

Augusta State University
College of Education Dept. of Educational Leadership, Counseling, and Special
Education
Fall 2009

Course: EDUC 7021: Conducting Educational Research
Time: W: 4:30
Instructor: Dr. Philip Smith
Office: UH 304
Telephone: 706-667-4492 (W); Email: psmith28@aug.edu
Office Hours: W: 3:00-4:15 or by appointment.

Required Text:

Conducting Educational Research (EDUC 7021), Pearson Custom Publishing. Available only at the ASU bookstore.

Other pertinent publications (a sample):

1. Campbell, D. T. & Stanley, J. C. (1963). *Experimental and Quasi Experimental Designs for Research*. Boston: Houghton Mifflin Company.
2. Field, A (2005) *Discovering Statistics with SPSS, 2nd Edition*. Thousand Oaks: Sage.
3. Glass, G. V. & Hopkins, K. D. (1996). *Statistical Methods in Education and Psychology* (3rd ed.). Boston: Allyn & Bacon.
4. Gravetter & Wallnau (1992). *Statistical Methods for the Behavioral Sciences* (7th ed.). Belmont CA: Thompson
5. Howell, D.C. (2007). *Statistical methods for Psychology* (6th ed.). Belmont CA: Thompson
6. Lomax, R. (2005) *An Introduction to Statistical Methods for Education and Behavioral Sciences*. Mahwah NJ: LEA
7. Wiersma, W. (2000). *Research Methods in Education* (7th ed.). Boston: Allyn & Bacon.

Course Description:

The purpose of this course is to empower students to interpret, conduct and evaluate research in education and the behavioral sciences as one means of making sound decisions concerning the choices they make in their professions. Students will be exposed to the process of research in educational contexts and the diverse methodologies that are employed in these contexts (primary emphasis will be on quantitative methods). The course will focus on key elements of the design, analysis, conduct and interpretation of educational research. A significant portion of the course will focus on analytical strategies including descriptive analysis, inferential techniques and correlational analysis (including regression). All content will be grounded in the contexts of journal readings (or other literature) reporting research results or dealing with research on educational issues.

Prerequisite: Admission to graduate program in education.

LiveText. All students admitted to degree programs in the College of Education are required to purchase *LiveText* software through the ASU bookstore. *LiveText* is an electronic, web-based data management service that allows students and faculty to create, store, and publish documents online using a word-processing format. When required, all students will upload assignments, their portfolio, and other required documents into *LiveText*. *LiveText* works better with the Mozilla Firefox browser rather than Internet Explorer. Students may Google Mozilla Firefox and download it to their computers.

LiveText will not be used in this course.

WebCT. All course materials, including assignments, readings and data sets will be posted on Pipeline and WebCT. If you do not know how to use these resources, you are encouraged to seek help with IT or consult other students who know how to use them. A brief introduction will be given during the first class. Evaluations will be done on WebCT. All assignments may be submitted through WebCT as Microsoft Word documents. When doing an assignment in Word to turn in via WebCT, be sure that your file name begins with your last name and first initial[e.g., **SmithPassignment1.doc**] so that I can identify it.

Specific Objectives:

The students will be able to:

- (a) **read, interpret** and **evaluate** research literature (NBS 1,2,3,4; CFP 1 - 5, 8, 9).
- (b) **perform** data analyses essential to the conducting of educational research (NBS 3; CFP 1, 8)
- (c) **explain** research-based data and recommendations for professional practice to colleagues, parents, and agencies in the larger community (NBS 5; CFP 1 - 5, 8, 9)
- (d) **become** a reflective practitioner who uses research in evaluating his/her professional practice (NBS 1- 5; CFP 1- 5, 8, 9)

College of Education Conceptual Framework

Understanding for Teaching, Teaching for Understanding

The preparation of educators is the most critical of all professions, without educators there are no other professions. The professional educator is the key element in the learning process. Building on the key elements of the professional educator, the Conceptual Framework of the unit of Augusta State University consists of a vision and mission with an overarching theme to produce **prepared, able, and responsive** professionals to teach diverse learners.

This vision and mission is a shared responsibility between campus colleagues, public school practitioners, and involved community agencies requiring the partnership of the entire education unit including the College of Education, the College of Arts and Sciences, and the local community educational system and the Partner School Network.

Element: Prepared (PD)

P2: Use self assessment and analysis to form the basis for collaboration with colleagues and the development of a desire to be a lifelong learner.

P3: Participate in graduate study to extend and refine the knowledge base of educators to build expertise.

P4: Possess an understanding of the central concepts, tools of inquiry, and structures of the discipline(s) or their professional field of study and be able to create learning experiences that enable all students to learn.

P6: Demonstrate knowledge of how to implement effective verbal and nonverbal information and technology techniques to foster active inquiry, collaboration, and supportive interaction in educational settings.

Element: Responsive (RD)

R2: Preparation in the subject area(s) to be taught or the professional field of study must be accompanied by the skill and dispositions to translate knowledge into creating and supporting meaningful experiences for diverse learners

R3: Understanding of how students differ in their approaches to learning and demonstrate the commitment for meeting their educational needs in fair, caring, nondiscriminatory, and equitable manners.

R4: Ability to be a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and actively seeks the opportunity to grow professionally

Method of Instruction. The primary method of instruction will be lecture with discussion.

Course Outline:

Tentative Schedule

Week 1: Introductions, overview of course, and definitions of research, sampling and a review of aspects of research design, especially as it relates to quantitative analysis. LAB: Introduction to computer analysis using EXCEL/SPSS. Handout/powerpoint; Ch.1-3. [Assignment due following week]

Week 2: Univariate and bivariate descriptive statistics; statistical inference (including analysis via the computer); Measurement concepts. LAB: Tables, charts and descriptive statistics with SPSS. Ch. 4-5 [Assignment due following week]

Week 3: Extending correlational methods – multiple regression. LAB: Bivariate plots, correlation and regression with SPSS. Ch. 6 [Assignment, Evaluation due the following week]

Week 4: More on regression. LAB: Multiple regression using SPSS – methods, techniques and interpretations. Ch. 6 [Analysis write-up due the following week]

Week 5: Statistical Inference. The inferential process, hypothesis testing. Comparing means. Ch. 7-9 [Assignment due the following week]

Week 6: Comparing means: Part 1 – two means, independent and dependent. LAB: Two group comparisons with SPSS. Ch. 10 [Assignment due following week]

Week 7: Comparing means: Part 2 –analysis of variance. LAB: ANOVA with SPSS. Ch. 11-12 [Analysis write-up]

Week 8: Comparing Means: Part 3 – Factorial Analysis of Variance Ch. 13 [Evaluation due following week]

The course approach will be integrated. All topics will involve reading and interpreting research reports (quantitative analysis) of others as well as the student performing elements of quantitative analysis using SPSS. Each class session will involve a lecture/discussion component and a lab component. Students will be expected to use SPSS/EXCEL for homework and other assignments. This may mean that students will need to have access to SPSS/EXCEL outside of class contact hours. All ASU labs are equipped with SPSS and versions of SPSS (student version, grad pack) are available for purchase.

Note: All dates are tentative. More specific directions about these assignments will be given in class. Students are required to attend classes regularly and punctually. If a student is absent for more than three hours, he/she may be asked to withdraw from the class. Unsatisfactory attendance of classes and participation in class activities will affect your grade adversely. **Points will be deducted for all late work – no assignments will be accepted over 24 hours late and those late assignments submitted within 24 hours of the due date will be evaluated at half normal value.** Weekly assignments will be graded primarily for completeness. You are advised to complete the readings and assignments, meet regularly with other students to discuss issues, and see the Instructor if you have any problems. Examinations could be in-class, take-home, or both. Requests to do make-up examinations, or to take an examination before or after the scheduled date, should be made (in writing) only in cases of absolute necessity. **Turn off your cell phones, please.** Children and other relations are not permitted in class.

Evaluation Course Grading Procedure:

Students will be evaluated on the basis of the following

1. Content Knowledge

Class Participation & Attendance	20pts.
Evaluation Homework (2):	80 pts.
Total Content	100 pts.

2. Applications

Analysis write-ups(2)	30 pts.
Assignments (5)	50 pts.
Total Applications	80pts.

Final grading will be based on total points as follows:

A: 160-180

B: 145-159

C: 130-144

D: 115-129

F: 0-114

Pipeline Accounts

Students should check their Pipeline and WebCT (Vista; GeorgiaVIEW) accounts daily. Students are responsible for any assignments or deadlines sent to them via Pipeline. If you have trouble accessing your accounts, you should contact Information Technology Services at 737-1676. Computers and printers are available free of charge in computer labs throughout campus as well as the library and campus internet cafes for students who do not have access from a home computer.

Academic Honesty

Students are expected to read and strictly adhere to the entire Academic Honesty policy found in the 2009–10 *Augusta State University Catalog*. In part, the policy reads:

Academic honesty requires the presentation for evaluation and credit of one's own work, not the work of others...Plagiarism is the failure to acknowledge indebtedness. It is always assumed that the written work offered for evaluation and credit is the student's own unless otherwise acknowledged. Such acknowledgement should occur whenever one quotes another person's actual works, whenever one appropriates another person's ideas, opinions, or theories, even if they are paraphrased, and whenever one borrows facts, statistics, or other illustrative materials unless the information is common knowledge.
(p.43)

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**Department of Educational Leadership, Counseling and Special
Education Website**

Students are invited to visit the departmental website at: <http://www.aug.edu/clinical> A variety of forms, some interactive, may be downloaded from the website. There are also newsletters, registration information and announcements which students will find useful. Most forms are in Adobe Acrobat. All campus computers have Adobe Acrobat Reader installed and students can download Adobe Acrobat Reader for their home computer at no charge from: <http://www.adobe.com/products/acrobat/>

Writing Center

You may contact the ASU Writing Center (737-1402) for help with developing and improving composition skills. If you would like additional help with writing or with learning APA style, inform the class instructor.

Students with Disabilities

Students with disabilities who are registered with the Office of Disability Services should schedule an appointment with the instructor before the third week of class to discuss academic accommodations. If the student does not initiate this meeting, it is assumed no special accommodations or modifications will be necessary to meet the requirements of this course. You may make an appointment by calling the Counseling and Testing Center (706) 737-1471 or visit their office located in the Quadrangle, next to Fanning Hall (Business Office).

Student Safety

Student safety is of primary importance. Students leaving classes late in the evening are encouraged to stay in groups of two or more and to report all suspicious behavior or persons to the ASU Office of Public Safety (emergency number 706-729-2911; non-emergency 706-737-1401). Emergency telephones are located in the University Hall parking lot and various other locations on campus.

Cell Phones

The use of cell phones for calls, text messaging, or other tasks is prohibited in class.