

# LEWIS & CLARK COLLEGE

## COURSE OUTLINE

**DEPARTMENT:** Counseling Psychology

**COURSE NUMBER:** MHC 535, Fall 2014

**CREDITS:** 3

**COURSE TITLE:** Research Methods in Counseling

**INSTRUCTOR:** Paul Sorenson, LCSW

**PREREQUISITE:** None

**TO SCHEDULE AN APPOINTMENT:** call, text or e-mail

**OFFICE PHONE:** 541-608-8735 (cell)

**E-MAIL:** psorenson@lclark.edu

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*Students needing an accommodation should immediately inform the course instructor. Students are referred to Disability Services to document their disability and to provide support services when appropriate.*

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### **COURSE OBJECTIVES -**

- Identify various paradigms for conducting research (CC: 8b)
- Identify each of the steps involved in the development of a research project (CC: 8b, 8c, 8d)
- Write research questions and hypotheses (CC: 8b)
- Understand the ethical issues involved in working with human participants (CC:8f)
- Identify and describe various types of quantitative and qualitative research designs (CC: 8b)
- Identify and describe validity issues inherent in different types of designs (CC: 8b, 8c, 8d)
- Discuss the issues involved in conducting real world research (CC: 8a, 8e)
- Discuss the impact of culture on various aspects of the research process (CC:8f, 7f, 2c)
- Critically evaluate published research articles
- Design a proposal for a research project
- Understand program evaluation, including community needs assessment to design and implement community counseling interventions (CC: 8d, B3)

### **CACREP objectives/student learning outcomes:**

- II.K.7.d. reliability (i.e., theory of measurement error, models of reliability, and the use of reliability information);
- II.K.7.e. validity (i.e., evidence of validity, types of validity, and the relationship between reliability and validity);
- II.K.8.a. the importance of research and opportunities and difficulties in conducting research in the counseling profession,
- II.K.8.b. research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research;
- II.K.8.c. use of technology and statistical methods in conducting research and

- program evaluation, assuming basic computer literacy;
- II.K.8.d. principles, models, and applications of needs assessment, program evaluation, and use of findings to effect program modifications;
- II.K.8.e. use of research to improve counseling effectiveness;
- II.K.8.e. and ethical and legal considerations.
- B3. strategies for community needs assessment to design, implement, and evaluate community counseling interventions, programs, and systems

**Program objectives:**

- Highly skilled & compassionate mental health professionals
- Excellent counselors/therapists
- Counselors who are effective in providing both individual and group counseling
- Counselors who are effective in diverse settings
- Counselors who emphasize the client-counselor relationship
- Counselors have a thorough understanding of mental health issues
- Counselors who utilize a developmental perspective with clients
- Professionals who are committed to equity and social justice when assisting children, adolescents and adults
- Reflective practitioners
- Ethical practitioners
- Agents of change, advocates for equity and social justice
- Creative leaders

**REQUIRED TEXT**

Patten, M. L. (2009). *Understanding research methods (7th ed.)*. Glendale, CA: Pyrczak Publishing.

**Recommended Text**

Pyrczak, F. (2008). *Evaluating research in academic journals (4th ed.)*. Glendale, CA: Pyrczak Publishing.

**REQUIREMENTS**

Real World Article Research (25 points each) (due as assigned)  
 Papers: Research Article Critique (2) (75 points each) (Due 10/8 & 11/12)  
 Group Project (100 points) (Due 12/3 & 12/10)  
 Brief Quizzes (4) - (15 points each)

**FINAL GRADES**

90% and above A  
 80% - 89% B  
 70% - 79% C

**REFERENCES**

Class texts, selected handouts & research articles. A simple calculator needs to be available during most classes.

## Class Schedule – Fall 2012

### Sept 02

Class Intro, Syllabus  
Text Review, Groups, real-world  
article signup

### Sept 09

Patton - Topics 1-4, 9-10, 12-13  
APA Formatting  
Ethics  
Frequency Distribution & %  
*Article*

### Sept 16

Patton - Topics 5-8  
APA Formatting  
Real world article presentations  
Stats: Visually representing data  
*Article*

### Sept 23

Patton - Topics 7-8, 44-46, 50-52,  
Appendix D  
Quartiles  
Real world article research  
Present: Hypothesis & Variables  
Stats: Measures of central tendency  
*Article*

### Sept 30

Patton - 20-26  
Real world article research  
Present: Sampling  
Stats: Measures of dispersion  
*Article*

### Quiz #1

### Oct 7

Patton - 43  
Stats: Standardized scores  
**Research Article Critique 1 Due**  
*Article*

### Oct 14

Patton - 54  
Real world article research 17  
Stats: *t* Test, Significance tests  
*Article*

### Oct 21

Patton - 58-60, 27-30, 38-39  
Real world article research  
Present: Validity/Qualitative  
Research

Stats: Effect Size

*Article*

### Oct 28

Patton - 11  
Real world article research  
Present: Program Evaluation Rsch  
Stats: Scattergram & Regression

*Article*

### Quiz #2

### Nov 4

Patton - 53, 61-63  
Real world article research 11&12  
Stats: Correlation Coefficient, Meta-  
Analysis

*Article*

### Nov 11

Real world article research 13 & 14  
Stats: Correlation Coefficient,  
Determination, Reliability  
Present: Reliability

**Research Article Critique 2 Due**  
*Article*

### Nov 18

Pyrczak - 11  
Patton - 31-36  
Real world article research 15 & 16  
Significance tests continued  
*Article*

### Quiz #3

### Nov 25

Patten-TBA  
Stats: ANOVA  
Article Evaluation  
*Article*

### Dec 2

Logistic Regression  
Intro to Advanced Statistical tests  
**Group Project Presentations**

## **MHC 535: Research Article Critique**

The purpose of this task is for you to use skills you have acquired over the course of the term to review and evaluate the strength of a peer reviewed article. The first article will be assigned to you (everyone will use the same one), the second article will be an article of your choice (you may use the article from your real-world research presentation if you'd like). Your critique should be around five pages long (but I'm flexible and am more concerned with your ability to demonstrate that you can incorporate the ideas we've discussed into a critique of a scientific article.

### **Points to be covered in the critique:**

#### **Introduction & Lit Review**

What question is the study trying to answer?

What is the significance of the problem and the research?

What are the hypotheses/questions and are they clearly presented?

How well does the review demonstrate the importance of this study?

Does the review provide you with enough background to understand the problem being investigated?

Are the citations used adequate?

#### **Methods: Subjects and Sampling**

What is the population being studied?

What sampling technique was used?

What are the specific characteristics of the sample presented?

To whom can the results be generalized?

In what ways might results or conclusions be biased due to the sample?

#### **Design**

Describe the design of the study.

How does the design of the study impact the interpretation of the findings?

Discuss ethical considerations.

#### **Internal Validity**

Random assignment? Control groups?

What are some rival hypotheses that might have affected the results?

#### **Procedures**

How were data collected? Could you replicate the study if given the procedures as described?

#### **Instruments**

What are the variables under investigation?

How are the variables operationally defined/measured?

Are they appropriate for the sample being studied?

If reliability and validity data are provided report them.

#### **Results**

What were the findings?

What statistical tests (if any) were used? How well did the authors explain statistical tests used and the rationale for their use?

Might the sample size have effect the results (i.e.; too small to detect a result or too large for result to have practical significance)?

How well are the findings tied to the hypotheses and/or research questions?

#### **Discussion**

Discuss the conclusions drawn by the authors (do you agree, are they valid?).

How do the findings support or contradict prior research?

Is each finding discussed in relation to the original hypotheses being tested?  
Are the results consistent or inconsistent with previous research? Do the authors discuss this?  
Do the authors generalize their results beyond the sample? Are the generalizations appropriate?  
What are the implications of the results?

### **MHC 535 – Group Project**

Your group project will consist of a group oral presentation of a research plan, a description of a proposed study designed to investigate a particular problem. The problem to be investigated is to be of the group's choosing. Your presentation should include significant visual aides (i.e. PowerPoint/Keynote or use of the white board)

The *written requirement* for the project is a bibliography of sources used to investigate the problem and design the study.

Your grade will be partially determined by your inclusion and discussion of the following elements of the plan:

#### I. Introduction

Statement of the Problem

Review of Related Literature

Statement of Hypotheses

#### II. Method

Subjects

Instruments

Design

Procedure

#### III. Data Analysis

What particular statistical techniques will be used to analyze data?

#### IV. Time Schedule

#### V. Budget

### **Real World Article Research**

Each member of the class will be responsible to find a report in the news (newspaper, internet, TV) and track down the original research study and compare the report to the study. Keep in mind sample size, methodology, claims, who the researchers are, etc. Draw your own conclusions based on the original research report in relation to what was reported in the news.