Course Description

An introduction to research design methodology. The class prepares students for formulating questions that can be translated into research designs. Students will follow the steps of the research process from the specification of the original idea to the reporting of the results of the study. A variety of types of research will be covered including program evaluation, meta-analytic designs, non-experimental observational research, survey research, and experimental designs. Students will study classic research literature and design their own research project.

Course Textbook


Course Learning Outcomes

Upon completion of this course, students should be able to:

1. Examine the professional literature as it relates to conceptualizing and conducting research.
2. Utilize research methods, research principles, techniques, and procedures of quantitative research methods.
3. Explain the fundamentals of measurement as applied to ethical public health research.
4. Evaluate basic analytic strategies for data analysis and determine when it is necessary to consult with a statistician for additional assistance.
5. Compare and contrast quantitative and qualitative research methods and describe the most appropriate use including the advantages and disadvantages in public health research design.
6. Describe a variety of techniques that may be used to communicate research results.

Credits

Upon completion of this course, the students will earn three (3) hours of college credit.

Course Structure

1. **Unit Learning Outcomes**: Each unit contains Unit Learning Outcomes that specify the measurable skills and knowledge students should gain upon completion of the unit.
2. **Unit Lesson**: Each unit contains a Unit Lesson, which discusses unit material.
3. **Reading Assignments**: Each unit contains Reading Assignments from one or more chapters from the textbook.
4. **Learning Activity (Non-Graded)**: A non-graded Learning Activity is provided in Unit III to aid students in their course of study.
5. **Key Terms**: Key Terms are intended to guide students in their course of study. Students should pay particular attention to Key Terms as they represent important concepts within the unit material and reading.
6. **Discussion Boards**: Discussion Boards are part of all CSU term courses. More information and specifications can be found in the Student Resources link listed in the Course Menu bar.
7. **Unit Assignments**: Students are required to submit for grading Unit Assignments in Units I, II, and IV-VIII. Specific information and instructions regarding these assignments are provided below. Grading rubrics are included with the each Unit Assignment. Specific information about accessing these rubrics is provided below.
8. **Ask the Professor**: This communication forum provides you with an opportunity to ask your professor general or course content related questions.
9. **Student Break Room**: This communication forum allows for casual conversation with your classmates.
CSU Online Library

The CSU Online Library is available to support your courses and programs. The online library includes databases, journals, e-books, and research guides. These resources are always accessible and can be reached through the library webpage. To access the library, log into the myCSU Student Portal, and click on “CSU Online Library.” You can also access the CSU Online Library from the “My Library” button on the course menu for each course in Blackboard.

The CSU Online Library offers several reference services. E-mail (library@columbiasouthern.edu) and telephone (1.877.268.8046) assistance is available Monday – Thursday from 8 am to 5 pm and Friday from 8 am to 3 pm. The library’s chat reference service, Ask a Librarian, is available 24/7; look for the chat box on the online library page.

Librarians can help you develop your research plan or assist you in finding relevant, appropriate, and timely information. Reference requests can include customized keyword search strategies, links to articles, database help, and other services.

Unit Assignments

Unit I Project

Research Topic and Question

Select a public health research topic and create a research question. Include an introduction and background to the topic. The objective of this assignment is for you to choose a topic and develop a research question that will ultimately be part of your final research project. Remember, you must use scholarly, peer-reviewed material for this assignment.

You are to write a formal paper of a minimum of 500 words, double-spaced, with in-text citations and references in APA format, to answer the questions below.

1. What is your research topic (give information/details about the topic)?
2. Why did you choose this topic?
3. What is your research question?

Some example topics include:

- Health consequences of second-hand smoke
- Adolescent obesity
- Depression and eating disorders
- Access to health care
- Health disparities among minorities
- HIV transmission, control, and prevention

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.

Unit II Project

Literature Review

The objective of this assignment is for you to conduct a literature review. The literature review will also be a part of your final research project. Using the topic you selected in Unit I, conduct a review of the literature using one of the resources in the CSU Online Library. You will select and analyze three of the sources that you identify during this literature review. Remember, you must use scholarly, peer-reviewed material for this assignment.

Write a formal two-three page paper, double-spaced, with in text citations and references in APA format, to complete the following:

1. What is your topic?
2. What search terms did you use for the literature search?
3. What database(s) did you use for the literature review?
4. Review three peer-reviewed sources that you identified in your literature search.
5. Summarize the main points and compare and contrast the three sources you selected.
Information about accessing the Blackboard Grading Rubric for this assignment is provided below.

Unit IV Project
Research Design and Methodology

The objective of this assignment is for you to complete the third part of the final research project. Using the topic you selected in Unit I, discuss the research design and methodology you plan to use in your final research project. Include the type of data you will need to collect to successfully complete the research. Consider the following questions:

1. Will you use a quantitative, qualitative, or mixed methods approach?
2. Why did you choose this approach?
3. What type of information do you need to collect to answer your research question?
4. What type of tool will you use to collect this information: survey, interview, observation, review of medical records?

Write a formal one-two page paper of at least 500 words, double-spaced, with in text citations and references in APA format.

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.

Unit V Project
Data Instrument and Data Collection Tool

The objective of this assignment is for you to complete the fourth part of the final research project. This assignment is divided into two parts. In Part 1, you will provide a description of your data instrument, and in Part 2, you will provide the data collection tool that you will use for your project.

Part 1: Data Instrument

1. What type of research are you conducting, quantitative or qualitative?
2. Are you providing a questionnaire with closed ended questions or are you going to conduct an interview with open-ended questions?
3. If you are distributing a questionnaire, will you give it face-to-face, online, via telephone, or by mail?
4. If you are conducting an interview, discuss if it will be conducted face-to-face, via telephone, or by mail?
5. Will it be one-on-one or group interviewing?
6. Who is the study population? (350 word minimum for Part 1)

Part 2: Data Collection Tool

1. Starting with an introduction to your research study, provide brief information on the purpose of your study. Why are you conducting it? How long will participation take? (one paragraph)
2. List a minimum of ten questions for your questionnaire or interview, starting with the easiest questions listed first. (three sentences per question)

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.

Unit VI Project
Data Analysis Plan

The objective of this assignment is for you to complete a data analysis plan, the fourth part of the final research project. In a minimum of 500 words, construct your data analysis plan. Be sure to answer all of the following questions:

1. How will you check for accuracy?
2. What types of variable measurements are you collecting?
3. Which statistical tests will you use to answer your research question? Why?
4. Will you consult an expert? Why, or Why not?

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.
Unit VII Final Project

Final Research Project

In this assignment, you will submit your final research project. You will compile all the parts that you completed in Units I, II, IV, V and VI into one paper. Please use subheadings to identify each section of your research. You will need to add a title page, abstract, conclusion, and references page to your compiled research.

Your conclusion should answer the questions below. (approximately 500 words)

1. What do you hope to learn from your research findings?
2. How will you communicate the findings?
3. What will you do with the information that you communicate? Will you start a public health program? Will you start providing education?
4. Summarize the entire project.

Your completed paper should include the following:

- Title Page
- Abstract: Include an abstract after the title page. (approximately 200-300 words)
- Body: Please use the subheadings below in your paper to identify each part.
  - Introduction
  - Literature Review
  - Research Design and Methodology
  - Data Instrument
  - Data Collection Tool
  - Data Analysis Plan
  - Conclusion
- References

Please remember that your paper should be in APA format with in-text citations and references.

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.

Unit VIII PowerPoint Presentation

In this assignment, you will submit a PowerPoint presentation summarizing your entire project. You should submit a minimum of 10 slides. This does not include the title slide and reference slide.

- Title page (1 slide)
- Introduction (1 slide)
- Background information on topic (minimum of 2 slides)
- Research question (1 slide)
- Research design/methodology (minimum of 2 slides)
- Data collection plan (1 slide)
- What you learned from research (minimum of 2 slides)
- Dissemination plan (1 slide)
- References (1 page)

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.
APA Guidelines

The application of the APA writing style shall be practical, functional, and appropriate to each academic level, with the primary purpose being the documentation (citation) of sources. CSU requires that students use APA style for certain papers and projects. Students should always carefully read and follow assignment directions and review the associated grading rubric when available. Students can find CSU’s Citation Guide by clicking here. This document includes examples and sample papers and provides information on how to contact the CSU Success Center.

Grading Rubrics

This course utilizes analytic grading rubrics as tools for your professor in assigning grades for all learning activities. Each rubric serves as a guide that communicates the expectations of the learning activity and describes the criteria for each level of achievement. In addition, a rubric is a reference tool that lists evaluation criteria and can help you organize your efforts to meet the requirements of that learning activity. It is imperative for you to familiarize yourself with these rubrics because these are the primary tools your professor uses for assessing learning activities.

Rubric categories include: (1) Discussion Board, (2) Assessment (Written Response), and (3) Assignment. However, it is possible that not all of the listed rubric types will be used in a single course (e.g., some courses may not have Assessments).

The Discussion Board rubric can be found within Unit I’s Discussion Board submission instructions.

The Assessment (Written Response) rubric can be found embedded in a link within the directions for each Unit Assessment. However, these rubrics will only be used when written-response questions appear within the Assessment.

Each Assignment type (e.g., article critique, case study, research paper) will have its own rubric. The Assignment rubrics are built into Blackboard, allowing students to review them prior to beginning the Assignment and again once the Assignment has been scored. This rubric can be accessed via the Assignment link located within the unit where it is to be submitted. Students may also access the rubric through the course menu by selecting “Tools” and then “My Grades.”

Again, it is vitally important for you to become familiar with these rubrics because their application to your Discussion Boards, Assessments, and Assignments is the method by which your instructor assigns all grades.

Communication Forums

These are non-graded discussion forums that allow you to communicate with your professor and other students. Participation in these discussion forums is encouraged, but not required. You can access these forums with the buttons in the Course Menu. Instructions for subscribing/unsubscribing to these forums are provided below.

Click here for instructions on how to subscribe/unsubscribe and post to the Communication Forums.

Ask the Professor

This communication forum provides you with an opportunity to ask your professor general or course content questions. Questions may focus on Blackboard locations of online course components, textbook or course content elaboration, additional guidance on assessment requirements, or general advice from other students.

Questions that are specific in nature, such as inquiries regarding assessment/assignment grades or personal accommodation requests, are NOT to be posted on this forum. If you have questions, comments, or concerns of a non-public nature, please feel free to email your professor. Responses to your post will be addressed or emailed by the professor within 48 hours.

Before posting, please ensure that you have read all relevant course documentation, including the syllabus, assessment/assignment instructions, faculty feedback, and other important information.
Student Break Room

This communication forum allows for casual conversation with your classmates. Communication on this forum should always maintain a standard of appropriateness and respect for your fellow classmates. This forum should NOT be used to share assessment answers.

Grading

- Discussion Boards (8 @ 2%) = 16%
- Projects (5 @ 10%) = 50%
- Unit VII Final Project = 24%
- Unit VIII PowerPoint Presentation = 10%

**Total** = 100%

Course Schedule/Checklist (PLEASE PRINT)

The following pages contain a printable Course Schedule to assist you through this course. By following this schedule, you will be assured that you will complete the course within the time allotted.
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### Unit I: Introduction to Research

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### Unit II: Literature Reviews

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Notes/Goals:
# PUH 6301, Public Health Research

## Course Schedule

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<td>□ Chapter 21: Primary Studies: Ethical Considerations</td>
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<td>□ Chapter 22: Ethical Review and Approval</td>
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<td>□ Chapter 23: Secondary Studies: Existing Data Sets</td>
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<td>□ Visit the following link and read <em>The Belmont Report</em>: <a href="http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html">http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html</a></td>
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**Notes/Goals:**
## Unit V: Research Methods—Continued

### Review:
- [ ] Unit Study Guide

### Read:
- [ ] Chapter 16: Primary Studies: Selecting a Sample Population
- [ ] Chapter 17: Primary Studies: Estimating Sample Size
- [ ] Chapter 18: Primary Studies: Developing a Questionnaire
- [ ] Chapter 19: Primary Studies: Surveys and Interviews
- [ ] Chapter 20: Primary Studies: Additional Assessments
- [ ] Visit the CSU Online Library and find the articles below:
  


### Discuss:
- [ ] Discussion Board Response: Submit your response to the Discussion Board question by Saturday, 11:59 p.m. (Central Time)
- [ ] Discussion Board Comment: Comment on another student's Discussion Board response by Tuesday, 11:59 p.m. (Central Time)

### Submit:
- [ ] Project by Tuesday, 11:59 p.m. (Central Time)

### Notes/Goals:

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## Unit VI: Data Analysis

### Review:
- [ ] Unit Study Guide

### Read:
- [ ] Chapter 25: Data Management
- [ ] Chapter 26: Descriptive Statistics
- [ ] Chapter 27: Comparative Statistics
- [ ] Chapter 28: A Brief Guide to Advanced Health Statistics

### Discuss:
- [ ] Discussion Board Response: Submit your response to the Discussion Board question by Saturday, 11:59 p.m. (Central Time)
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