CP 6691 – Research Methodology
TROY UNIVERSITY – Pensacola
TERM 5, 2018 (May 29 – July 29)

4/18/18

PROFESSOR: Lamon H. Small, Ph.D.

LOCATION: Pensacola

Time: Monday, 5:00 – 10:00

PHONE: Pensacola Office – 458-4733

OFFICE HOURS: Monday & Tuesday (12-5)

REQUIRED TEXTBOOKS AN OTHER MATERIALS:


(Livetext is purchased only one time and used for all classes)

CATALOG DESCRIPTION:
The study and evaluation of research methods commonly used in the social sciences. The courses will provide information necessary to understand and apply research processes, synthesize knowledge and writing, and plan and organize research problems for interpretation and application of research results. Application of these skills in the form of a written project using the Publication Manual of the American Psychological Association (APA) is required.

RATIONALE FOR COURSE:
The course has been developed to assist the graduate student in planning research designs. Students study basic concepts of design which will also be useful in planning program evaluations and in developing proposals for external funding.
Goals

Goals and Objectives of Courses:
The Teacher Education Program is designed to provide a quality, academic program that emphasizes meaningful and practical learning experiences in preparing students to be innovative, informed, reflective decision-makers. In addition, this course provides opportunities to:

1. Develop/improve the ability to interpret and objectively evaluate studies, research, and evidence-based best practices in the social sciences to advance the counseling profession. II.G.8.a, II.G.8.e

2. Know the fundamentals of social science research with emphasis on the basic quantitative and qualitative research designs (descriptive, casual-comparative, correlational, and experimental). Alabama State Department of Education School Counseling (2) (a) 12 (Conceptual Framework 6); II.G.8.b

3. Appreciate the importance of legal and ethical considerations in human subject research. Alabama State Department of Education School Counseling (2) (a) 12 (Conceptual Framework 6); II.G.8.f

4. Demonstrate an understanding of the appropriate use of inferential statistics in analyzing research data. Alabama State Department of Education; School Counseling (2) (a) 12 (Conceptual Framework 6); II.G.8.c

5. Develop an awareness of program evaluation principles and concepts. II.G.8.c, II.G.8.d

Legend: CACREP 2009 Standards Section II G. 8 a-f,
**ATTENDANCE POLICY:** All classes missed must be made up, regardless of whether the absence was excused or unexcused. Contact professor for missed class assignments. It is the student’s responsibility to see that this make-up work is completed and turned in within two weeks from the missed class date.

**TROY EMAIL** (Troy address will be the only email used for contact)

**Electronic Devices:**
- **CELL PHONES** – (Are not to be used during class)
- **LAPTOPS** – (Are only to be used for classroom use)
- **ELECTRONIC DEVICES** – (Are only to be used for classroom use)

**AMERICANS WITH DISABILITIES ACT (ADA):**
Troy University supports Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, which insure that postsecondary students with disabilities have equal access to all academic programs, physical access to all buildings, facilities and events, and are not discriminated against on the basis of disability. Eligible students, with appropriate documentation, will be provided equal opportunity to demonstrate their academic skills and potential through the provision of academic adaptations and reasonable accommodations. Further information, including appropriate contact information, can be found at the link for Troy University’s Office of Human Resources at [http://www.troy.edu/humanresources/ADAPolicy2003.htm](http://www.troy.edu/humanresources/ADAPolicy2003.htm)

A link to the Oracle, which covers all student policies, can be found on my main webpage.
COURSE REQUIREMENTS:

A. CLASS PARTICIPATION
The textbook readings must be completed prior to the class meetings in order to facilitate classroom discussion. You may be called on to share your understanding of the material. The key to success in this course is active participation and involvement. A wide variety of learning resources are available, all of which are directed toward enabling you to achieve an excellent result in the course.

B. MID-TERM AND FINAL EXAMINATIONS
Each exam will focus on identification and knowledge mastery and will be composed of 50 multiple-choice questions.

Study Guide – A copy of both the mid-term and final exam study guides can be downloaded from: http://spectrum.troy.edu/drsmall/

Start studying as soon as possible. Each study guide is a listing of the questions on each test, with the answer choices removed.

Suggestion –

• Read the study questions for the chapter first.
• Then read the chapter, answering the questions as you read.
• Next reread the chapter for a better understanding of the material.
• Focus more on understanding the word, concept or idea than trying to find a one word or one sentence answer.
• Make note of page numbers for reference and study group.

C. LiveText Assignments
Instructor’s Summary Form Student Assignment Memorandum of Understanding Research Proposal IRB Training Module
D. RESEARCH PROPOSAL

Research Topic – Since this syllabus is available via the Internet before class, it is advisable that students come to class with a general research topic area in mind.

RESEARCH PROPOSAL:
Each student will produce a research proposal. This proposal will establish a prototype research study for a counseling/human services-related topic or research problem.

References – (Rule of thumb) there should be an average one reference for each page.

Page Count is measured from title page through the reference page.

Due: (Last night of class)
A spiral bound copy of the proposal is due the last day of class.
Proposal MUST be posted on Turnitin, by due date
Turnitin Receipt MUST be submitted with proposal.
Posted on Livetext

Binding –
-Spiral binding
-Clear plastic cover
-Solid back cover

(Further details will be discussed in class)
COURSE OUTLINE

Week 1
Introduction
Selecting a Topic

Week 2
WORKING TOPIC DUE AND PRESENTED TO CLASS

Week 3 VIDEO – Research
Ch. 1 The Role and Importance of Research.
Ch. 2 The Research Process: Coming to Terms.

Week 4 VIDEO – The Wonder Pill
Ch. 3A Selecting a Problem and Reviewing the Research.
Ch. 3B Ethics: The Basic Principles
Ch. 4 Sampling and Generalizability
Ch. 6 Methods of Measuring Behavior.
Ch. 7 Data Collection and Descriptive Statistics.

Week 5 (Mid-Term Exam)
Ch. 8 Introducing Inferential Statistics.
Ch. 9 Nonexperimental Research: Descriptive and Correlational Methods.
Ch. 10 Nonexperimental Research: Qualitative Methods.
Ch. 11 Pre- and True Experimental Research Methods.

Week 6 (APPOINTMENTS)

Week 7 (APPOINTMENTS)

Week 8 (FINAL EXAM)

Week 9 (See below Assignment Due Dates)
An after class voluntary tutorial session will be held for any student(s) who may need clarification of any material discussed that session.

This class schedule may change to better facilitate the needs of the students.

ASSIGNMENT DUE DATES

Week 4 LiveText Instructors Summary
Memorandum of Understanding (MOU) Assignment
IRB Training Module

Week 9 Proposal (Spiral Bound Copy With Turnitin Receipt Attached)
• Proposal Posted on LiveText
• Proposal Posted on Turnitin (submit receipt with proposal)
METHOD OF EVALUATION:

Grades will be based on the requirements listed on the following page. An incomplete grade will not be automatically assigned, but must be requested by the student by submitting the proper request for an incomplete form to the professor.

Failure to clear the incomplete within the specified time period will result in the automatic assignment of a grade of “F” for the course.

To receive a grade in this class the student must:

• Must submit an appropriately formatted APA research proposal that is well thought out and constructed.
• Attend class and individual session.
• Submit a spiral bound hard copy (Due last night of class).
• Proposal must be posted on Turnitin by last night of class.
• Turnitin must have an appropriate score.
• Turnitin Receipt must be attached to hard copy of proposal.
• Complete all Livetext assignments by DUE DATE.

ALL WORK MUST BE ORIGINAL FOR THIS CLASS.

DO NOT WORK ON THE STUDY GUIDE DURING CLASS.

DO NOT READ THE TEXTBOOK DURING CLASS
### GRADING CRITERIA

<table>
<thead>
<tr>
<th>Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90–100</td>
<td>A</td>
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<tr>
<td>80–89</td>
<td>B</td>
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<tr>
<td>70–79</td>
<td>C</td>
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<tr>
<td>60–69</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
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</tbody>
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**A GRADE OF "B" OR BETTER IS REQUIRED FOR CREDIT IN THIS COURSE TO SATISFY THE TROY UNIVERSITY RESEARCH REQUIREMENT.**

#### To Receive a Grade of “A”

**Participation**
- Must be prepared for class
- Initiate and lead classroom discussions
- Contribute meaningfully to class discussions
- Attend all classes

**Mid-Term/Final Exam**
Mid-Term and Final are averaged together for final exam grade.

- **90–100=A**

**LiveText Assignment**
Must complete all assignments

- IRB Training Module MUST be 80% or higher

**Research Proposal**
Must Submit a **25 Page Minimum**
Properly Formatted APA Research Proposal

**ALL WORK MUST BE COMPLETED AND SUBMITTED BY DUE DATE.**

#### To Receive a Grade of “B”

**Participation**
- Contribute meaningfully to class discussions
- Attend all classes

**Mid-Term/Final Exam**
Mid-Term and Final are averaged together for final exam grade.

- **80–89=B**

**LiveText Assignment**
Must complete all assignments

- IRB Training Module MUST be 80% or higher

**Research Proposal**
Must Submit a **15 Page Minimum**
Properly Formatted APA Research Proposal

**ALL WORK MUST BE COMPLETED AND SUBMITTED BY DUE DATE.**

- **ANY WORK BELOW THESE STANDARDS WILL RESULT IN A LESSER GRADE.**
- **WORK SUBMITTED LATE MAY BE PENALIZED ONE GRADE LEVEL.**
- **ALL WORK MUST BE ORIGINAL FOR THIS CLASS.**

**DO NOT** -
- **WORK ON THE STUDY GUIDE DURING CLASS.**
- **DO NOT READ THE TEXTBOOK DURING CLASS.**
# Mental Measurements Yearbook

On my main webpage –
Click Library
Click on Mental Measurements Yearbook - Click Here
Sign in

Search for the type/category of test you are looking for.

**Examples:**
For a specific test-
Stanford-Binet intelligence Test

Categories of tests –
Intelligence testing

Tests for specific disorders –
Depression

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## LiveText – (https://www.livetext.com/)

<table>
<thead>
<tr>
<th>Memorandum of Understanding MOU) Assignment Instructions</th>
<th>6600 Professional Orientation/Other Stuff/LiveText Instructions</th>
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<tbody>
<tr>
<td>Demographic Form</td>
<td>Found at <a href="https://www.livetext.com/">https://www.livetext.com/</a></td>
</tr>
<tr>
<td>Disposition Development Plan</td>
<td></td>
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<tr>
<td>Essays #1/2/3</td>
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</tbody>
</table>

## Turnitin (http://turnitin.com/en_us/home)

First create a profile at Turnitin.com then register for this course using the Class ID & Password listed below.

<table>
<thead>
<tr>
<th>Class ID:</th>
<th>16978792</th>
</tr>
</thead>
<tbody>
<tr>
<td>Password:</td>
<td>cp6691</td>
</tr>
<tr>
<td>Turnitin Information:</td>
<td>6600 Professional Orientation/Other Stuff/Turnitin Instructions</td>
</tr>
</tbody>
</table>
**Proposal Outline**

<table>
<thead>
<tr>
<th>Name: (last): _______________________ (first): _________________________</th>
<th>Term / Year: ____________________________</th>
</tr>
</thead>
</table>

**Area of Interest:**  
(Ex. Students that score low on FCAT)

**Problem:** (Cause)  
(Ex. Students are scoring low on the FCAT because they have poor study skills)

**Solution:** (Treatment)  
(Ex. Teach study skills to improve test scores)

**Research Question:**  
(Ex. Will teaching study skills to students that score low on the FCAT improve their FCAT test score?)

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**Population**  
Define the group of people you want to treat:  
(Ex. Middle school students that scored in the level 1 & 2 range on the FCAT)

**Sample**  
Randomly select _______ subjects for you treatment/control groups.

**Target Population**  
Where are you going to get your sample (subjects) from?  
(Ex. Brentwood Middle School)

**Randomly assign ______ subjects to the Treatment Group.**  
**Randomly assign ______ subjects to the Control Group.**

**Control Group**  
The control group receives nothing. They are here to represent the population.

**Treatment**  
(Independent Variable / Solution / Procedure)  
What are you going to do to your subjects to correct the problem?  
(Ex. The treatment group will attend a 1 hour study skills workshop twice a week for 9 weeks on how to develop proper study skills. The workshop will start 9 weeks prior to the FCAT and run until the test is taken)

**Test**  
(Dependent Variable)  
What standardized test will be used to measure the effects of your treatment?  
(Ex. Florida Comprehensive Assessment Test (FCAT))

**Follow-Up:**  
A Follow up will be conducted 6 month and 1 year after the conclusion of the study.
Title Page

Table of Contents
Lists all three chapters with subheading,
References
Page numbers

Chapter 1: The Problem
Introduction
Background
Statement of the Problem
Purpose of the Study
Questions to be Answered
Research Hypothesis
Importance of the Study
Assumptions
Definition of Terms
Scope and Delimitation’s of the Study

Chapter 2: Review of the Related Literature

Chapter 3: Methodology
Research Design
Null Hypothesis
Selection of Subjects
Instrumentation
Procedures
Data Analysis
Limitations of the Study
Follow-up

References:
Basic Steps in the Planning and Conducting of Research

1. Identify the problem.
2. Survey the literature.
3. Define the actual problem for investigation in clear, specific terms.
4. Formulate testable hypotheses and define the basic concepts and variables.
5. State the underlying assumptions which govern the interpretation of results.
6. Construct the research design to maximize internal and external validity.
   a. Selection of subjects
   b. Control and/or manipulation of relevant variables.
   c. Establishment of criteria to evaluate outcomes.
   d. Instrumentation-selection or development of the criterion measures.
7. Specify the data collection procedure
8. Select the data analysis methodology.
9. Execute the research plan.
10. Evaluate the results and draw conclusions.

The Research Proposal

The research proposal starts out as a general topic area. These could be topics such as:
- The effectiveness of certain therapy methods on patient improvement
- The effect of divorce on children
- The effect of TV on children’s aggressiveness
- How to predict student success in a vocational program
- How to prevent teenage pregnancy

From this general topic the researcher focuses in on a more specific research question. For example, the researcher may ask:
Is behavior therapy more effective in treating sex offenders than insight oriented therapy?
Do girls with eating disorders have lower self-esteem than girls without eating disorders?

For each of the following proposal sections there is listed a:
Suggested length (L=)
Suggested reference (R=)
These are just suggestions; your sections may vary.

Each chapter starts on a new page.
Chapter 1 - Introduction / The Problem
(L=Suggested Length) (R=Suggested Number of References)

**Introduction**  
(L = 1 to 2+ paragraphs)  (R = 2)  
This section sets the stage for the study. It should orientate the reader to the problem and develop the logic behind the study.

**Background**  
(L = 1+ page)  (R = 2+)  
This section adds to the introduction by offering a historical perspective and overview which may include a description of the disorder, how many people are afflicted by the disorder, the onset of the disorder and other similar issues.

**Statement of the Problem**  
(L = 1 to 2 sentences)  (R = 0)  
Formulation of a research problem, or problem statement, is a next step in the research process. A good problem statement has three characteristics:
- It clearly identifies the variables under consideration.
- It specifies the population being studied.
- It implies the possibility of empirical testing.

**Purpose of the Study**  
(L = 1 sentence)  (R = 0)  
This section answers the questions:
- What is it that you plan to investigate?
- What are the general goals of the study?
Here is where you define the problem.

**Questions to be answered**  
(L = 1 to 2 sentences / Bullet list of 1 to 2 questions)  (R = 0)  
When the research is finished, what are the questions to which reasonable answers can be expected?

**Research Hypothesis**  
(L = 1 sentence)  (R = 0)  
After doing the literature review, the researcher is ready to formulate a research hypothesis. Like the research problem, hypotheses can be derived from theories, observations, intuition, or a combination of these. A hypothesis converts the question posed by the research problem into a declarative statement that predicts an expected outcome. A hypothesis is an assumptive statement about the relationships between two or more variables that suggests an answer to a research question.

A research hypothesis has four characteristics:
- It identifies the predicted relationship between two or more variables in a clear manner.
- It is specific.
- It is value-free
- It is testable

A hypothesis should be expressed in clear, simple, and concise terms. The person reading a hypothesis should be able to determine:
- The variables of the hypothesis.
- The population being studied.
- The predicted outcome of the hypothesis.
Importance of the Study  
(L = 2 to 3 sentences)  (R = 1)
What is the importance of this study and who will benefit from it and why.

Assumptions  
(L = 1 sentence intro / bullet list of 2+)  (R = 0)
Assumptions are what the researcher takes for granted. Taking things for granted may cause misunderstandings. In research, we try to leave nothing to chance in the hope of preventing any misunderstanding. All assumptions that have a material bearing on the problem should be openly and unreservedly set forth.

Definition of Terms  
(L = 1 intro sentence / bullet list 2+)  (R = 1 per term)
What precisely do the terms in the problem mean? Each term must be defined operatively; That is, the definition must interpret the term as it is employed in relation to the researcher’s project. We need not necessarily subscribe to such a definition, but so long as we know what the researcher means when employing a particular term, we are able to understand the research and appraise it appropriately. All terms are listed alphabetical.

Scope and Delimitations of the Study  
(L = 1 paragraph)  (R = 0)
Spells out precisely what the researcher does not intend to do.
Chapter 2 - Review of Related Literature
(L=Suggested Length) (R=Suggested Number of References)

**Review of the Pertinent Literature** (L = 4+ pages) (R = 4+)

After formulating the research problem, the researcher will begin to carry out a literature review of the topic to be studied. A literature review is a systematic and critical review of research which has been published in scholarly journals and books. It summarizes related studies and describes limitations and strengths of these studies (critiques them). Very often the current study follows from these previous studies, picking up where they left off, to answer questions that have been raised by the previous studies. Sometimes the researcher finds contradictions between the results of previously done studies, and therefore decides to do a study to help explain the inconsistencies. At other times the researcher may want to replicate a study using subjects in a local setting.

The literature review brings the researcher up to date as the state of the knowledge of a research area. It also provides information on how other researchers have operationalized variables, what types of research designs have been used in the past, and pitfalls that other researchers have experienced. The method involves authors reading original (primary) studies, taking notes, organizing themes, and immersing themselves in the research literature in order to develop a comprehensive understanding of the main findings.

A literature review is an account of what has been published on a topic by accredited scholars and researchers. In writing the literature review, your purpose is to convey to your reader what knowledge and ideas have been established on a topic, and what their strengths and weaknesses are. As a piece of writing, the literature review must be defined by a guiding concept (e.g., your research objective, the problem or issue you are discussing or your argumentative thesis). It is not just a descriptive list of the material available, or a set of summaries.

**A literature review should:**

a) be organized around and related directly to the thesis or research question you are developing
b) synthesize results into a summary of what is and is not known
c) identify areas of controversy in the literature
d) formulate questions that need further research

A literature review is not a list describing or summarizing one piece of literature after another. It's usually a bad sign to see every paragraph beginning with the name of a researcher. Instead, organize the literature review into sections that present themes or identify trends, including relevant theory. You are not trying to list all the material published, but to synthesize and evaluate it according to the guiding concept of your thesis or research question. The first paragraph should introduce the focus of that section and end with a summary.

After doing a literature review, a researcher may revise the original research problem. It may be that the original idea was too broad, and would be unwieldy to try and study. A more specific question may be developed. Or the researcher may fine tune the original idea, or take a slightly different track. Sometimes the original idea is discarded, and a new research problem is developed based on the literature review.

**Things to be aware of:**

1. Quality, not quantity, is the watchword.
2. Avoid the use of passive voice.
3. Avoid excessive quotations.
4. Contractions do not belong in formal writing.
5. The use of the first person is inappropriate in formal writing in that it gives the appearance of less objectivity. Writing should be in the third person.
6. Your opinions are not important. The results of your investigation are.
Chapter 3 - Methodology
(L=Suggested Length) (R=Suggested Number of References)

After doing the literature review, the researcher should have at least a general idea of how to design a study to effectively determine the relationship between the variables of interest. Very often the study is modeled after the studies found in the literature review. This section describes in detail how the study will be conducted. A reader should be able to replicate your study based on the information in the method section.

Research Design (L = 1 paragraph) (R = 1)
This section describes the design of the study. After this section, readers should have a clear understanding of the independent, and dependent variables and the manner in which participants were assigned to levels of the independent variables. The connection between the design and the research hypotheses should be clear; after reading this subsection, the reader should understand how the hypotheses will be tested.

Null Hypotheses (L = same as hypotheses) (R = 0)
Restate your hypotheses in the null form.

Selection of Subjects (L = 1 paragraph) (R = 0)
- How will the subjects be obtained, who are they
- How many subjects will there be in total?
- How many subjects will be in each experimental group?
- Describe the general characteristics of each group

Instrumentation (L = 1 paragraph) (R = 1 Mental Measurement Yearbook)
- Use the Mental Measurement Yearbook
- Describe the tests, questionnaires, and any specialized equipment used.
- Given at least one example of a question from all questionnaires used.

Procedures (L = 1 paragraph+) (R = 0)
This section describes how the research was conducted with the participants. Discuss everything that was done with the participants, from the beginning to end, including instructions to the participants, the formation of groups, and experimental manipulations. This section is organized chronologically. Enough detail should be included so that the study can be replicated.

- Describe in detail the execution of the research.
- Describe the experimental design and manipulations.
- State the instructions given to the subjects (paraphrase, not verbatim).
- If a cover story (deception) is used, explain what it is.
Data Analysis (L = 2 or 3 sentences) (R = 0)
How will the data be analyzed and what statistics will be used.

Limitations of the Study (L = 1 paragraph) (R = 0)
What limitations exist in your methods or approach?
- Sampling restrictions
- Uncontrolled variables
- Faulty instrumentation
- And other compromises to internal and external validity?

Follow-up
Describe how the follow-up will be conducted to determine if the achieved affects will exist in the real world.

References

References 12+
- A listing of all research articles and books referenced in the proposal.
- suggested number – should equal number of pages