OVERVIEW:

1. BROAD PURPOSE OF COURSE

This course is designed to introduce students to basic research methods used in health care research. The course will provide an overview of basic methodological concepts used in health care, social science, and behavioral science research. After completing this course you should be able to demonstrate an advanced understanding of all phases and components of the research process including: generating research questions and hypotheses, designing a study, selecting a study sample, measuring variables and constructs, collecting data and planning data analysis.

OBJECTIVES:

2. COURSE OBJECTIVES

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

1. Accurately critique different kinds of practice-related research reports.
2. Enhance skills in accessing and critically reviewing practice-related research.
3. Demonstrate understanding of various approaches to data collection and analysis
4. Select appropriate statistical procedures to analyze and correctly interpret different kinds of data.
5. Identify and follow appropriate procedures and rules for obtaining informed consent, preserving confidentiality, and notifying participants of benefits and risks related to research.

3. GRADING POLICY

Homework Assignments: 150 points (15 points each)

You will be required to complete 10 class assignments throughout the semester. Assignments should be submitted on the due date to receive credit. No late assignments will be accepted unless approved by the instructor. The Instructor will provide handouts in class with instructions for each homework assignment.

Research Proposal: 150 points

You will be required to write a research proposal to conduct a study in your area of interest. Proposal should be about 10 to 15 pages long with 1” margins (font should be 12 Times New Roman). Please do not include more than 1 direct quote from the literature. The content of the proposal should include the following:

1. Title page
2. Introduction (1-2 pages)
   a. Specific aims
   b. Research questions to be answered
3. Review of the Literature (3 – 5 pages)
4. Significance of the study (1 – 2 pages)
5. Methods/Results section (4 – 6 pages)
No late proposals will be accepted unless approved by the instructor.

**Presentation: 50 points**

You will be required to give a 10-15 minute presentation of your research proposal. You are allowed an additional 5-10 minutes of discussion time. The use of PowerPoint slides is preferred.

**Class Participation: 50 points**

Active participation in class, peer evaluations, and during group activities is crucial for learning in this course. Class participation also includes playing active roles in creating a supportive atmosphere in which every participant's learning will be fostered. I do expect you to attend every class meeting. Excessive absences will be counted against participation points. Feel free to discuss and share with me whatever problems emerge that can affect your participation in the class.

**METHODS OF EVALUATION**

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<th>Assignments</th>
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<td>Homework Assignments</td>
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<td><strong>Total Points Possible</strong></td>
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<tr>
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<td>A</td>
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<tr>
<td>B</td>
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<td>D</td>
<td>240 – 279</td>
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4. **TEXTS AND READINGS**

**Required:**

William Trochim, *Research Methods: The Concise Knowledge Base*

**Recommended:**

5. ACADEMIC INTEGRITY

Academic Integrity Policy
Students are expected to abide by and uphold the Academic Integrity Policy for Graduate Students from the Graduate School of Arts & Sciences. All students should have received this policy. Please contact the Office of the Dean of the School of Arts & Sciences to obtain copies of this document.

Students with disabilities
Washington University is committed to providing accommodations and/or services to students with documented disabilities. Students who are seeking support for a disability or a suspected disability should contact the Disability Resource Center (DRC) at 5-4062 on the lower level of the Women's Building (drc@dosa.wustl.edu). The DRC is responsible for approving and arranging all accommodations for University students.
6. CLASS SCHEDULE

Class 1

**Topic:** Introduction & Overview; Designing your research question(s)

1. Text: Research & Medical Literature - Chapter 1: Introduction

MLK Holiday

Class 2

**Reading Assignment:**
1. Text: Trochim: Chapter 1: Foundations
2. Text: Research & Medical Literature - Chapter 4: Human Subjects and the IRB

**Class Homework 1:**
1. Identifying Independent and Dependent variables

Class 3

**Reading Assignment:**
1. Text: Research & Medical Literature – Chapter 6: The Research Problem
 Chapter 7: Review of the Literature

**Class Homework 2:**
1. The Hourglass Notion of Research – Practice with study design

Class 4

**Reading Assignment:**
Text: Trochim: Chapter 2: Sampling

**Class Homework 3:**
1. Gaining Practice in Sampling Critique (Exercise 2-2b)

Class 5

**Reading Assignment:**
Text: Trochim: Chapter 3: The Theory of Measurement

**Class Homework 4:**
1. Practice in Measurement Critique (Exercise 3-3b)
2. Proposal discussions – Research questions, introduction

Class 6

**Reading Assignment:**
1. Text: Trochim: Chapter 4: Survey Research
2. Text: Research & Medical Literature – Chapter 10: Survey Research

**Class Homework 5:**
1. Recognition of Item Formats (Exercise 4-3a)

Class 7
Reading Assignment:
Text: Trochim: Chapter 13: Write-Up

Class Homework: Proposal draft/discussions

Spring Break

Class 8

Reading Assignment:
  1. Text: Trochim: Chapter 7: Design
  2. Text: Research & Medical Literature – Chapter 8: Methodology

Class Homework 6: Critiquing Internal Validity (Exercise 7-3a)

Class 9

Reading Assignment:
  1. Text: Trochim: Chapter 6: Qualitative and Unobtrusive Measures
  2. Text: Research & Medical Literature – Chapter 12: Qualitative Research

Class Homework 7: The Qualitative Methods Critique (Exercise 6-3b)

Class 10

Reading Assignment:
  1. Text: Trochim: Chapter 11: Analysis

Class Homework 8: Understanding Statistical Significance and Power (Exercise 11-2b)

Class 11

Reading Assignment:
  1. Text: Trochim: Chapter 12: Analysis for Research Design

Class Homework 9: Interpreting the Results of an Inferential Statistical Analysis (Exercise 12-3a)

Class 12

Reading Assignment:
  1. Text: Research & Medical Literature – Chapter 14: Data Analysis

Guest Lecture

Class Homework: Proposal draft/discussions: Methods and Results section

Class 13

Class Homework 10: Proposal Peer Reviews

Class 14

Class Presentations
Research Proposal is due

Class 15:
Class Presentations