

**Saint Louis Christian College**  
**RESEARCH METHODS & PSYCHOLOGY STATISTICS PCO422**  
**Professor Gary M. Reed, MS, LPC**  
**Three Credit Hours**

**Spring 2012**

**Course Prerequisites:** General Psychology

**Meeting Days**

Wednesdays & Fridays 1:30pm

## MISSION STATEMENT

*Saint Louis Christian College equips men and women as leaders who impact the world for Christ.*

## COURSE DESCRIPTION

This course introduces students to the essential concepts of using qualitative and quantitative research methods and analysis. Students will learn the stages of research design, how to become critical evaluators of research and how to apply research results to psychological practices and ministry. Each student will participate in data collection, data analysis and interpretation.

## COURSE RATIONALE

As students grow and apply knowledge in both public sector and ministry, students must understand how to read and interpret current research. Upon completion of this class, students be able to develop their professional and ministry skills by reading research and conducting their own research studies.

## COURSE OBJECTIVES

Upon conclusion of this course, the learner should be able to:

1. Define, understand and explain psychological research terms.
2. Apply psychological terms within both professional and ministry settings.
3. Conduct literary reviews of research within both library and online contexts.
4. Understand various research designs and develop independent designs in order to set up studies and interpret psychological research.
5. Research various methods to testing and measuring subjects and observations.
6. Organize, display and manipulate data in the proper context of research.
7. Use measures of central tendency and variability to describe distributions.
8. Understand normal probability, hypothesis development and testing in order to predict and test beliefs about human behavior in professional and ministry contexts.
9. Organize test samples with critical analysis of samples for report writing and interpretative discussions.
10. Understand statistical analysis of data from sample measurements.
11. Conduct psychological research and write APA reports for both individual, professional development and further psychological, ministry studies.
12. Relate the psychological, research methods to everyday concerns in life and ministry.

## COURSE REQUIREMENTS

1. Read the following book:  
Research Methods: A Modular Approach by Sherri L. Jackson. Wadsworth Publishing: 2011, 2<sup>nd</sup> edition. Students are to read each chapter of textbook, as assigned on schedule. While reading textbook, highlight terms in text in preparation for quizzes and research activity applications.
2. Attend each class and participate in discussions, classroom activities, small groups and assigned, off campus learning activities. Students will split their class time for “independent studies” on Wednesdays and class time for lectures and learning activities on Fridays. See class schedule for details. Students will not be allowed to use cell phones in class for texting or communication purposes. Students can use a statistical calculator (not on cell phone) in class. If students choose to use laptop, only word processing are allowed to be use during class time, unless otherwise specified by professor.
3. Students will complete 15 chapter quizzes on terms and concepts found in the textbook (see course schedule). Students can expect multi-choice questions, matching, true/false questions, define and apply terms. Most quizzes will be taken in the library as a part of “independent study” times (see schedule). When taking quizzes in library, students will not be allowed to use their cell phone, books and notes, only a statistics calculator (not on cell phone) and can not be shared by students.
4. Students will complete seven exams in the library (see class schedule). Expect multiple choice and listing questions from reading assignments as listed on quizzes or handouts. If students need special accommodations for test taking, this must be set up with Prof Reed, one week ahead of each scheduled exam.
5. Students will complete five research activities in application of class objectives and preparation of research paper. Professor Reed will provide students with descriptive handouts and class training for each activity, with grading expectations. See class schedule for due dates.
6. Students will write a 15 page research paper, with 15 journal references according to the APA format (see Module 21 in text). Research papers will be written on a specific psychological issue found in psychological journals and approved by Professor Reed. Topic with 7 references, 5 page literary review, hypothesis and design outline will be turned into Professor Reed by February 17<sup>th</sup>; method (testing) and design step by step process by March 2<sup>nd</sup>; method testing results on March 30<sup>th</sup>; research paper draft on April 11<sup>th</sup>; and final research paper with 15 references due on April 27<sup>th</sup>. Students will be expect to provide a 5 minute presentation on research paper and answer questions.

## COURSE ASSESSMENT

1. Read the following book:  
Research Methods: A Modular Approach by Sherri L. Jackson. Wadsworth Publishing: 2011, 2<sup>nd</sup> edition. Students are to read each chapter of textbook, as assigned on schedule. While reading textbook, highlight terms in text in preparation for quizzes and research activity

applications. Based upon textbook reading students will complete 15 chapter quizzes on terms. Students can expect multi-choice questions, matching, true/false questions, define and apply terms. Each quiz will be worth a possible 2 points, total of 30 points (30% of total grade).

2. Students will complete seven exams in the library. Expect multiple choice and listing questions from reading assignments as listed on quizzes or handouts. Each exam is worth 5 possible points, total of 35 points (35% of grade).

3. Students will complete five research activities in application of class objectives and preparation of research paper. Each research activity will be worth 4 possible points, 20 total points (20% of total grade).

4. Students will write a 15 page research paper, with 15 journal references according to the APA format (see Module 21 in text). Research papers will be written on a specific psychological issue found in psychological journals and approved by Professor Reed. Topic with 7 references, 5 page literary review, hypothesis and design outline will be turned into Professor Reed by February 17<sup>th</sup> (2 points); method (testing) and design step by step process by March 2<sup>nd</sup> (1 point); method testing results on March 30<sup>th</sup> (1 point); research paper draft on April 11<sup>th</sup> (1 point); and final research paper with 15 references due on April 27<sup>th</sup> (10 points). Possible total of 15 points (15% of grade).

## COURSE SCHEDULE

**January 11<sup>th</sup>, 2011 , 1:30pm - No Class** (Prof Reed in Nicaragua)

Homework due on 1/13/12:

- 1) Read pp. 12-17 then answer Module Exercise odd questions on bottom p. 17 in Research Methods: A Modular Approach by Sherri Jackson, 2<sup>nd</sup> edit..
- 2) Read pp. 37-45 (text) in preparation to take Quiz #1 & 2 in class on 1/13/12.

**January 13<sup>th</sup>** - Introduction to Research Methods

Course Syllabus and Description (mixture of independent study and classroom).

Take Quiz # 1 & 2 on Chapters 1 & 2 in Research Methods: A Modular Approach by Sherri Jackson, 2<sup>nd</sup> edit.

Review Research Activities - Literary Review handout.

Homework due on 1/18/12:

- 1) Read pp. 33-45 in preparation for Quiz 3 (take in Library on 1/18 between 9am-1:30pm)
- 2) Read Literary Review Research Activity (handout) and prepare.
- 3) Watch EBSCO video in library and get library pass to UMSL library.

**January 18<sup>th</sup>** - Independent Study

Quiz 3 (take in Library on 1/18 between 9am-1:30pm) over pp. 33-45 in text.

Watch EBSCO training in library, bring outline of your notes to class.

Homework due on 1/20/12:

- 1) Read pp. 46-64 in preparation for Quiz 4 (take in Library on 1/120 between 9am-1:30pm)

**January 20<sup>th</sup>** – Ethical Research

Prior to class take Quiz 4 take in Library on 1/20/12 between 9am-1:30pm.

Review Literary Review Research Activity (handout) and questions.

Research Paper Expectations

Homework due on 1/25/12:

- 1) Study for Exam One – Quizzes 1-4

**January 25<sup>th</sup>** – Independent Study

Exam One taken in library between 9:00am – 1:30pm.

Complete Literary Review and compile paper work then bring to class.

Homework due on 1/27/12:

- 1) Read pp. 69-79 in preparation for Quiz 5 in library on 1/27/12 prior to class – 9:00am - 1:30pm.
- 2) Literary Review Research Activity paper (hard copy).

**January 27<sup>th</sup>** – Research Variables

Quiz 5 over pp. 69-79, taken in library between 9:00am-1:30pm.

Turn in Literary Review Research Activity (hard copy) beginning of class.

Review Hypothesis Activity – read handouts, links and pp. 262-64.

Homework due on 2/8/12:

- 1) Read pp. 80-89 in preparation for Quiz 6 in library.

**February 8<sup>th</sup>** – Independent Study

Quiz 6 over pp. 80-89, taken in library between 9:00am-1:30pm.

Homework due on 2/10/12:

- 1) Prepare for Exam Two - Quizzes 5 & 6.
- 2) Hypothesis Activity.

**February 10<sup>th</sup>** – Reliability and Validity

Before class take Exam 2 in library between 9:00am – 1:30pm.

Turn in Hypothesis Activity.

Review Method & Design Activity

Homework due on 2/15/12:

- 1) Read pp. 95-106 for Quiz 7
- 2) Read Survey Research Activity and prepare.

**February 15<sup>th</sup>** – Independent Study

Quiz 7 in library taken between 9:00am – 1:30pm.

Homework due on 2/17/12:

- 1) Read pp. 110 – 122 for Quiz 8.
- 2) Research Paper Literary Review (7 journals, design & hypothesis)

**February 17<sup>th</sup>** – Survey Methods

Take Quiz 8 over pp. 110-22 in library between 9:00am – 1:30pm  
Turn in Research Paper Literary Review (7 journals, design & hypothesis).

Homework due on 2/22/12:

- 1) Review for Exam 3.

**February 22<sup>nd</sup>** – Independent Study

Take Exam 3 in library between 9:00am – 1:30pm.

Homework due on 2/24/12:

- 1) Read pp. 130-140 in preparation for Quiz 9.
- 2) Turn in Method & Design Activity

**February 24<sup>th</sup>** – Conducting Correlational Research

Take Quiz 9 over pp. 130-140 in library between 9:00am – 1:30pm.  
Turn in Method & Design Activity  
Review Statistics Activity

Homework due on 2/29/12:

- 1) Read pp. 143-163 in preparation for Quizzes 10 & 11.

**February 29<sup>th</sup>** – Independent Study

Take Quiz 10 & 11 over pp. 143-163 in library between 9:00am – 1:30pm.

Homework due on 3/2/12

- 1) Study for Exam 4 – Quizzes 9-11.
- 2) Research Paper draft of Method & Design (step by step process).

**March 2<sup>nd</sup>** – Single Case Research

Take Exam 4 over pp. 130-163 in library between 9:00am – 1:30pm.  
Turn in Research Paper draft of Method & Design (step by step process).

Homework due on 3/7/12:

- 1) Read pp. 215-230 in preparation for Quiz 12.

**March 7<sup>th</sup>** – Independent Study

Take Quiz 12 over pp. 215-230 in library between 9:00am – 1:30pm.

**March 9<sup>th</sup>** – Data Organization and Descriptive Statistics

Homework due on 3/14/12:

- 1) Read pp. 234-252 in preparation for Quiz 13.

**March 14<sup>th</sup>** – Independent Study

Take Quiz 13 over pp. 234-252 in library between 9:00am – 1:30pm.

Homework due on 3/16/12:

- 1) Statistics Activity

**March 16<sup>th</sup>** – Correlation Coefficients

Turn in Statistics Activity

Homework due on 3/28/12:

- 1) Study for Exam 5, pp. 215-252, Quizzes 12 7 13.

**March 21<sup>st</sup> and 23<sup>rd</sup>** – Lab Week**March 28<sup>th</sup>** – Independent Study

Take Exam 5 over 215-252 in library between 9:00am – 1:30pm.

Homework due on 3/30/12:

- 1) Take Quiz 14 over pp. 262-268 in library on 3/30, 9:00am – 1:30pm.
- 2) Methods results page for Research Paper.

**March 30<sup>th</sup>** – Inferential StatisticsBefore Class take Quiz 14 over pp. 262-268 in library between 9:00am – 1:30pm.

Turn in Methods results page for Research Paper.

Homework due on 4/4/12:

- 1) Read pp. 270-280 in preparation for Quiz 15.

**April 4<sup>th</sup>** – Independent Study

Take Quiz 15 over pp. 270-280 in library between 9:00am – 1:30pm

Homework due on 4/6/12:

- 1) Results and Discussion Activity.

**April 6<sup>th</sup>** – What are “t” tests for Independent Groups?

Turn in Results and Discussion Activity.

Homework due on 4/11/12:

- 1) Exam 6 over Quizzes 14 & 15.
- 2) Research Paper all sections draft.

**April 11<sup>th</sup>** – Independent Study

Take Exam 6 over pp. 259-280 in library between 9:00am – 1:30pm.

Turn in Research Paper all sections draft into Prof Reed’s office.

Homework due on 4/18/12:

- 1) Read pp. 321-335 in preparation for Exam 7 on 4/18..

**April 13<sup>th</sup>** – Research Statistics and Research Paper in APA form a Discussion.

Homework due on 4/18/12:

- 1) Study for Exam 7 over pp. 321-335
- 2) Review Research Paper revisions.

**April 18<sup>th</sup>** – Independent Study

Take Exam 7 over pp. 321-335 in library between 9:00am – 1:30pm

**April 20<sup>th</sup>** – Good Friday**April 25<sup>th</sup>** – Independent Study

Complete revisions of Research Paper Final Draft due 4/27/12.

**April 27<sup>th</sup>** – Research Papers Discussions

Students give summary of Research Paper.

Turn in Research Paper.

**COURSE STUDENT LEARNING RESOURCES**

Bibliographies to be provided by Professor Reed in class.

**COURSE POLICIES**

1. Homework assignments turned in late or incomplete will be graded one complete grade lower for every week (one to seven days) late. Exams will also be graded one complete grade lower for every week late unless prior arrangements have been made with Professor Reed.
2. If you have a diagnosed learning disability, please see the professor privately to discuss assessment measures that would enhance your ability to learn.
3. Please understand that the Professor Reed reserves the right to modify this course plan by changing topics, due dates, or even an assignment as long as it does not add to the students' work load.

**COURSE INSTRUCTOR CONTACT INFORMATION**

1. Professor Reed is available on Wednesday and Friday mornings.
2. Professor Gary Reed can be reached at:

[greed@slconline.edu](mailto:greed@slconline.edu) or by phone: 314-629-7110.