<table>
<thead>
<tr>
<th>Evaluation Item</th>
<th>Points</th>
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<tbody>
<tr>
<td>Pre-Class Chapter Quizzes (best 10 of 11)</td>
<td>50</td>
</tr>
<tr>
<td>Class Exercises</td>
<td>50</td>
</tr>
<tr>
<td>Tests (3)</td>
<td>570</td>
</tr>
<tr>
<td>Homework Assignments (3)</td>
<td>80</td>
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<tr>
<td>Lab Assignments (7)</td>
<td>70</td>
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<tr>
<td>Poster</td>
<td>50</td>
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<tr>
<td>Self-Research Data Updates (5)</td>
<td>30</td>
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<tr>
<td>Self-Research Report</td>
<td>100</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1000</strong></td>
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<td>Bonus up to...</td>
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### 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 written 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.
<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Topic</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 4</td>
<td>R</td>
<td>Introduction to course format</td>
<td></td>
</tr>
<tr>
<td>Jan 8</td>
<td>M</td>
<td><strong>UNIT 1: Psychology &amp; Science; Variables</strong></td>
<td>White &amp; McBurney (2013), Chapter 1</td>
</tr>
<tr>
<td>Jan 11</td>
<td>R</td>
<td>Required reading: White &amp; McBurney (2013), Chapters 1, 5</td>
<td>Chapter 1 Pre-Class Online Quiz</td>
</tr>
<tr>
<td>Jan 15</td>
<td>M</td>
<td>Required reading: White &amp; McBurney (2013), Chapter 5</td>
<td>Chapter 5 Pre-Class Online Quiz</td>
</tr>
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<td>Jan 18</td>
<td>R</td>
<td><strong>UNIT 2: Validity; Control; Ethics in Research</strong></td>
<td>White &amp; McBurney (2013), Chapter 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Required reading: White &amp; McBurney (2013), Chapters 6, 7</td>
<td>Chapter 6 Pre-Class Online Quiz</td>
</tr>
<tr>
<td>Jan 22</td>
<td>M</td>
<td>Required reading: White &amp; McBurney (2013), Chapters 6, 7</td>
<td>Chapter 7 Pre-Class Online Quiz</td>
</tr>
<tr>
<td>Jan 25</td>
<td>R</td>
<td>Required reading: White &amp; McBurney (2013), Chapters 7, 3</td>
<td>Homework Assignment 1 due (TCPS II Tutorial completed)</td>
</tr>
<tr>
<td>Jan 29</td>
<td>M</td>
<td>★ Test 1 (Chapters 1, 5, 6, 7, 3)</td>
<td>BONUS: <em>Think Fast</em>—Unit 1 and/or Unit 2 assignment due (5 bonus points each)</td>
</tr>
<tr>
<td>Feb 1</td>
<td>R</td>
<td><strong>UNIT 3: Description of Data; Inferential Statistics</strong></td>
<td>White &amp; McBurney (2013), Chapter 14</td>
</tr>
<tr>
<td>Feb 5</td>
<td>M</td>
<td>Required reading: White &amp; McBurney (2013), Chapters 14, 15</td>
<td>Chapter 14 Pre-Class Online Quiz</td>
</tr>
<tr>
<td>Feb 8</td>
<td>R</td>
<td>Required reading: White &amp; McBurney (2013), Chapter 15</td>
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<td>Feb 12-16</td>
<td></td>
<td>READING BREAK</td>
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<tr>
<td>Feb 22</td>
<td>R</td>
<td><strong>UNIT 4: Nonexperimental Research</strong></td>
<td>White &amp; McBurney (2013), Chapter 8</td>
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<tr>
<td></td>
<td></td>
<td>Required reading: White &amp; McBurney (2013), Chapter 8</td>
<td>Chapter 8 Pre-Class Online Quiz</td>
</tr>
<tr>
<td>Feb 26</td>
<td>M</td>
<td>Required reading: White &amp; McBurney (2013), Chapter 9</td>
<td>Chapter 9 Pre-Class Online Quiz</td>
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<tr>
<td></td>
<td></td>
<td><em>Self-Research Project</em>—submit Week 1 data</td>
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<tr>
<td>Date</td>
<td>Notes</td>
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</table>
| Mar 1 (R) | ★ Test 2 (Chapters 14, 15, 8, 9)  
  ❖ Homework Assignment 2 due (Statistics Exercise completed)  
  ⇝ BONUS: Think Fast—Unit 3 and/or Unit 4 assignment due (5 bonus points each) |
| Mar 5 (M) | UNIT 5: True Experiments  
  Required reading: White & McBurney (2013), Chapter 10  
  ➢ Chapter 10 Pre-Class Online Quiz  
  • Self-Research Project—submit Weeks 1-2 data; intervention begins |
| Mar 8 (R) | Required reading: White & McBurney (2013), Chapters 10, 11  
  ➢ Chapter 11 Pre-Class Online Quiz |
| Mar 12 (M) | Required reading: White & McBurney (2013), Chapter 11  
  • Self-Research Project—submit Weeks 1-3 data |
| Mar 15 (R) | UNIT 6: Single-Participant Experiments; Quasi Experiments  
  Required reading: White & McBurney (2013), Chapter 12  
  ➢ Chapter 12 Pre-Class Online Quiz |
| Mar 19 (M) | Required reading: White & McBurney (2013), Chapters 12, 13  
  ➢ Chapter 13 Pre-Class Online Quiz  
  • Self-Research Project—submit Weeks 1-4 data; return to baseline begins |
| Mar 22 (R) | Required reading: White & McBurney (2013), Chapter 13  
  ❖ Homework Assignment 3 due (Visual Data Analysis Tutorial completed) |
| Mar 26 (M) |  
  • Self-Research Project—Review  
  • Self-Research Project—submit Weeks 1-5 data; data collection stops |
| Mar 29 (R) | ★ Test 3 (Chapters 10, 11, 12, 13)  
  ○ BONUS: Think Fast—Unit 5 and/or Unit 6 assignment due (5 bonus points each) |
| Apr 2 (M) | EASTER MONDAY |
| Apr 5 (R) | ★ Test 4 (optional)  
  ○ BONUS: Review Article Quiz due (up to 15 bonus points) |
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 305-308 of the UVic Calendar January 2018.

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, January 2018, p. 46-47)

- **What to do if you miss the final exam scheduled during the formal exam period**

  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](http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf)

- **What to do if you miss an exam other than one scheduled during the formal exam period**

  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 (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](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 ([https://web.uvic.ca/calendar2018-01/undergrad/info/regulations/academic-integrity.html#](https://web.uvic.ca/calendar2018-01/undergrad/info/regulations/academic-integrity.html#)), p. 42-45, UVic Calendar January 2018). 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 offenses 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. **Unauthorized Use of an Editor.** The use of an editor is prohibited unless the instructor grants explicit written authorization.

3. **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.

4. **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.

5. **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.

6. **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. 43-44 in January 2018).

**The definitive source** for information on Academic Integrity is the University Calendar (p. 42-45 in January 2018) ([https://web.uvic.ca/calendar2018-01/undergrad/info/regulations/academic-integrity.html#](https://web.uvic.ca/calendar2018-01/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](https://www.uvic.ca/services/counselling/success/study/index.php)
2. The Ombudsperson’s office: [http://www.uvss.uvic.ca/ombudsperson/pubsguides/plagiarism.pdf](http://www.uvss.uvic.ca/ombudsperson/pubsguides/plagiarism.pdf)