Trinity Western University PSYC 322-IS

Research Methods Summer 2017 3 credit hours

Instructor's Name: LISA BARKER, MA E-mail: lisaanne.barker@gmail.com Class Time: On-line Office Location: On-line Prerequisites: Psych 105/106 and Psych 201 & 207 plus 3 additional hours of psychology.

COURSE DESCRIPTION

This course provides an introduction to the principles of the scientific method and to the research designs and techniques used in psychology. Topics covered include sampling and generalizability, forms of reliability and validity, types of measurement, experimental, quasi-experimental and non-experimental designs, research ethics, and analysis of variance. The research project incorporates both library and empirical research components.

COURSE OBJECTIVES

- 1. To gain familiarity with the types of research conducted in psychology.
- 2. To develop competence in planning and conducting a variety of empirical research methods.
- 3. To gain experience summarizing, analyzing, interpreting and reporting research data.
- 4. To develop critical and reflective thinking skills related to evaluating reports of psychological research as presented in both the popular press and professional journals.
- 5. To develop proficiency in professional scientific writing.
- 6. To build the experience, skills and confidence necessary to conduct your own thesis research.

REQUIRED TEXT

Salkind, N. J. (2012). Exploring Research (8th Ed). Upper Saddle River, NJ: Pearson Ed., Inc.

DETERMINATION OF FINAL GRADE

Forum Posts 15% Group Research Project (4 stages) 25% Final Project Proposal 15% Exams 45% (Mid-term 20% and Final 25%)

Forum Posts 15%

Each unit in the course contains an online discussion forum. The purpose of the forum is for students to share ideas and learn from each other. Usually the forum requires that you do some homework assignment and then write the results of your assignment in the forum online. To receive full marks for each forum you must post your response to the assignment and you must also address comments made by at least two of your classmates. Note: this is an asynchronous format (i.e., you are not required to be online at any specific time) but there are weekly deadlines.

Group Research Project Components (25%)

Students will work in pairs or small groups on a detailed research project proposal over the duration of this course. The project is divided into 5 preliminary submissions given equal weight of 5% each. These 5 assignments will then be incorporated into your final project proposal.

- 1) Introduction section (5%)
- 2) Method section (5%)
- 3) Ethics Review (2 parts)
 - a) Complete the Tri-Council Policy Tutorial (5%) (see instructions below)
 - b) Complete the Request for Ethical Review Form (5%) (see below)
- 4) Hypothetical Results section (5%)

Final Project Proposal (15%)

Your final project proposal will include the project components already completed. In addition to these edited and revised preliminary sections, you will add a Discussion section, an Abstract, and references. In addition, any needed tables and/or Appendices should also be included. The paper is expected to comply with APA 6th edition format. Note that for this project, you **will not actually be running subjects or collecting real data**.

Mid-Term (20%) and Final Exam (25%)

These will be available for students to write on-line. Further directions will be provided.

COURSE POLICIES

1. Writing

All coursework is expected to be college level writing and follow APA 6th edition format (incl. typed, double-spaced, 1" margins, 12-point standard font and correct APA format for citing references in the body of the paper and in the Reference list).

2. Deadlines

All deadlines are firm. Assignments must be submitted in time to avoid penalty. Late assignments will be marked down 5%/day late. After 7 days, assignments will not be accepted and a grade of 0 will be assigned.

3. Psychology Department Grading Scale

Please note that the psychology department utilizes the following grading scale that may be different from other courses:

| A+ 94-100 | А | 90-93 | A- 86-89 | |
|-----------|---|-------|----------|--------|
| B+ 82-85 | В | 78-81 | B- 74-77 | |
| C+ 70-73 | С | 66-69 | C- 62-65 | |
| D+ 58-61 | D | 54-57 | D- 50-53 | F 0-49 |

4. Communication

Because this is an online course, it is imperative that communication via email is consistently available. Please ensure that you use the TWU email account assigned to you for the duration of this course or that you have provided the instructor with a reliable alternative that you regularly check. If you are having any technical issues with your email or the online course please contact <u>esupport@twu.ca</u> or call 604-882-HELP. Students are responsible for knowing about course-related that is emailed and/or posted to the Course Announcement link on the course site.

5. Academic Integrity

Academic dishonesty includes cheating on exams, tests, lab results, etc., submitting the same or substantially the same essay for credit in more than one course without faculty permission, and plagiarism. TWU has a strict policy on plagiarism (see academic calendar 2013-2014). Learning what constitutes plagiarism and avoiding it is the student's responsibility. An excellent resource describing plagiarism and how to avoid it has been prepared by TWU Librarian William Badke and is freely available for download (PPT file) or used as flash (self-running) tutorials of varying lengths from:

http://acts.twu.ca/library/plagiarism.ppt

http://acts.twu.ca/library/Plagiarism.swf (14 minute flash tutorial)

http://acts.twu.ca/library/Plagiarism_Short.swf (8 minute flash tutorial

It is expected that all student work is original and that every effort is made to avoid plagiarism. For more information see TWU's policies at <u>http://twu.ca/governance/policies/policy-on-academic-dishonesty.html</u>. In cases of academic dishonesty, the University policy outlined in the Academic Calendar will be enforced.

6. Students with Disabilities

Students with a disability who need assistance are encouraged to contact the Equity of Access Office upon admission to TWU to discuss their specific needs. All disabilities must be recently documented by an appropriately certified professional and include the educational impact of the disability along with recommended accommodations. Within the first two weeks of the semester, students must meet with their professors to agree on accommodations appropriate to each class. Students should follow the steps detailed by the Equity of Access Office outlined on the TWU website at

http://www.twu.ca/life/wellness/learningresources/disabilities-and-equity-of-access/steps-toattaining-disability-services.html

TENTATIVE COURSE OUTLINE (subject to revision)

| Date | Topic & Assignments | Text |
|----------------------------|---|----------------------------|
| Week 1 (May 15-21) | The Scientific Method - Hypotheses Scope and Limits of Science Types of Research | Ch. 1 Ch. 2 |
| Week 2 (May 22-28) | Selecting a Problem & Reviewing Research Ethics in Research Writing a Research Proposal | Ch. 3A Ch. 3B Ch. 13 |
| Week 3 (May 29-June 4) | Sampling & Generalizability | Ch. 4 |
| Week 4 (June 5-11) | Measurement, Reliability and Validity Submit Paper Topic | Ch. 5 |
| Week 5 (June 12-18) | Mid-Term | |
| Week 6 (June 19-25) | Methods of Measuring Behavior Submit Introduction | Ch. 6 |
| Week 7 (June 26-July 2) | Data Collection & Descriptive Statistics | Ch. 7 |
| Week 8 (July 3-9) | Non-experimental Research Methods Submit Methods | Ch. 9 & 10 |
| Week 9 (July 10-16) | Experimental Research Methods Quasi-Experimental Research Complete Ethics Tutorial & Form | Ch. 11 Ch. 12 |
| Week 10 (July 17-23) | Inferential Statistics Hypothetical Results | Ch. 8 |
| Week 11 (July 24-30) | Writing a Research Manuscript | Ch. 14 |
| Week 12 (July 31-Aug.6) | Final Exam Final Paper Due | |

| Assignment | Due by | |
|--------------------------|------------------|--|
| Submit Topic | Midnight June 11 | |
| Mid-Term | Week of June 12 | |
| Introduction | Midnight June 25 | |
| Methods | Midnight July 9 | |
| Ethics – Tutorial & Form | Midnight July 16 | |
| Hypothetical Results | Midnight July 23 | |
| Final Exam | Week of Aug 6 | |
| Final Paper | Midnight Aug 6 | |

Tri-Council Policy Tutorial Link:

http://www.pre.ethics.gc.ca/eng/education/tutorial-didacticiel/

Upload or email a copy of the certificate you receive at the end of the tutorial as verification of completion. This tutorial takes about 2 hours (depends on how many activities and examples you explore) and requires that you create a log-in to receive the certificate. You do not need to complete the whole tutorial in one sitting. Your log-in will save the work you have completed.

Ethical Review Form Link:

http://www.twu.ca/academics/research/ethics/approval-forms.html

Under "Undergraduate Thesis/Essay Research", go to "Request for Ethical Review -Undergraduate Form". **REMEMBER DO NOT submit this form to the Langley Campus Ethics Review Board. This assignment is just for practice**!