

Syllabus for  
**GADM 870—Quantitative Research**  
3 Credit Hours  
Fall Module  
September 4-7, 2013

*The Mission of the Oral Roberts University College of Education is to provide the opportunity for individuals who hold Christian principles to participate in initial and advanced study in preparation for the professional public and private responsibilities in the field of education throughout the world. The College of Education's mission includes training and developing professional educators with a Christian worldview who will go into every person's world as transformed educators who will impact society for the purpose of transforming the next generation.*

**I. COURSE DESCRIPTION**

Covers the creation and analysis of quantitative data used to carry out the objectives of research. Emphasizes the assumptions of various methods, the relationship between the given method and the level(s) of measurement of the independent and dependent variables, and the relationship of research design to the given analytical method.

**II. COURSE GOALS**

The purpose of this course is to enable the student to do the following:

- A. Acquire knowledge of the quantitative methods available in educational research.
- B. Become acquainted with different types of research problems that call for appropriate application of these methods.

**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. Discuss, orally or in essay form, the intended use and assumptions regarding the following statistical methods: *t* test, analysis of variance (simple and factorial design), analysis of covariance, partial correlation, and regression analysis (single and multiple).
- B. From hypothetical information concerning a research question or descriptive information regarding individuals or groups and the data available, select the proper statistical tool (or tools) for the problem. Consideration will be given to levels of measurement of the variables.
- C. Explain what factors affect the sensitivity of quantitative research techniques and how analysis sensitivity may affect the conclusions of research.
- D. Explain the difference between the significance of results and practical importance of those results.
- E. Describe the College of Education Conceptual Model and discuss the integration of a biblical foundation and Christian worldview as related to a whole person education.

#### IV. TEXTBOOKS AND OTHER LEARNING RESOURCES

##### A. Required Materials

1. Textbooks  
Gravetter, F. and Wallnau, L. (2013). *Statistics for the Behavioral Sciences* (9th ed.). Belmont, CA: Wadsworth. ISBN 9781111830991
2. Other  
None

##### B. Optional Materials

1. Textbooks  
Gravetter, F. and Wallnau, L. (2013), *Cengage Advantage Books: Statistics for the Behavioral Sciences* (9<sup>th</sup> ed.). ISBN 9781111835767  
None
2. Other  
None

#### V. POLICIES AND PROCEDURES

##### A. University Policies and Procedures (may or may not be applicable)

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, video, multimedia, or computer software. By submitting an assignment in any form, the student gives permission for the assignment to be checked for plagiarism, either by submitting the work for electronic verification or by other means.
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. College and/or Department Policies and Procedure

1. Oral Roberts University outcomes and College of Education Institutional Standards along with state and national accreditation standards are collected and assessed through the College of Education ePortfolio processes.
2. Assessment Requirements  
Course specific artifacts are submitted into ePortfolio. A College of Education approved ePortfolio is a requirement for all College of Education Candidates.
3. Independent Study, Dissertations, or Internships

- a. Cheating in any form, including plagiarism, will not be tolerated. Any student caught cheating will receive a zero for that exam and/or risk receiving an F for the course. *Merriam-Webster's Collegiate Dictionary* defines plagiarize as "to steal and pass off (the words of another) as one's own." In standard academic practice, **this means if a student copies more than three consecutive words** written or spoken by another, the student must acknowledge the source of these words by using the proper reference notation as dictated by the *Publication Manual of the American Psychological Association*, 6<sup>th</sup> edition.
  - b. **Absolutely no** research involving human subjects may be performed until **full** approval of the Institutional Review Board has been obtained. Any such research done prior to approval of the IRB will be null and void and may carry a federal penalty.
  - c. Credit for any independent study must be earned/completed in the semester in which the student is enrolled. (Exceptions may be petitioned in cases of severe illness/emergencies.)
2. In-Class Studies (or All Other Studies)
- a. Class attendance is an absolute **must** for the student to gain full benefit from his/her enrollment. Absences affect the student's grade. Any student leaving class before dismissal or coming late will be marked absent. Extended illness will be handled on an individual basis and will require verification from a doctor.
  - b. Students who miss class for university-sponsored activities must present an administrative excuse form with appropriate signatures prior to the event and must not miss if committed to a class presentation or exam. If participation in the event is voluntary, the student will not be permitted to do make-up work nor complete an exam missed.
  - c. Cheating in any form, including plagiarism, will not be tolerated. Any student caught cheating will receive a zero for that exam and/or risk receiving an F for the course. *Merriam-Webster's Collegiate Dictionary* defines plagiarize as "to steal and pass off (the words of another) as one's own." In standard academic practice, **this means if you copy more than three consecutive words** written or spoken by another, you must acknowledge the source of these words by using the proper reference notation as dictated by the *Publication Manual of the American Psychological Association*, 6<sup>th</sup> edition.
  - d. **Absolutely no** research involving human subjects may be performed until **full** approval of the Institutional Review Board has been obtained. Any such research done prior to approval of the IRB will be null and void and may carry a federal penalty.

C. Course Policies and Procedures

1. Evaluation Procedures

- a. Grading:
 

Premodular assignment	20%
One in-class exam	20%
In-class assignments	20%
Postmodular project	40%
- b. Grading scale:
 

A=90-100%
B=80-89%

C=70-79%  
D=60-69%  
F=below 60%

2. Whole Person Assessment Requirements  
The School of Education has no Whole Person Assessment Requirements.  
However, the Oral Roberts University outcomes are reflected through the School of Education Institutional Standards.
3. Other Course Policies and/or Procedures  
**Preassignment:**
  - a. Read Chapters 8,9,10
  - b. Problems to be turned in: pg. 276 #5,9,13,25  
pg. 303 #5,13,15,19  
pg. 335 #1,5,15,21

## VI. COURSE CALENDAR

Day	Topic	
1	The <i>t</i> Test	Chapters 9,10,11
2	Analysis of Variance	Chapters 13,`4,15
3	Correlation Nonparametric Tests	Chapters 16,17 Chapters 18,19
4	Nonparametric Tests (continued) Review Final Exam	Chapter 20

**Course Inventory for ORU's Student Learning Outcomes**  
**GADM 870—Quantitative Research**  
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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.

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

This course specifically addresses the ORU College of Education Institutional Standards:  
1, 6, 8, 9, 13, and 15.