

# COLLEGE OF ST JOSEPH

Division of Psychology and Human Services

## Course Syllabus

**COURSE NUMBER:** GPS503    Spring 2010    **CLASS TIME:** Monday 7:00 – 9:30 p.m.

**COURSE TITLE:**                    **Research Methods**

### **COURSE DESCRIPTION:**

This course provides a survey of research methods in applied human service settings. This course looks at the methods of scientific investigation, experimental and non-experimental methods, appropriate analysis of data, procedures of developing, analyzing, and interpreting original research problems, and critical analysis of published research.

**INSTRUCTOR:**                    W. David Hoisington, Ph. D.  
**OFFICE HOURS:**                arrange with the professor  
**EMAIL:**                            [dhoisington@csj.edu](mailto:dhoisington@csj.edu) or [healertalk@comcast.net](mailto:healertalk@comcast.net)

### **RESOURCES:**

#### **REQUIRED TEXTS:**

**Research methods in applied settings: An integrated approach to design and analysis** (2<sup>nd</sup> edition, 2009), by Jeffrey A. Gliner, George Arthur Morgan.

Additional resources will be used from the website [www.CompassionSpace.com](http://www.CompassionSpace.com)

### **GOALS AND OBJECTIVES:**

At the conclusion of this course the student will have an understanding of:

1. assumptions and functions of psychological research;
2. the basic terminology used in psychological research;
3. applied theoretical, clinical, and practical issues involved in the interpretation of psychological research;
4. what is involved in designing a research study;
5. social, ethical, and legal consequences of psychological research.

### **Methodology:**

The format will be largely Socratic and “hands-on” in nature. Student will be asked to “seek and find” answers, just like they would if they in the “real world” trying to help someone. Answers will not be given directly by the professor. There will be very few lectures by the professor. Students will be asked to give presentations supported with research. This class will be mostly student driven within a seminar format. Three papers will be written by each student and each presented orally within the class. The professor will provide regular

feedback to the students on the depth of their understanding of the material. This feedback will occur in class, on the written papers, and in emails. The Mastery approach will be used when grading written assignments. Students can meet with the professor by appointment for additional feedback. The mastery approach is one where the professor continues to return the paper to the student until it has reached B level competence. The student has the option of resubmitting to seek a higher level of competence (an A). Because of this format there are heavy **penalties** for late paper assignments. If you turn a paper in late expect a lower final grade.

## Course Requirements:

All assignments are due by 6 PM, by email, on the day they are assigned. Because the Mastery approach is used there is a penalty for late papers or incomplete papers. The main goal of these assignments is to help the student learn the basic terminology used in research and how it is applied. The second goal is to learn about being critical of published research. This will help the student become more skilled in applying research findings when helping people.

### Terms of Research Methods Assignment – Article Review Paper

This is an assignment that is meant to demonstrate to the professor your understanding of the terms used in psychological research (see the list of terms below). The student must present **ALL** of the basic terms and concepts as applied to a practical problem. This will be done by finding a published research quantitative study that uses a reliable measurement device. The student presents an overview of the article, and then a review of the terms included in the article and those not included. When addressing the terms that are missing the student should explain what the authors would need to do to include the terms. The paper must include a definition of the all basic terms listed below. This paper needs to be a minimum of 10 double-spaced typed pages and include 1 additional reference. Papers will be **graded using the mastery approach\***.

The paper will be organized as follows:

- 1 – Title page,
- 2- Abstract.
- 3- Paper overview (and this should be more than a page – do it well!)

Then a heading for each of the terms listed below:

#### **List of Basic Terms – These Need to be Headings in your Paper**

4. Validity (All three)
5. Measures of Central Tendency (All three)
6. Measures of Variability (All three)
7. Frequency Distribution and Normal Distribution
8. Sampling – random, size, bias, subgroup size
9. Test Standardization, Normed-Referenced Tests and Criterion-Referenced Tests
10. Standard Error of Measurement and Standard Error of Estimate
11. Norm Group Selection, Raw Score transformations (z scores, t scores, etc. plus what raw score is and why it needs to be transformed)

12. Scales of Methods (Likert, Guttman, etc. plus what a scale is)
13. Levels of Measurement (nominal, ordinal, etc. plus what a level of measure is)
14. Reliability (which relates to the score and describe different types of reliability)

Finally there will be a summary and conclusions and a reference page.

This paper will also be presented in class and a short, 1 page, handout will be provided to students.

### Data Set Analysis Paper – Group Project

In this paper the group will be given a data set and asked to do an analysis of it that demonstrates an understanding of data analysis in applied human service settings. The analysis must include all of the procedures in the list below and each group member MUST do at least one example of each. This paper needs to be a minimum of 10 double-spaced typed pages (not including the space for illustrations) and include 6 references – 2 of which need to be different than what is on the website associated with the data set. Papers will be **graded using the mastery approach\*** to learning. You may use any resources you need to complete the analysis, just as you would in the real world. Group, and class, cooperative learning is a part of this assignment. Ask your fellow students for help and give help to others. The data set will be provided in Excel format and the source questions/survey are available online.

The format of the paper will be as follows:

1. Title
2. Abstract
3. An overview of the survey  
The following procedures are to be headings in the paper
4. Qualitative analysis.
5. Frequency graphs, median, mode, standard deviation and mean\*.  
\*You should have a mean and the associate value or N for every data set in the report.
6. Scatter plot, line graphs, least squares fit, correlation coefficient.
7. The T-test.
8. Chi-square test.
9. Two factor ANOVA
10. Summary and conclusions
11. References

Remember that you are writing a research paper using a data set – you MUST have references that connect to any conclusions you might draw. This paper will be presented in class as part of a group discussion. Graphics handout will be necessary as everyone is NOT doing exactly the same task. Each group will be looking at a different part of the data set, although there may be some overlap. Learning how to do this will help with the final assignment. The group will turn in only ONE paper that represents the work of the whole group. Papers will be **graded using the mastery approach\*** to learning.

Designing Your Own Research Study

The student will design their own research study as the final assignment in this class. This assignment is aimed at helping the student have a deeper understanding of what is involved in designing a research study. This knowledge will help the student be able to professionally evaluate the research done by others. This paper needs to be a minimum of 10 double-spaced typed pages and include 10 references. Papers will be **graded using the mastery approach\*** to learning. Please follow the outline below:

Headings to be Used in the Research Design Paper

- 1.) Title page
- 2.) Abstract
- 3.) Define the purpose of the study, what has been done by others and why this study fills in a missing knowledge gap. Provide the hypothesis and a rationale for needing to do this research. You **MUST** do the background research and it should be several pages.
- 4.) Data Collection Methods: sampling, data devices, time frame, informed consent (attached in appendix)
- 5.) Data Analysis Methods.
- 6.) Risks and Limitations
- 7.) Summary and Conclusions
- 8.) References (you need to have at least 10)

This assignment will be presented in class with a one page handout for all the students.

Class Participation

The class will use a seminar format where student input will be required. Be prepared to be asked for input at each class. Regular attendance and active participation in discussions and learning activities **is required**. A reduction in grade will occur due to non-participation in class. Each of your presentations contributes to this portion of the grade.

**EVALUATION:**

Course grading criteria is as follows:

Article Paper	20%
Data Analysis Paper	20%
Research Design Paper	40%
Participation	20%

**PROPOSED COURSE OUTLINE:**

<b>DATE</b>	<b>PROPOSED CLASS WORK</b>	<b>ASSIGNMENTS*</b>
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01/11/10	INTRODUCTION TO CLASS REQUIREMENTS AND FOUNDATIONS OF RESEARCH	HOMEWORK: READ CHAPTERS 1
01/18/10	The Nature of Variables	READ CHAPTERS 3 AND 4
01/25/10	Descriptive Statistical Terminology	READ CHAPTERS 8, 9, AND 10
02/01/10	Descriptive Statistical Terminology	<b><u>ARTICLE PAPER IS DUE</u></b> READ CHAPTERS 11 AND 12 STUDENT PRESENTATIONS OF ARTICLE PAPER
02/08/10	Descriptive Statistical Terminology	STUDENT PRESENTATIONS OF ARTICLE PAPER
02/15/10	Presidents Day Break	START WORKING ON THE DATA ANALYSIS CHAPTERS 16 -27 FOR REFERENCE
02/22/10	Descriptive Statistical Terminology	STUDENT PRESENTATIONS OF ARTICLE PAPER, CONTINUE WORK ON THE DATA ANALYSIS
03/01/10	Applied Research Methods	GROUP DISCUSSION OF DATA ANALYSIS, CONTINUE WORK ON THE DATA ANALYSIS
03/08/10	Applied Research Methods	CONTINUE GROUP DISCUSSION
03/15/10	SPRING BREAK!	<b><u>DATA ANALYSIS PAPER IS DUE BEFORE THIS DATE</u></b> ENJOY THE BREAK!
03/22/10	Applied Research Methods	GROUP DISCUSSION OF DATA ANALYSIS
03/29/10	Research Study Design	DISCUSSION OF RESEARCH TOPICS AND DESIGN CHAPTERS 2, 5-7, 13-15 AS REFERENCE
04/05/10	Research Study Design	DISCUSSION OF STUDENTS RESEARCH TOPICS AND DESIGN
04/12/10	Research Study Design	DISCUSSION OF STUDENTS RESEARCH TOPICS AND DESIGN
04/19/10	Research Study Design	<b><u>RESEARCH DESIGN PAPER IS DUE</u></b> STUDENT PRESENTATIONS OF RESEARCH DESIGN
04/26/10	Final – last day for revisions	STUDENT PRESENTATIONS OF RESEARCH DESIGN

**\*ALL ASSIGNMENTS ARE DUE THE DAY ON WHICH THEY ARE LISTED. BECAUSE OF THE MASTERY APPROACH, THERE ARE HEAVY PENALTIES FOR LATE PAPERS OR PAPERS TURNED IN THAT ARE NOT COMPLETE.**

**MISSION STATEMENT – Writing Across the Curriculum:**

Dedicated to the proposition that the ability to write effectively is an important life skill, the faculty of the College of St. Joseph advocates writing across the curriculum for all students as a vehicle to develop good writing habits. Writing across the curriculum enhances student success by encouraging writing to learn and learning to write in all academic disciplines, recognizing a diversity of needs in society. Developing these skills is incorporated in course work throughout the curriculum in a manner that promotes writing as a valuable and enjoyable means of learning.

### **COURSE POLICY:**

**Late Assignments:** All out of class assignments must be turned in to the instructor at the beginning of class on the due date. Late assignments will be heavily penalized.

### **GRIEVANCE POLICY:**

A student who has concerns regarding any aspect of the course is encouraged to seek resolution by implementing the following process in the order outlined.

- a. Consult with the instructor to resolve the issue in question.
- b. If no resolution is achieved, address the issue with the Division Chairperson.
- c. If a resolution is not attained, consult the Vice President of Academic and Student Affairs.

Should the student so desire, he or she may seek the guidance of his/her academic advisor to facilitate the process outlined above.

### **POLICY ON PROFESSIONAL BEHAVIOR:**

It is expected that during all aspects of their involvement with the College and Division of Psychology and Human Services programs, services, and activities, all faculty, staff, and students will display appropriate professional demeanor; including active listening skills, respect for divergent views and opinions expressed by others, and sensitivity to the feelings of other members of the College community. Unprofessional behavior will not be accepted and will be addressed, as appropriate, with any person engaging in such behavior, in accord with the College Handbook, Student Handbook and other College policies, and may result in removal from class and /or group meetings, course failure, referral to the appropriate undergraduate or graduate committee, and/or to the Vice President for Academic and Student Affairs. A pattern of such behavior may be cause for recommendation of termination or dismissal from the program.

### **POLICY ON STUDENT LEARNING OUTCOME OBJECTIVES:**

The first responsibility of the College of St. Joseph is to provide quality educational programs, and to ensure that when you graduate, you possess particular skills, capacities, aptitudes, knowledge, and abilities that will enable you to fulfill your personal and professional

aspirations, think creatively, assume positions of leadership, and offer unique contributions to the world. As part of our college-wide efforts to foster continuous improvement in our programs and services, *Characteristics of a College of St. Joseph graduate* and *Student Learning Outcome Objectives* have been defined by the faculty in each Division, and a comprehensive assessment process has been developed to measure the extent to which those objectives are being met by various courses and educational experiences in each degree program.

This course has been identified as being of particular importance in helping to accomplish the student learning outcomes, which we have established for our students. As such, certain assignments which students in this course complete are evaluated by a committee of faculty members, on an assigned, four year cycle, after the end of the spring semester and graduation in May of each year. The intent of this evaluation is not to evaluate any one particular student, but to assess the extent to which students as a group have accomplished learning outcomes, which have been defined for the course. For further information regarding our student learning outcome assessment process or results, please contact: Dr. Craig W. Knapp, Chairperson of the Division of Psychology and Human Services or the college President.