

**CEDAR CREST COLLEGE**

**RESEARCH DESIGN AND METHODOLOGY  
COURSE SYLLABUS**

**COURSE TITLE:** Research Design and Methodology

**COURSE CODE:** Edu 525

**CREDITS:** 3 credits

**SEMESTER:** Fall 2009

**SCHEDULE:** Thursdays 6:00 p.m. to 9:00 p.m.  
August 27, 2009 to December 3, 2009 (Thanksgiving Break on November 26)

**LOCATION:** Blaney Hall 8

**INSTRUCTOR:**

Nancy L. King, Ed.D.

E-mail: [nlking@cedarcrest.edu](mailto:nlking@cedarcrest.edu)

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

Cell: 610-858-3400 (cell)

**OFFICE:** Curtis, Room 225

**OFFICE HOURS:** Tuesday 1:00 p.m. – 4:00 p.m., Thursday 2:30 p.m. – 5:30 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 (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington DC: Author.

**RECOMMENDED READINGS:**

Peddiewell, J. A. (1939). *The saber-tooth curriculum*. New York: McGraw Hill.

Lightfoot, S. L. (1983). *The good high school*. Basic Books.

**SUPPLEMENTARY COURSE MATERIALS:**

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

**COURSE DESCRIPTION:**

Research Design and Methodology (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. Two major goals will be realized during the course:

1. Students will be exposed to research processes and engaged in a review of literature and research methodology.
2. Students will complete and submit a Research Proposal on a selected topic.

**COURSE OBJECTIVES:**

- Students will demonstrate an understanding of the goals, applications, and limitations of research in the field of education.
- Students will explore the different modes of research and their appropriate applications.
- Students will complete a broad review of literature relevant to a selected research topic which pertains to their educational and professional goals.
- Students will explore research designs and methods for conducting a research study.
- 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 proposed research topic.

Complete one or more student-selected assignments as described on the attached page.

Complete and present a 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.

## RESEARCH PROPOSAL

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

American Psychological Association. (2001) *Publication manual of the American Psychological Association* (5th 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 and 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.
- Attach the **References** section to 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.
- 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 serves as 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 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)

## 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 student-selected 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
Guided Research Projects	15 points (3 Assignments @ 5 points)
Chapter 1 – Introduction	10 points
Chapter 2 – Literature Review & References	15 points
Chapter 3 – Methodology	10 points
Final Research Proposal	25 points
Student-Selected Assignments	5 points (maximum of 15 points)
Class Presentation of Research Proposal	10 points

**Total 100 – 110 Points**

## COURSE GRADING

A	92 points and above
A-	90 – 91 points
B+	88 – 89 points
B	82 – 87 points
B-	80 – 81 points
C+	78 – 79 points
C	72 – 77 points
C-	70 – 71 points
D+	68 – 69 points
D	65 – 67 points
D-	63 – 64 points
F	62 points and below

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

**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.

## STUDENT – SELECTED ASSIGNMENTS

The following student-selected assignment for Research Design and Methodology (Edu 525) are offered to extend a student's experiences beyond the required assignments for the course. These assignments are specifically designed to differentiate instruction by addressing individual student interests, expertise or learning styles.

**Students are required to complete at least one of the assignments listed below for up to 5 course points.** A student may elect to complete up to 3 of the options listed for a maximum of 15 points. The student-selected assignments allow a student to accumulate additional points toward his or her final grade for the course. As such, these assignments allow a student to supplement points deducted from the required assignments in order to move their final grade to the desired level. Points awarded for each assignment will range from 1 to 5 points. The number of points awarded will be based on the quality of the completed assignment.

### RECOMMENDED READINGS

### 5 TO 10 POINTS

The following textbooks are recommended but not required readings for the course. A student may elect to read one or both textbooks and submit a 2 page written report or provide a 5 minute oral presentation on the educational relevance of the textbook. Students providing a written report or oral presentation of either textbook will be awarded up to 5 points.

**Peddiewell, J. A. (1939). *The saber-tooth curriculum*. New York: McGraw Hill.**  
**Lightfoot, S. L. (1983). *The good high school*. Basic Books.**

### RESEARCH TOOLS

### 5 to 15 POINTS

The following research tools are offered to extend a student's knowledge base on data analysis and research processes. Students may elect any one of the research tool assignments listed below. Each assignment is worth up to 5 points with a maximum of 15 points for all three assignments.

#### MICROSOFT EXCEL

Using the Microsoft Excel Program, students may choose to 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 should list 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.

#### STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES (SPSS)

Students may choose to explore the SPSS Program and provide a 2 page written report or a 5 minute oral presentation on the application of the program in analyzing statistical data for a research project.

#### ENDNOTE

Students may choose to explore the EndNote Program and provide a 2 page written report or a 5 minute oral presentation on the application of the program with research citations.

### RESEARCH SEARCH ENGINES

### 5 POINTS

Students may choose to select a current trend in education such as differentiated instruction or technology integration, among others, and research the selected educational trend using an internet search engine. Students should evaluate the quality of the websites generated by the search engine and provide a written or oral presentation of five quality websites that serve to inform others about the educational trend and its effectiveness to improve student achievement.

COURSE SCHEDULE:

Date	Topics	Readings and Assignments
August 27	<p>Course Overview</p> <p>Review of Syllabus</p> <p>Introduction to Educational Research</p>	<p>Fraenkel, J. R., &amp; Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill.            Part 1 Introduction to Research            Chap. 1 pp. 2 – 24</p>
September 3	<p>Identifying a Research Problem</p> <p>Identifying Purpose of Research</p> <p>Steps in Conducting Research</p>	<p>Fraenkel, J. R., &amp; 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 - 4 pp. 26 - 65</p>
September 10	<p>Critiquing Educational Research</p> <p>Review of Literature</p> <p>APA form</p> <p>Reference Citations</p>	<p>Fraenkel, J. R., &amp; 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, Fifth Edition</i>            Chap. 4 pp. 215 - 268</p>
September 17	<p>Researcher Computer Based Training</p> <p>NIH Office of Human Participants</p> <p>Library Research</p>	<p>Fraenkel, J. R., &amp; Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill.            Part 9 Writing Research Proposals and Reports            Chap. 25 pp. 615 - 642</p> <p><i>Publication Manual of the American Psychological Association, Fifth Edition</i>            Chap. 1 pp. 3 - 30</p> <p><b><a href="http://phrp.nihtraining.com/index.phpp">http://phrp.nihtraining.com/index.phpp</a></b></p> <p><b>Research Study Critique Due</b></p>

September 24	<p>Research Methods</p> <p>Quantitative Research</p>	<p>Fraenkel, J. R., &amp; 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</p> <p><i>Publication Manual of the American Psychological Association, Fifth Edition</i>  Chap. 3 pp. 77 - 129</p> <p><b>Research Problem Due</b></p>
October 1	<p>Research Methods</p> <p>Quantitative Research</p>	<p>Fraenkel, J. R., &amp; 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</p> <p><i>Publication Manual of the American Psychological Association, Fifth Edition</i>  Chap. 5 pp. 283 - 300</p> <p><b>NIH “Protecting Human Research Participants” Certificate Due</b></p>
October 8	<p>Research Methods</p> <p>Qualitative Research</p>	<p>Fraenkel, J. R., &amp; Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill.  Part 5 &amp; Part 6  Chap. 18 – 20 pp. 420 – 498</p> <p><b>Chapter I Introduction Due</b></p>
October 15	<p>Research Methods</p> <p>Qualitative Research</p>	<p>Fraenkel, J. R., &amp; Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill.  Part 5 &amp; Part 6  Chap. 21 – 22 pp. 500 – 554</p>



October 22	Collecting Data  Sampling  Instrumentation	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  <b>Chapter 2 Review of Literature Due</b>
October 29	Statistical Procedures  Data Analysis  Interpreting Data	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
November 5	Peer Editing Introduction	Fraenkel, J. R., & Wallen, N. E. (2009). <i>How to design and evaluate research in education</i> (7th ed.). New York: McGraw Hill. Part I Introduction to Research Chap. 6 pp. 150 - 181 Chap. 8 pp. 212 – 242  <b>Revised Introduction for peer editing</b>  <b>Chapter 3 Methodology Due</b>
November 12	Peer Editing Literature Review	<b>Revised Literature Review for peer editing</b>
November 19	Peer Editing Methodology  Research Proposal Presentations	<b>Revised Methodology for peer editing</b>
December 3	Research Proposal Presentations	<b>Final Research Proposal Due</b>

Note: The Instructor may find it necessary to revise the syllabus and course schedule in order to meet course objectives.