GRANDE PRAIRIE REGIONAL COLLEGE
PY 2120: RESEARCH METHODS IN PSYCHOLOGY
Sept 3 – Dec 3, 2009
LECTURE TIMES: Tuesdays and Thursdays: 8:30 – 9:50 AM
(3-0-0) UT to all Alberta Universities (3)

Instructor: Bruce Galenza, Ph.D.
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Office Hours: Mon: 10:00-11:30; Tues/Wed/Thurs: 10-12:30;
Fri 8-10; afternoons by appointment.

Required:

Shaughnessy, J.J., Zechmeister, E.B., & Zechmeister, J.S. (2006). *Research methods in psychology (8th Edition).* McGraw Hill.

A statistics calculator.

THE COURSE: This course, subtitled *Critical thinking about human behaviour,* is designed as an introductory course in quantitative research methods and statistics in psychology. Its primary goal is to direct students' development in critical thinking skills and making independent judgments and decisions based on reason and evidence as opposed to authority, tradition, or opinion. It will concentrate on the students' development of these skills through developing the objective, measurement-based, and inferential research strategies of developing hypotheses, designing appropriate data collection tools, analyzing and interpreting descriptive and inferential statistical results, and writing research reports. It is directed at both the consumer and producer of psychological research.

GOALS: This course requires students to develop cognitively and behaviourally in the following areas:
1. Knowledge structures; organized, related and interrelated information of research principles: the <u>what</u> of critical thinking.
2. Procedural knowledge; research methods and procedures, and communication of ideas: the <u>how</u> of critical thinking.
3. Metacognitive judgement; critical and analytic judgment concerning the proper use of the procedures; the <u>where</u> and <u>when</u> of critical thinking.
4. Attitudinal considerations; understanding the value of this work and its application: the <u>why</u> of critical thinking.

BEHAVIOURAL OBJECTIVES: As a result of participating in this course, students will demonstrate the abilities to:

1. understand and apply the concept of empirical objective evidence, to differentiate between what is and what is not evidence.
2. discuss the APA's guidelines of ethics in human experimentation by evaluating the ethics of research proposals.
3. formulate questions and hypotheses that are appropriate for systematic investigation, recognizing and distinguishing descriptive, correlational, and explanatory, basic and applied designs.
4. operationally define their variables as reliable and valid measurements using appropriate scales.
5. choose and design appropriate research strategies to investigate the problems they have formulated.
6. construct data collection tools that will be necessary to answer their questions validly.
7. analyse and interpret the data that their research, and others', might generate, through mastery of the concepts of measures of statistics: central tendency and variance, correlation and regression, and hypothesis testing using t-tests and ANOVAs.
8. master and apply computer applications (SPSS) of statistical tools of research.
9. evaluate their own research and that of others.
10. write research reports in APA style.

TEACHING STYLE:

My preferred teaching style is interactive lecture, derived from the teaching philosophy that little is learned until responses are made (either verbally or written). However, the majority of work in this course will be hands-on, lab-based experiential learning.

- I encourage and welcome student consultation to the point of tutoring, and I will be more than happy to proof student' rough drafts and to further discuss course material. Pre-writes are welcome up to the due date, and may be submitted as an e-mail attachment.

- Late papers will be marked, but penalized 5 points per week. As adequate time will be allotted between the assignment and the due date, few excuses other than medical and major emergencies and single parenthood will be accepted. Papers with multiple spelling and grammatical errors will be returned unmarked.

ASSESSMENT:

"A grade is an inadequate report of an inaccurate judgement of a biased and variable judge of the extent to which a student has obtained an unidentified level of mastery of an unknown proportion of an indefinite amount of material."

-Paul Dressel, 1955.

As stated above, research psychology recognizes the authority of, and bases its judgements on, reason and evidence as opposed to authority, tradition, or opinion. In keeping with this philosophy: rather than me imposing my authority on you and telling you what you must know and then arbitrarily assigning cut-off points for grades through non-standardized tests and labs, you as a class will inform me what you are capable of, through my careful measurement of your performance. Students will be assessed according to their relative position within the class. The field of psychology always measures human behaviour in this way. This method will be explained fully in the first class period; a handout is available if requested.

Alpha Grade	**4-point Equivalence**	**Descriptor**	**Alpha Grade**	**4-point Equivalence**	**Descriptor**
A+	4.0	Excellent	C+	2.3	Satisfactory
A	4.0		C	2.0	
A-	3.7	First Class	C-	1.7	
B+	3.3	standing	D+	1.3	Poor
B	3.0	Good	D	1.0	Minimal pass
B-	2.7		F	0.0	Fail

Assessment will primarily consist of three formal lab-based research projects and one formal research proposal. In addition, there will be two short examinations. All six assignments are equally weighted. Examinations will place more emphasis on material not covered in labs. No dates are given at this time as this is a relatively new organization of this material for me and I intend to let student abilities direct the speed of the course, but each assignment due date will be announced in class with plenty of lead-time.