

A. COURSE TITLE: ASTL 6380 RESEARCH METHODS

11/01/05

- B. CATALOG DESCRIPTION:** This course is designed to teach the application of scientific method to educational research, including nature of research problems in education, theory of research, experimental design, techniques in data gathering, the gathering of results, research reporting, and bibliographical techniques.
- C. PURPOSE:** The purpose of the course is to present candidates with the tools necessary to carry out applied research projects. The candidate will acquire the skills, knowledge, and strategies necessary to interpret and to critique research reports.
- D. REQUIRED TEXTS:**
McMillan, J., & Schumacker, S. (2006). *Research in education: A conceptual introduction* (6th ed.). New York: Longman.
Pyrzczak, F. (2005). *Evaluating research in academic journals: A practical guide to realist evaluation* (3rd ed.). Los Angeles: Pyrczak Publ.
American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

A course packet is available at the UCA bookstore for Dr. Witcher's section of ASTL 6380.

RECOMMENDED TEXT:

Parsons, R. D., & Brown, K. S. (2002). *Teacher as reflective practitioner and action researcher*. Belmont, CA: Wadsworth.

SUPPLEMENTARY TEXT ON RESERVE IN THE TLC:

Bieger, G. R., & Gerlach, G. J. (1996). *Educational research: A practical approach*. Belmont, CA: Wadsworth.

E. CONCEPTUAL FRAMEWORK: "EDUCATORS AS REFLECTIVE DECISION MAKERS"

Faculty members involved in the preparation of professional educators, as well as professional education candidates, public school representatives, and members of the community share a vision for the Professional Education Unit at the University of Central Arkansas (UCA). This vision is one of preparing Educators as Reflective Decision-Makers. The vision encompasses the development of candidates' abilities to examine problems, formulate options, consider decisions, and evaluate outcomes while embracing an awareness of and sensitivity to human diversity. The vision is achieved by candidates' acquisition of reflective decision-making skills through self-understanding, course work, and field and internship experiences.

How do the goals of the program reflect the conceptual framework?

This course is a service course to several graduate programs. See individual program explanations.

How does *Research Methods* address the conceptual framework and the overall program assessment?

Donald Schön in his book *The Reflective Practitioner* (1983) asks teachers to reflect "in" and "on" their action and make adaptations on their own unique situations. Part of the decision-making process is the ability to analyze and interpret the current research available, conduct action research, and apply one's findings to the classroom. *Research Methods* provides candidates the tools needed to apply techniques of research to examine and improve candidates' own teaching and to facilitate educational change.

- F. USE OF TECHNOLOGY:** Candidates will be introduced to the Torreyson Library on-line research data bases. Search strategies will be used in conjunction with Course Evaluation Activities 2 and 3.
- G. DIVERSITY:** An activity that requires the candidate to submit a written critical assessment of a research article that has diversity as its main theme will be an assignment for each candidate. Discussion will

center on the value of the article for adding worthwhile information to the database on diversity. See Course Evaluation Activity 2.

H. OBJECTIVES:

The candidate will be able to

1. Define educational research and give two examples.
2. List the specific types of research that fall into the broad categories of quantitative and qualitative research.
3. Take a general problem in an area of interest in education and state it in specific form ready for empirical investigation.
4. Detail a systematic progression of steps in organizing the review of literature demonstrating the techniques of reviewing and abstracting.
5. Given operational statements, identify concepts that can aid in generating hypotheses.
6. Identify testable hypotheses and construct a null hypotheses.
7. Identify and describe the sources of internal and external validity.
8. Distinguish between pre-experimental designs, true experimental designs, and quasi-experimental designs based on how adequately they guard against different threats to validity.
9. Distinguish between formative and summative evaluation.
10. Analyze and interpret data from an evaluation study and draw an appropriate conclusion.
11. Describe procedures for conducting case studies or ethnographic research, including data analysis and report preparation.
12. Follow APA guidelines in written assignments.
13. Describe characteristics of action research

I. COURSE OUTLINE

1. Introduction to Research
2. Quantitative and Qualitative Modes
3. Research Problems
4. Literature Reviews
5. Designing Quantitative Research
6. Designing Qualitative Research
7. Non-experimental Research
8. Experimental Research Designs
9. Quantitative Data Collection
10. Qualitative Data Collection
11. Descriptive Statistics
12. Inferential Statistics
13. Introduction to the APA Manual
14. Introduction to Action research

J. FIELD EXPERIENCE REQUIREMENTS N/A

K. COURSE EVALUATION: The final grade is the total points of the following components:

1. Three Examinations. Each examination will be worth 100 points. Make-up exams will be given at the discretion of the instructor.
2. Two Abstracts. Candidates will write an abstract on each of two articles published in professional journals. These abstracts will not be written on research-based articles. One of the articles must have diversity as its main theme. The goal is to assist candidates in writing abstracts and to allow candidates to practice strategies for locating on-line articles. In addition to writing an abstract, the candidate will be prepared to share responses in class to the following questions as they refer to the article on diversity: *How did the information gleaned from the article impact the candidate's sensitivity to human diversity? How will the candidate apply this information?* See rubric for preparation guidelines. (Each abstract: 10 points)

3. A Scavenger Hunt. Candidates will complete the Scavenger Hunt for Research, photocopying the page of "the find" (complete research study not necessary), and stapling it in order of the Hunt. A cover page must be stapled on the front with the *candidate's name* and *Activity 3* centered two inches from the top.
4. In addition to the Scavenger Hunt, several assignments will be given throughout the semester that will bring the total number of activity points to 100.

Grading Scale: A = 93 – 100%; B = 83 – 92%; C = 73 – 82%; D = 63 - 72

Late work: Homework submitted after the due date will be penalized by deducting ten percent of the assigned point value for each day late.

Please note: Candidates are encouraged to retain copies of all ASTL course products as they may be of importance to candidates when preparing the exit portfolio.

- L. ATTENDANCE POLICY:** Graduate candidates are expected to demonstrate professional behavior and disposition at all times. Because lecture and classroom discussion / activities are important to the total learning experience, candidates are expected to attend and participate in class regularly. Furthermore, all readings and assignments are to be completed before class. In addition, if a candidate misses a class, the instructor is to be notified as soon as possible (preferably in advance), and the candidate is responsible for submitting assignments on time and for completing all assignments for the next class. A ten percent reduction in the candidate's final average will be calculated for each absence beyond the first. Candidates should note the university's drop date policy that includes notifying the Registrar's Office.
- M. STUDENT HANDBOOK POLICY:** Candidates are expected to follow all policies regarding academic dishonesty, sexual harassment, and academic issues as outlined in the current *UCA Student Handbook*. Candidates should familiarize themselves with all policies included in the *Handbook*.

Plagiarism is the presentation of another person's work, ideas, or expressions whether you do so intentionally or as a result of careless documentation. It is a serious violation and carries severe penalties - failure on the assignment or in the course. Although collaboration is encouraged, any work submitted as part of a course assignment must be the candidate's own work or else referenced using the appropriate reference format (i.e., APA). Plagiarism will not be tolerated. Please consult the instructor if you have any questions concerning what constitutes plagiarism.

The University of Central Arkansas adheres to the requirements of the Americans with Disabilities Act. If you need an accommodation under this Act, please contact the UCA Office of Disability Services at 450-3135.

N. BIBLIOGRAPHY:

- Ary, D., Jacobs, L., & Razavieh, A. (2002). *Introduction to research in education*, 6th ed. Belmont, CA: Wadsworth/Thomson Learning.
- Council for Exceptional Children. (2005) *Special issue: Criteria for evidence-based practice in special education* 71(2). Arlington, VI: Author/Editor.
- Eisenhart, M., & Howe, K. (1990). Standards of qualitative and quantitative research: A prolegomenon. *Educational Researcher*, 19(4), 2-9.
- Eisner, E. W. (1997). The promise and perils of alternative forms of data representation. *Educational Researcher* 26(6), 4-10.
- Freankel, J. R., & Wallen, N. E. (2003). *How to design and evaluate research in education*, 5th ed. Boston, MA: McGraw Hill.
- Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers*. White Plains, NY: Longman.
- Grouws, D. (Ed.). (1992). *Handbook of research on mathematics teaching and learning*. New York: MacMillan.
- Holcome, Z. (1997). *Real data*: Los Angeles: Pyczak Publishing.
- Johnson, R. B. (1997). Examining the validity structure of qualitative research. *Education*, 118, 282-292.
- Mathison, S. (1988). Why triangulate? *Educational Researcher*, 17(12), 13-17.

- Pan, M. L. (2003). *Preparing literature reviews: Qualitative and quantitative approaches*. Los Angeles: Pyczak Publishing
- Patten, M. (2000). *Proposing empirical research*. Los Angeles: Pyczak Publishing.
- Tuckman, B. (1999). *Conducting education research*. Belmont, CA: Wadsworth/Thomson Learning.
- Weinreich, N. K. (n.d.). Integrating quantitative and qualitative methods in social marketing research. Retrieved July 2005 from <http://www.social-marketing.com/research.html>. Originally appeared in the Winter 1996 issue of the *Social Marketing Quarterly*.
- Wiseman, D. (1999). *Research strategies for education*. Belmont, CA: Wadsworth/Thomson Learning.

GRADUATE CANDIDATE DIVERSITY SURVEY

3/14/04

(Administer twice during candidate's degree program – Pre and Post Program Survey)

This survey is for data collection purposes only. It is not an individual assessment.

UCA Name/ID# _____ Date _____ Semester _____

Graduate Program _____ Circle: Pre-Program Survey Post-Program Survey

Using this rating scale, please respond to the following questions by choosing a number after each statement which best reflects your personal opinion.

4= Strongly Agree 3=Agree 2=Disagree 1=Strongly Disagree

I believe...

- 1...my culture to be different from some of the students/clients with whom I work/will work . 4 3 2 1
2. ...it is important to identify immediately the ethnic groups of the students/clients with whom I will work. 4 3 2 1
3. ...I would prefer to work with students/clients and parents whose cultures are similar to mine. 4 3 2 1
4. ...I would be uncomfortable in settings with people who speak non-standard English. 4 3 2 1
5. ...I am uncomfortable in settings with people who exhibit values or beliefs different from my own. 4 3 2 1

I believe...

6. ...I am sometimes surprised when members of certain ethnic groups contribute to particular school activities (e.g., bilingual students on the debate team or African American students in the orchestra). 4 3 2 1
7. ...it is necessary to include on-going parent input in program planning. 4 3 2 1
8. ...English should be taught as a second language to non-English speaking students/clients as a regular part of the school curriculum. 4 3 2 1
9. ...that there are times when the use of the non-standard English should be ignored. 4 3 2 1
10. ...in a society with as many racial groups as the U.S.A., I would expect and accept the use of ethnic jokes or phrases by some students/clients. 4 3 2 1

4= Strongly Agree 3=Agree 2=Disagree 1=Strongly Disagree

I believe...

- 11. ...that there are times when racial statements should be ignored. 4 3 2 1
- 12. ...a student/client should be referred for testing if learning difficulties appear to be due to cultural differences and/or language. 4 3 2 1
- 13. ...it is my responsibility to provide opportunities for students/clients to share cultural differences in foods, dress, family like and/or beliefs. 4 3 2 1
- 14. ...Individualized Education Program meetings or program planning should be scheduled for the convenience of the parent. 4 3 2 1

I believe...

- 15. ...I should make adaptations in programming to accommodate the different cultures and/or learning abilities of my students/clients. 4 3 2 1
- 16. ...the displays and frequently used materials within my setting should include different ethnic groups or customs. 4 3 2 1
- 17. ...one's knowledge of a particular culture should affect one's professional service to students/clients and assessment instruments. 4 3 2 1
- 18. ...I prefer to learn in an atmosphere where fellow students/clients have similar cultural backgrounds to my own. 4 3 2 1
- 19. ...I prefer to learn from faculty with cultural backgrounds similar to my own. 4 3 2 1

I believe...

- 20. ...it is my responsibility to help provide appropriate learning opportunities for all students/clients in the classroom/school regardless of their abilities. 4 3 2 1
- 21. ...all students/clients, including students/clients with disabilities and students/clients with diverse learning needs, have the right to attend and actively participate in my classroom/school. 4 3 2 1
- 22. ...it is my responsibility to increase parent participation in their children's education. 4 3 2 1

I can ...

- 23. At this time, I am skillful in using examples, data, and information from a variety of cultures to improve my professional skills and services. 4 3 2 1
- 24. At this time, I am adept at using specific methods to help students/clients understand how knowledge is created and influenced by racial, ethnic, and social class factors. 4 3 2 1
- 25. At this time, I am skillful in helping students/clients from different ethnic backgrounds develop positive relationships, work together, and develop democratic attitudes towards each other. 4 3 2 1
- 26. At this time, I am proficient in particular ways to facilitate the academic success of students/clients from diverse ethnic and social class backgrounds. 4 3 2 1
- 27. At this time, I am adept in helping schools develop organizational practices that lead to the academic and emotional growth of students/clients from diverse ethnic and social backgrounds. 4 3 2 1

Comments:

Describe your feelings about **teaching** (or **working with**) students/clients from diverse backgrounds. Provide an assessment of (a) what you know now, and (b) what you would like to know in the future about teaching and/or working with students/clients from very diverse and social backgrounds.

Program Coordinator – please return all completed forms to **Debbie Barnes as soon as possible.**