

CEDAR CREST COLLEGE

**RESEARCH DESIGN AND METHODOLOGY
COURSE SYLLABUS**

COURSE TITLE: Research Design and Methodology

COURSE CODE: EDU 525

CREDITS: 3 credits

SEMESTER: Spring 2010

SCHEDULE: Mondays 6:00 p.m. to 9:00 p.m.
January 19, 2010 to May 5, 2010 as noted in Course Schedule below

LOCATION: Curtis Hall 135 & 208

INSTRUCTOR:

Nancy L. King, Ed.D.

E-mail: nlking@cedarcrest.edu

Phone: Office: 610- 606-4666, Ext. 3616

Cell: 610-858-3400 (cell)

OFFICE: Curtis, Room 225

OFFICE HOURS: Monday 1:00 p.m. – 4:00 p.m., Thursday 11:00 a.m. – 2:00 p.m., or by Appointment

PLEASE NOTE: Email correspondence to the Instructor should be made through a student's Cedar Crest College email account to the Instructor's designated email account.

REQUIRED COURSE TEXTS:

Fraenkel, J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education* (7th ed.). New York: McGraw Hill.

American Psychological Association (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington DC: Author.

SUPPLEMENTARY COURSE MATERIALS:

Access to Microsoft Excel, Statistical Package for the Social Sciences (SPSS) and/or EndNote.

COURSE DESCRIPTION:

Research Methods and Design (EDU 525) will provide the opportunity for students to explore the importance and value of research in the field of education. Textbook assignments, self-selected assignments, class discussions, large and small group interactions, presentations, lectures, and guided research reviews will serve as the means of delivering instruction. The course is designed to promote collaborative interactions and support between students and the Instructor toward the completion of the course requirements.

COURSE OBJECTIVES:

- Students will demonstrate an understanding of the goals, applications, and limitations of research in the field of education.
- Students will explore research designs and methods for conducting a research study.
- Students will conduct a broad review of literature relevant to a selected research topic which pertains to their educational and professional goals.
- Students will design a potential research study and complete the required chapters of a research proposal.
- Students will develop and deliver a presentation to explain the focus and value of the proposed research study.

COURSE REQUIREMENTS FOR CREDIT:

Complete a broad review of literature related to the selected research topic.

Complete the assigned projects as described on the following page.

Complete and present the Research Proposal as described on the following pages.

Attend, actively participate, and complete required assignments in all classes.

ATTENDANCE POLICY

Attendance at all class meetings is expected and a vital part of the learning process. If an illness or emergency occurs during the semester, the student is responsible for contacting the instructor by email or telephone in advance of the scheduled class and making arrangements for completing the work missed. Students are responsible for the content and assignments covered in all class sessions. Unexcused absences will impact the final grade.

COURSE ASSESSMENT

The chapters, final research Proposal, and presentation will serve as the major means for assessing student knowledge and application of the course content. Class attendance, participation, and assignments, guided research reviews, and related assignments will provide additional opportunities for students to demonstrate extended knowledge.

The final product submitted should be the work of the individual student and one that embodies principles of honesty and academic integrity as expected at Cedar Crest College. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Acts of dishonesty violate the fundamental ethical principles of the College community and compromise the worth of work completed by others.

Each of the following assignments will be awarded a maximum number of points as indicated. The number of points awarded for each assignment will be determined by the quality of the product submitted. Points will be deducted for assignments submitted after the due date. The final grade for the course will be based on the student's accumulated points.

Class Attendance, Participation, & Assignments	10 points
Assigned Projects	20 points (4 Assignments @ 5 points)
Research Study Critique	
Research Problem	
National Institute of Health (NIH) Certificate	
Microsoft Excel Grade Sheet	
Chapter 1 – Introduction	10 points
Chapter 2 – Literature Review & References	15 points
Chapter 3 – Methodology	10 points
Final Research Proposal	25 points
Class Presentation of Research Proposal	10 points
Total	100 Points

COURSE GRADING

A	94 points and above
A-	90 – 93 points
B+	87 – 89 points
B	84 – 86 points
B-	80 – 83 points
C+	77 – 79 points
C	74 – 76 points
C-	70 – 73 points
D+	67 – 69 points
D	63 – 66 points
F	Below 63 points

PLEASE NOTE: Students must achieve a B or better in all education classes.

RESEARCH PROPOSAL

Each chapter and the final Research Proposal should be written in APA format. Refer to the required text:

American Psychological Association. (2010) *Publication manual of the American Psychological Association* (6th ed.). Washington DC: Author.

Chapter 1 - Introduction

The Introduction serves as a general overview of the research problem and the proposed research study. The Introduction should be 2-3 pages in length and should include the following:

Statement of the research **problem**.

Statement about the **purpose** of the research study.

Statement of research **questions or hypothesis** to be addressed in the research study.

Statement about the **rationale and significance or value** of the research study.

Statement about the **audience(s)** for the study.

Statement about the **limitations** of the existing research.

Definitions of critical terms used in the research proposal.

Chapter 2 - Literature Review

The Literature Review serves as a review and synthesis of current research related to the proposed research study. The student demonstrates knowledge of the topic being investigated and the major findings of previous research conducted on the selected topic. The Literature Review should be 5-7 pages in length and should be developed according to the following guidelines:

- Review a **minimum of 15 primary sources** related to the research study. Primary sources should be empirical studies conducted within the last 5 -10 years.
- Include conflicting or opposing viewpoints on the research problem.
- Identify research themes and discuss individual studies.
- Provide an analysis of the research.
- Discuss conclusions and implications of research studies reviewed.
- Include the **References** section with the Literature Review.

Chapter 3 - Methodology

The Methodology serves as the theoretical framework of the research study and describes the modes and means by which the research will be or could be conducted. The Methodology section should be 5-7 pages in length and should include a detailed description of the following:

- Restatement of the research questions and hypotheses for the research study.
- Research study design that will serve to address the research questions and hypotheses.
- Population sample.
- Types and sources of data to be collected.
- Instruments that will be used to collect the data.
- Data-collection procedures.
- Proposed data-analysis methods and strategies.
- Connection between the research questions/hypotheses and the methods for the research study.

References

The References section lists all sources used in the writing of the proposal. Every source cited in the proposal must be included in the References section. Every source cited in the Reference section must appear in the body of the proposal. The References section begins on a new page and is completed according to appropriate APA format.

Final Research Proposal

The Final Research Proposal is a culmination of the chapters developed during the course and provides a revised version of the Introduction, Literature Review and Methodology for the research proposal. The final Research Proposal should be 12-20 pages in length and will include the following sections:

Chapter 1 – Introduction with appropriate revisions. (2-3 pages)

Chapter 2 – Literature Review with appropriate revisions. (5-7 pages)

Chapter 3 – Methodology with appropriate revisions. (5-7 pages)

References - Citation of **resources** related to and supporting the proposed research study.
(1 – 3 pages)

ASSIGNED PROJECTS

The following projects for Research Design and Methodology (EDU 525) extend a student's experiences to support the development of the required proposal for the course. Students are required to complete each of the assignments listed below. Each assignment has a value of 5 course points. The number of points awarded will be based on the quality of the completed assignment.

Research Study Critique

To develop an understanding of research design and the format of a research article, students will select a research study or an article from a professional journal and write a critique of the study following the guidelines provided for completing the assignment.

Research Problem

Students will identify a research topic and define a research problem. Students will follow the guidelines provided for the assignment to complete the required elements of the problem statement.

National Institute of Health Certificate

In order to understand the goals and principles of Human Subjects Protection, students will to complete the National Institute of Health (NIH) Web-based training course, "Protecting Human Research Participants". Students will access the training program at the following website: <http://phrp.nihtraining.com/index.php>. Students will submit the certificate from the National Institutes of Health (NIH) Office of Extramural Research to certify successful completion of the training course.

Microsoft Excel Grade Sheet

Using the Microsoft Excel Program, students will create a student grading spreadsheet that incorporates formulas to calculate both the final grade for individual students and the average grade for students on each of five assignments. The spreadsheet must list a minimum of ten anonymous students with percentage grades for five different assignments. The spreadsheet should allow the user to enter grades, and the spreadsheet should automatically generate grade averages for each student and group averages for each assignment. The spreadsheet must be submitted to the instructor in hard copy and electronically.

COURSE SCHEDULE:

Date	Topics	Readings and Assignments
January 25	Course Overview Review of Syllabus Introduction to Educational Research	Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 8 Writing Research Proposals and Reports Chap. 24 pp. 600 - 623

<p>February 1</p>	<p>Types of Research The Research Process Critiquing Educational Research</p>	<p>Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 1 The Nature of Research Chap. 1 pp. 2 – 24</p> <p><i>Publication Manual of the American Psychological Association, Sixth Edition</i> Chap. 1 pp. 9 - 20</p>
<p>February 8</p>	<p>Identifying a Research Problem Studying Relationships Manuscript Structure and Content</p>	<p>Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 2 The Basics of Educational Research Chap. 2 - 3 pp. 26 - 52</p> <p><i>Publication Manual of the American Psychological Association, Sixth Edition</i> Chap. 2 pp. 21 – 40</p> <p>Research Study Critique Due</p>
<p>February 15</p>	<p>Ethics and Research Researcher Computer Based Training NIH Office of Human Participants Mechanics of Style</p>	<p>Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 2 The Basics of Educational Research Chap. 4 pp. 54 - 67</p> <p>http://phrp.nihtraining.com/index.phpp</p> <p><i>Publication Manual of the American Psychological Association, Sixth Edition</i> Chap. 4 pp. 87 – 124</p> <p>Research Problem Due</p>

<p>February 22</p>	<p>Library Research</p> <p>Review of Literature</p> <p>Citing References</p>	<p>Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 2 The Basics of Educational Research Chap. 5 pp. 66 – 88</p> <p><i>Publication Manual of the American Psychological Association, Sixth Edition</i> Chap. 6 pp. 169 – 189</p> <p>NIH “Protecting Human Research Participants” Certificate Due</p>
<p>March 1</p>	<p>Collecting Data</p> <p>Sampling</p> <p>Instrumentation</p> <p>Validity</p> <p>Reliability</p> <p>Reference List</p>	<p>Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 2 The Basics of Educational Research Chap. 6 – 9 pp. 89 - 182</p> <p><i>Publication Manual of the American Psychological Association, Sixth Edition</i> Chap. 7 pp. 193 – 224</p> <p>Microsoft Excel Grade Sheet Due</p>
<p>March 15</p>	<p>Statistical Procedures</p> <p>Data Analysis</p> <p>Interpreting Data</p> <p>Writing Clearly and Concisely</p>	<p>Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 3 Data Analysis Chap. 10 - 12 pp. 183 – 258</p> <p><i>Publication Manual of the American Psychological Association, Sixth Edition</i> Chap. 3 pp. 61 - 84</p> <p>Chapter I Introduction Due</p>

March 22	Research Methods Quantitative Research Methods	Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 4 Quantitative Research Methodologies Chap. 13 - 15 pp. 260 – 361
March 29	Research Methods Quantitative Research Methods Creating Surveys	Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 4 Quantitative Research Methodologies Chap. 16 - 17 pp. 362 – 418 Chapter 2 Review of Literature Due
(Tuesday) April 6	Research Methods Qualitative Research Methods	Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part 5 & Part 6 Chap. 18 – 19 pp. 420 – 477
April 12	Presentation Guidelines Peer Editing Introduction	Revised Introduction for peer editing Chapter 3 Methodology Due
April 19	Microsoft Power Point Peer Editing Literature Review	Revised Literature Review for peer editing
April 26	Peer Editing Methodology Research Proposal Presentations	Revised Methodology for peer editing

May 3	Research Proposal Presentations	Final Research Proposal Due
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Note: The Instructor may find it necessary to revise the syllabus and course schedule in order to meet course objectives.

Accommodations for Students with Disabilities: Students with documented disabilities who may need accommodations should discuss these needs with the Instructor during the first two weeks of class. Students with disabilities who wish to request accommodations should contact Academic Services.

Plagiarism: Plagiarism is regarded as a failure to comply with the Cedar Crest College Honor Code as noted in Section A of *A Student's Guide to Cedar Crest College*. Any student who has used the work of another person and has not cited that person as the source of the work will receive a grade of "0" for that assignment.

Classroom Protocol and Student Behavior: Appropriate classroom behavior is expected as noted in Section A of *A Student's Guide to Cedar Crest College*. All students and faculty have the right to a courteous and respectful classroom environment free from distractions and behaviors that might disrupt instruction and learning. Please note that all electronic devices should be turned off during class.