

Syllabus for
PSY 401--Experimental Psychology
3 Credit hours
Fall 2015

I. COURSE DESCRIPTION

A survey of the fundamentals of psychological research, experimentation, data analysis, and report writing.

Prerequisites: PSY 201 and MAT 232

Corequisite: PSY 401 lab

This course will explore the fundamentals of psychological research: the logic of experimentation and the empirical approach, experimental design, and data analysis, with application of these to laboratory and non-laboratory settings. Topics include sampling techniques, group assignment, statistical techniques involving comparing means, and interpreting results in the broader context of experimental research.

II. COURSE GOALS

- A. Familiarize the student with the strategies and tactical issues of experimental psychological research.
- B. Cultivate a proper concern for accuracy and precision in laboratory work, ethics, and reporting.
- C. Be equipped with the basic tools of experimental design and statistical analysis as related to psychology
- D. Become familiarized with the laboratory and prepared insofar as possible for the Senior Paper experience.
- E. Become proficient in analyzing statistical data utilizing SPSS.
- F. Familiarize the student with appropriate APA reporting style and procedure.

III. STUDENT LEARNING OUTCOMES FOR THIS COURSE

As a result of successfully completing this course, the student will be able to do the following:

- A. Criticize research using experimental designs.
- B. Use current literature on a selected topic to inform the student on the next appropriate step in the research process.
- C. Formulate appropriate hypotheses.
- D. Explain how to design an experimental study in terms of data collection and analysis.

- E. Describe the basic steps in t-tests, one-way and multi-way ANOVAs, and Factorial ANOVAs.
- F. Demonstrate correct data analysis using SPSS for the above procedures.
- G. Draw reasonable conclusions from the data analysis.
- H. List and discuss appropriate ethical principles when designing and analyzing experimental research.
- I. Report findings of an experimental study in acceptable APA format.

IV. TEXTBOOKS AND OTHER LEARNING RESOURCES

Required Materials Textbooks

American Psychological Association (2010) *Publication manual of the American psychological association*. (6th ed.). Washington, D.C.: author. (ISBN: 9780890420256)

Gravetter, F & Wallnau, L. (2013) *Statistics for the Behavioral Sciences*. (8th Ed.), Belmont, CA: Thompson. (ISBN: 9780495602200)

Smith, R. A., and Davis, S. F. (2013). *The Psychologist as detective*. (6th ed.) Upper Saddle River, NJ: Prentice Hall. (ISBN: 9780132277310)

V. POLICIES AND PROCEDURES

- A. University Policies and Procedures
 - 1. Attendance at each class or laboratory is mandatory at Oral Roberts University. Excessive absences can reduce a student's grade or deny credit for the course.
 - 2. Students taking a late exam because of an unauthorized absence are charged a late exam fee.
 - 3. Students and faculty at Oral Roberts University must adhere to all laws addressing the ethical use of others' materials, whether it is in the form of print, electronic, video, multimedia, or computer software. Plagiarism and other forms of cheating involve both lying and stealing and are violations of ORU's Honor Code: "I will not cheat or plagiarize; I will do my own academic work and will not inappropriately collaborate with other students on assignments." Plagiarism is usually defined as copying someone else's ideas, words, or sentence structure and submitting them as one's own. Other forms of academic dishonesty include (but are not limited to) the following:
 - a. Submitting another's work as one's own or colluding with someone else and submitting that work as though it were his or hers;
 - b. Failing to meet group assignment or project requirements while claiming to have done so;
 - c. Failing to cite sources used in a paper;
 - d. Creating results for experiments, observations, interviews, or projects that were not done;
 - e. Receiving or giving unauthorized help on assignments

4. Final exams cannot be given before their scheduled times. Students need to check the final exam schedule before planning return flights or other events at the end of the semester.
5. Students are to be in compliance with University, school, and departmental policies regarding Whole Person Assessment requirements. Students should consult the WPA handbooks for requirements regarding general education and the students' majors.
 - a. The penalty for not submitting electronically or for incorrectly submitting an eportfolio artifact is a zero for that assignment.
 - b. By submitting an assignment, the student gives permission for the assignment to be assessed electronically.

B. Department Policies and Procedures

Policies and procedures for submitting artifacts can be found in the General Education Whole Person Assessment Handbook and the departmental handbook for the student's major.

C. Course Policies and Procedures

1. Evaluation Procedures
 - a. Examinations—Three unit exams (100 points each) for a total of 300 points.
 - b. Participation Grade (100 points total)—Includes attendance, several class activities, lab work, and/or SPSS assignments and will be given throughout the semester. These may be unannounced, so regular attendance is paramount. Missing more than 2 classes without official “excuse” is considered excessive; each day missed beyond 2 unexcused absences will result in a 2 point deduction.
 - c. Senior Paper Proposal (100 points total)--See assignment requirements provided by the professor.
2. Whole Person Assessment Requirements
 - a. The research proposal for senior paper as detailed above will be submitted to the student's eportfolio account by the 10th week of the semester.
 - b. Artifacts not submitted electronically or incorrectly submitted receive a zero for that assignment.
3. Other Policies and/or Procedures
 - a. Contemporaneity--All material presented in fulfillment of course requirements must be initiated and completed during the semester the course is offered. Papers prepared in other semesters and for other courses are not accepted for this course.
 - b. Exclusiveness--All course requirements are designed for this course alone and are to be submitted only for this course. Likewise, assignments carried out for other courses during this semester are not accepted for this course.
 - c. Under no circumstances is any material, score sheets, or test interpretations to be used by the student for any purpose other than for educational experiences involved in this course. There are severe penalties for misuse of materials.

- d. Punctuality--Deadlines for submitted course assignments are printed in this syllabus in order that the students may budget time and submit each assignment on or before the deadline. The instructor reserves the right to refuse to accept material submitted late.
- e. Changes--Class attendance is considered an essential component of the requirements of this course. Therefore, any changes in syllabi, assignments, exams, or class requirements announced in class by the instructor are considered to constitute adequate and sufficient notice. It is each student's responsibility to be aware of any such changes and to contact the instructor if unsure of what is expected.
- f. Assignments and Papers
 - (1) All assignments and papers are due at the beginning of class the day the assignment and/or papers are due.
 - (2) Spelling, grammar, and neatness count towards the final grade.
 - (3) The official guide for all papers in the Department of Behavioral Sciences is the *Publication Manual of the American Psychological Association*, 5th ed. 2001.
 - (4) Late assignments and papers receive point deductions. Because course requirements are assigned in advance, excused extensions are extremely rare.
 - (5) Plagiarized work receives no points for the assignment/paper and no makeup opportunities. To avoid having work suspected of plagiarism, make sure the sources of information and opinion are documented and acknowledged.
- g. Exams
 - (1) All exams are expected to be taken on the scheduled date. Tests are exceptional events, and students are expected to make every effort to be in attendance for the exam.
 - (2) Unexcused absences on test days
 - (a) If a student does not show up for an exam, he or she may receive zero points for the exam.
 - (b) In some cases, a makeup exam may be given within a week, and no later, of the originally scheduled exam. Students will receive a point deduction of 10 points per day.
 - (3) Excused absences on test days
 - (a) No points or fees are deducted for Administrative Excuses. These must be typed, printed, and signed by the appropriate staff in the provost's office, and presented to the instructor no later than one day before which the exam is to be given.
 - (b) As physician appointments can be scheduled around exams, only bona fide emergency visits, properly documented (signed excuse), are acceptable. No points or fees are deducted for an excused emergency. The form used by the school nurse is not acceptable.
 - (c) Arrangements must be made to take the excused makeup exam within one week of the originally scheduled exam.
- h. Cheating
 - (1) Blatant—the student receives no points for the exam and no makeup.
 - (2) Suspected (i.e., reported by classmate or proctor)—the student takes a makeup exam. The procedure for the makeup exam follows that of

- a late exam (as above). If refused, the student receives no points for the exam.
- (3) All appeals to the contrary must be typed and copies given to both Dr. Feller and the instructor within the week.
- i. Office Hours
 - (1) Office hours are posted on instructor's door and given in class.
 - (2) If students cannot make the posted hours they should see instructor after class or leave a message (with a phone number and/or box number and times available).
 - (3) If the instructor's door is closed students should check first with the secretary before knocking. The student should respect the confidentiality of others that is requested by the closed door.
 - k. Attendance is mandatory in all classes. If a student misses more than 2 classes for “unexcused” reasons, points may be deducted from final grade. Arriving late or leaving early may be counted as an absence. Habitually arriving late to a class is a sign of disrespect to the instructor and class members alike and should be avoided. If scheduling makes it impossible for the student to arrive on time on a regular basis, that student should inform the instructor.

VI. COURSE CALENDAR

<u>Week</u>	<u>Content</u>
1	Overview of Psychological Research (Smith & Davis, Ch. 1)
2	Research Ideas and Ethical Concerns (Smith & Davis, Ch. 2)
3	Using Scientific Method in Psychology (Smith & Davis, Ch. 5)
4	Experimental Methods I (Smith & Davis, Ch. 6)
5	Experimental Methods II (Smith & Davis, Ch. 7)
6	Internal and External Validity (Smith & Davis, Ch. 8)
	Exam I
7	Basic Statistics (Smith & Davis, Ch. 9; ref. Gravetter & Wallnau, Chs.1-7)
8	Hypothesis Testing (Gravetter & Wallnau, Chs. 8)
9	Two-Group Experiments (Smith & Davis, Ch. 9-10; Gravetter & Wallnau, Chs. 10-11)
10	Multiple-Group Experiments (Smith & Davis, Ch. 11; Gravetter & Wallnau, Chs. 12-13)
11	Exam II
12	Multiple-IV Experiments (Smith & Davis, Ch. 12; Gravetter & Wallnau, Ch. 13)
13	Multiple-IV Experiments (Smith & Davis, Ch. 12; Gravetter & Wallnau, Ch. 13)
14	Alternative Designs (Smith & Davis, Ch. 13)
15	APA Format Research Reports (Smith & Davis, Ch. 14)
16	Synthesis
	Exam III (Taken during time allotted for Final Exam)

Due to specific needs of each class, there may be flexibility in what is discussed on a particular day. Thus, course calendar is intended as a general guideline. Specific dates for lectures and exams will be announced in class. Lab meeting days will also be announced during class and will occur on the specified day at generally the same time as the regularly scheduled lecture meetings.

Course Inventory for ORU's Student Learning Outcomes
Psy 401: Experimental Psychology
Fall 2013

This course contributes to the ORU student learning outcomes as indicated below:

Significant Contribution – Addresses the outcome directly and includes targeted assessment.

Moderate Contribution – Addresses the outcome directly or indirectly and includes some assessment.

Minimal Contribution – Addresses the outcome indirectly and includes little or no assessment.

No Contribution – Does not address the outcome.

The Student Learning Glossary at <http://ir.oru.edu/doc/glossary.pdf> defines each outcome and each of the proficiencies/capacities.

OUTCOMES & Proficiencies/Capacities		Significant Contribution	Moderate Contribution	Minimal Contribution	No Contribution
1	Outcome #1 – Spiritually Alive Proficiencies/Capacities				
1A	Biblical knowledge				x
1B	Sensitivity to the Holy Spirit				x
1C	Evangelistic capability				x
1D	Ethical behavior	x			
2	Outcome #2 – Intellectually Alert Proficiencies/Capacities				
2A	Critical thinking	x			
2B	Information literacy	x			
2C	Global & historical perspectives				x
2D	Aesthetic appreciation				x
2E	Intellectual creativity	x			
3	Outcome #3 – Physically Disciplined Proficiencies/Capacities				
3A	Healthy lifestyle				x
3B	Physically disciplined lifestyle				x
4	Outcome #4 – Socially Adept Proficiencies/Capacities				
4A	Communication skills	x			
4B	Interpersonal skills			x	
4C	Appreciation of cultural & linguistic differences			x	
4D	Responsible citizenship		x		
4E	Leadership capacity		x		

(Revised 1/15/04)