

**COURSE SYLLABUS**  
**RESEARCH METHODS AND DESIGN**  
**CEDAR CREST COLLEGE**

**COURSE TITLE:** Research Methods and Design  
**COURSE CODE:** Edu 525  
**CREDITS:** 3 credits  
**SEMESTER:** Spring 2009  
**SCHEDULE:** Mondays 6:30 p.m. to 9:00 p.m.  
January 19, 2009 to May 4, 2009 (No Classes on March 9 and April 13)  
**LOCATION:** Curtis Building Room 112

**INSTRUCTORS:** **Daniel A. Novey, Ed.D**  
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**OFFICE:** Curtis Building Room 112  
**OFFICE HOURS:** By Appointment (prior to or after class)

**PLEASE NOTE:** Email correspondence should be made through a student's Cedar Crest College email account to the instructors at their designated email accounts.

**REQUIRED COURSE TEXT**

Fraenkel, J.R. and N. E. Wallen, *How to Design and Evaluate Research in Education*, 5th Ed, McGraw Hill, 2003.

American Psychological Association, 2001, *Publication Manual of the American Psychological Association*, 5th Ed, Washington D.C. American Psychological Association.

**ANCILLARIES COURSE MATERIALS**

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

## **COURSE DESCRIPTION**

Research Methods and Design (Edu 525) will afford students the opportunity to explore the importance and value of research in the field of education. Two major goals will be realized during the course. Students will be exposed to and engaged in a review of literature along with research processes and methodology. This first goal will serve as the basis for the second goal of a Master's Research Proposal. Textbook assignments, self-selected assignments, class discussions, large and small group interactions, presentations/lectures, and guided research reviews will serve as the means of instructional delivery. Most important, the course is designed to promote collaborative interactions and support between students and instructors toward the completion of the course requirements.

## **COURSE OBJECTIVES**

Students will:

- understand the goals, applications, and limitations of research in the field of education.
- understand the different modes of research and their appropriate applications.
- complete a broad review of the literature relevant to a particular research topic which complements their educational and professional goals.
- explore the design and methods for conducting a research study
- design a potential research study and complete the required chapters of a research proposal.
- present and explain the focus and value of a proposed research study to others.

## **COURSE REQUIREMENTS FOR CREDIT**

- **Attendance and active engagement in all classes.**

Students are responsible for the content and assignments covered in any class they miss during the semester. Legitimate absences should be cleared with the instructors in advance by email or telephone call whenever possible. Unexcused absences may result in a lower final grade.

- **A broad review of literature related to the student's proposed research topic**
- **Completion of one or more student-selected assignments**

Please refer to the attached page on "Student-Selected Assignments"

- **Completion of a research proposal as described on the following pages**

# RESEARCH PROPOSAL

Each component or chapter of the research proposal should be typed with a 1.25 margin on all sides using a 12 point font. The Arial or Time Roman fonts are recommended.

## **Chapter 1 - Introduction**

The “Introduction” serves as a general overview of the research problem and the proposed research study.

- 2-3 pages
- Statement of the research **problem**
- Statement of the **purpose** of the research study
- Statement of research **questions** to be addressed in the research study
- Statement on the **significance or value** of the research study
- Statement on the **limitations** of the research study
- Citation of **literature** related to and supporting the proposed research study

## **Chapter 2 - Literature Review**

The “Literature Review” serves as a review and synthesis of current research related to the proposed research study. As such, the student demonstrates knowledge of the topic being investigated and the major trends in previous research conducted on the topic.

- 5-7 pages
- Review 15 or more primary and/or secondary 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
- **Define critical terms** used in the research
- **Provide an analysis of** the research
- **Identify themes, conclusions and implications** of the research
- **Synthesize** the research as a whole body of work

### **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.

- 5-7 pages
- Describe the research **questions** and workable **hypotheses** for the research study
- Describe the **design, framework, format or organization** of your research study that will serve to answer the research questions and prove the hypotheses
- Describe the **types and sources of data** to be collected
- Describe the **instruments** that will be used **to collect the data**
- Describe the **procedures to collect the data**
- Describe the **methods and strategies to analyze the data**
- Provide a clear **connection between the research** questions/hypotheses **and the methods** for the research study

### **Final Research Proposal**

The Final Research Proposal serves as a culmination of the chapters developed during the course and provides a revised and condensed version of the Introduction, Literature Review and Methodology for the research proposal.

- 7-10 pages
- **Chapter 1 – Introduction** with appropriate revisions 1-2 pages
- **Chapter 2 – Literature Review** with appropriate revisions 3-4 pages
- **Chapter 3 – Methodology** with appropriate revisions 3-4 pages

\* Each chapter and the final research proposal should be written in APA format. Please refer to the

**American Psychological Association, 2001, *Publication Manual of the American Psychological Association*, 5th Ed, Washington D.C. American Psychological Association.**

## **COURSE ASSESSMENT**

The individual chapters and the final research proposal will serve as the major means for assessing student knowledge and application of the course content. In addition, class participation/engagement, guided research reviews, and student-selected assignments will provide an opportunity for students to excel in a variety of differentiated modes and styles in order to fairly evaluate effort and extended knowledge.

Students are encouraged to collaborate, but 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. Such 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. The magnitude of the points awarded will be based on the rigor of the assignment and the time on task. The actual number of points awarded for each assignment will be based on the quality of the product submitted by the student. Points will be deducted for assignments submitted after the due date. The final grade for the course will be based on each student's number of accumulated points.

Class Participation/Engagement	10 points	
Guided Research Reviews	15 points	3 Assignments @ 5 points each
Chapter 1 – Introduction	10 points	
Chapter 2 – Literature Review	15 points	
Chapter 3 – Methodology	15 points	
Final Research Proposal	30 points	
Student-Selected Assignments	5 points	with a maximum of 10 points
<b>Total</b>	<b>100 – 105</b>	<b>Points</b>

## **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.**

## **ATTENDANCE POLICY**

Your attendance at all class meetings is expected and a vital part of the learning process. If vacations, athletic activities, professional duties, medical appointments, or any other conflicts prevent you from fully attending all classes, you are strongly encouraged to take this course during another semester. If an illness or emergency occurs during the semester, you are responsible for contacting the course instructor to make up work missed. Due to the interactive nature of this course, however, there will be assignments that you will not be able to make up if you are absent.

# STUDENT – SELECTED ASSIGNMENTS

The following student-selected assignments for Research Methods and Design (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 2 of the options listed for a maximum of 10 points. The student-selected assignments allow a student to accumulate additional points toward his or her final grade for the course as necessary. 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 for each assignment will range from 1 to 5 points. The actual number of points awarded will be based on the quality of the completed assignment.

## **CURRENT TRENDS IN EDUCATION**

**5 to 10 POINTS**

Students may elect to research a current trend in education by reading two articles related to a self – selected topic. A 1-2 page written report for each of the two articles or a 3-5 minute oral presentation on the selected topic may be selected. Students providing a written report will be awarded up to 5 points. Students choosing an oral presentation will also be awarded up to 5 points.

## **RESEARCH TOOLS**

**5 to 10 POINTS**

The following research tools are offered to extend a student's knowledge base on data analysis and research processes. Students may elect anyone of the research tool assignments listed below. Each assignment is worth up to 5 points with a maximum of 10 points for any two assignments.

### **MICROSOFT EXCEL**

**5 POINTS**

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.

### **STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES SPSS**

**5 POINTS**

Students may choose to explore the SPSS Program and provide a 1-2 page written report or a 3-5 minute oral presentation on the application of the program in analyzing statistical data for a research project.

### **ENDNOTE**

**5 POINTS**

Students may choose to explore the EndNote Program and provide a 1-2 page written report or a 3-5 minute oral presentation on the application of the program with respect to 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 their 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 it's effectiveness to improve student achievement.