

**SOUTHERN UNIVERSITY  
DEPARTMENT OF REHABILITATION AND DISABILITY STUDIES  
REHABILITATION SERVICES**

**I. Descriptive Information**

**A. Course Number:** REHB 415

**B. Course Title:** Rehabilitation Research

**C. Catalog Description:**

In this course, the nature of the scientific method and basic techniques in social science research as applied to the collection, analysis, and interpretation of rehabilitation-related data are the focus.

**D. Instructor's Emphasis:**

This course is offered each semester; and offers discipline-specific examples of key concepts and techniques of research. Chapters should be read prior to each class discussion. Skills gained in this class are necessary to master the requirements of the second part of this course, which is the applied portion.

**E. Course Credit:** 4 Hours Class Time: 3-4:50 MW; 128 Blanks Hall

**F. Prerequisites:** REHB 340, PSYC 274

**G. Intended Audience:** This course is intended for undergraduate students in rehabilitation services.

**H. Instructor**

- 1. Name:** Carliss Y. Washington. Ph.D., CRC
- 2. Office Location:** 214 Blanks Hall
- 3. Office Hours:** 5-6 MW; 2-4 TR and by appointment.
- 4. Office Phone Number:** 771-2390
- 5. Email:** carlissw@cox.net

**II. Course Goals:**

1. To illustrate rehabilitation frameworks for scientific inquiry.
2. To evaluate the various methods for conducting research.
3. To examine rehabilitation trends and issues as addressed in various research methods (refereed journal articles)
4. To analyze and evaluate important research terms, concepts, and techniques
5. To recognize the benefits of research in enhancing quality of life of individuals with disabilities.
6. To develop analytical thinking capabilities via research exercises related to current and emerging rehabilitation trends and issues.
7. To enhance the student's literacy skills through assigned readings, discussions, examinations, and other requirements.
8. To practice skills necessary for the advanced study of rehabilitation research.

### **III. Student Learning Outcomes:**

During the course of the semester and as covered, students should acquire, written and orally, the ability to:

1. Discuss the ethical principles of research in rehabilitation and related fields.
2. Describe the scientific method.
3. Describe the five ways of gaining information.
4. Define the nine basic types of research.
5. Explain why replication research is important in science.
6. Define, recognize and give examples of dependent and independent variables.
7. Identify and describe the components of a published research article.
8. Define *internal validity*.
9. Explain each of the 12 possible threats to the internal validity of a study.
10. Distinguish between external validity and population validity.
11. Identify possible threats to internal or external validity given a research vignette.
12. Define reliability, validity, operational definition and inter-observer agreement.
13. Describe three types of test reliability
14. Determine the type of test reliability related to different research problems.
15. Distinguish among construct validity, content validity, & criterion related validity.
16. Give examples of variables measured on the different scales of measurement.
17. Describe the purpose of the null and alternative hypotheses;
18. State the differences between parametric and nonparametric tests of statistical significance.
19. Explain what is meant by Type I and Type II errors.
20. List the types of parametric and nonparametric tests.
21. Explain the different methods of sampling.
20. Describe and recognize the different true experimental designs, quasi-experimental designs, and pre-experimental designs.
21. Indicate the appropriate conditions to use a true experimental design, a quasi-experimental design, or a pre-experimental design.
22. Describe the threats to internal and external validity for true experimental designs, quasi-experimental designs, and pre-experimental designs.
23. Discuss issues critical to designing causal-comparative research.
24. Explain the purpose of correlational research.
25. Describe issues critical to a correlational research design.
26. Explain how correlational research is interpreted.
27. Describe the relationship between the correlation and causality.
28. Describe the three conditions that researchers must meet to infer a causal relationship between two variables using the correlational research method.
29. Identify the correlational statistical procedure applicable for each level of measurement. .
30. Describe the characteristics of qualitative research.
31. Indicate how qualitative research differs from quantitative research.
32. Briefly describe case study research.
33. Explain what an observation study entails.
34. Distinguish participant and nonparticipant observation methods.
35. Discuss problems of, and solutions to, observer effects and observer bias;
36. Define naturalistic observation.
37. Explain how single-case methods are similar to and different than quantitative and qualitative research methods.
38. Explain the purpose of a baseline.
39. Explain the following single-subject designs: A-B, A-B-A, A-B-A-B, B-A-B, A-B-C-B, multiple baseline across behaviors, subjects, or settings, multiple probe designs, multitreatment designs, alternating treatment designs, and different combinations of any of these designs.
40. Describe the essential features of single subject design.
41. Describe the purposes of survey research.
42. Describe the types of surveys.
43. Describe the factors in choosing a survey method.
44. Describe the importance of response rate to survey research.
45. Describe the internal and external validity concerns in survey research.
46. Other outcomes to be added as student need indicates.

IV. **Readings**

Required Text: Graziano, A. M., & Raulin, M. L. (2010). *Research methods: A process of inquiry* (7<sup>th</sup> ed). Boston, MA: Pearson Education.

Supplementary Readings: Assigned/distributed in class.

V. **Examinations** will be given upon completion of each unit. Estimates may change.

Exams = 5 @ 100pts ea.  
Pop Quizzes= 5 @ 10pts ea. (Possibly)  
Exercises = minimum 5 @ 10 pts ea.  
Proposal= 1 @ 100 pts

VI. **Grading** (Of total points available):

90-100% = A  
80- 89% = B  
70- 79% = C  
60- 69% = D  
Below = F

VII. **Instructional Procedures:**

Lecture 40%  
Discussion 30%  
Homework Exercises 30%

VIII. **Course Requirements**

A. **Administrative Requirements:**

1. Attendance per University requirements.
2. Acceptance of late assignments will not be encouraged or supported except in rare instances where strongly justified and with final permission at the discretion of the professor.

B. **Academic Requirements:**

1. Permission to make up exams will be based on the student's ability to substantiate the need to do so (upon production of a physician's excuse or a letter from the Dean of the College of Sciences) with the final decision made by the instructor.
2. Assignments are to be turned in by the due date. Late assignments will be worth 10% less per week than the original total.
3. All cellular phones and other electronic devices that distract from giving this class your full attention must be turned off during the class and put away during quizzes and exams.
4. During quizzes and exams, no one can leave the room without prior permission from the professor/examiner.

## **IX. Accommodations:**

If you need academic accommodations, please identify those needs. It is the responsibility of the student to seek available assistance at the University and to request reasonable accommodations.

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact the instructor to discuss their individual needs for accommodations. See Mrs. Hebert in OSSD – Blanks Hall 2<sup>nd</sup> Floor (Rm. 246) for verification of need for accommodations to receive those accommodations in class-related matters.

## **X. Classroom Decorum:**

The University seeks to promote a teaching and learning environment free from material and substantial classroom disruptions. Faculty members have the authority and responsibility to effectively manage their classroom environments. Please adhere to the University's Student Conduct Code and to the Department's Student Handbook including the Disruptive Behavior Policy.

**Disruptive student behavior** is student behavior in a classroom or other learning environment (to include both on and off-campus locations) that disrupts the educational process. The instructor defines “disruptive class behavior”, for this purpose. Such behavior includes, but is not limited to, verbal or physical threats, repeated obscenities, unreasonable interference with class discussion, making/receiving personal phone calls or texts during class, leaving and entering class frequently in the absence of notice to instructor of illness or other extenuating circumstances, and persisting in disruptive personal conversations with other class members.

NOTICE: As often as is possible and feasible, I will offer in-class “hands-on” experience with the concepts discussed in class. Homework must be typewritten/word processed. If multiple pages, the assignment must be stapled. Late homework is not accepted. Make-ups are not given. You are responsible for keeping track of your scores.

If caught cheating, you will fail the entire class. Cheating includes, but is not limited to, looking on others' tests or letting them look on yours during a test; copying or giving others test answers; and plagiarism which includes copying the words of fellow students or any other author in your papers, handing in work that you have handed in for another class, handing in papers you have gotten from the internet or other students, etc.

I will not change your grade unless I made a mistake in calculating it.

Do not send emails to me in text-speak (e.g., “ r u givin a qz 2day?”). Certainly, do not communicate this way on an exam. Correct spelling and grammar are expected and will be corrected and penalized.

- XI. Tentative Schedule of Class Activities (subject to change at the professor's discretion and with feasible immediate notification to the student - given the circumstances warranting the change):

Week	Day or Date	Chapter	Topic	Note?
1	M	1	Unscientific & Scientific Research Techniques	Handout
	W	1	9 Basic Methods of Research	
2	M	-	Mandatory Undergrad Informational and Orientation Session	Rm.128 /3:00pm
	W	3	Ethics in Research; variables	Var wksheet
3	M	-	Labor Day Holiday	No Class Mtg.
	W	-	<b>EXAM 1</b>	
4	M	3&4	Variables cont'd; Operational Defs; Scales of Meas	Wk.sheet
	W	4&5	Measurement scales; Rel., Validity; Statistics	Wk Sheet
5	M	5	Statistics	
	W	5	Statistics	
6	M	-	<b>Exam 2</b>	
	W	6;7; Appendix B	Research Topics in Research/ Using APA format; Hypothesis testing	Handout/Appendix B
7	M	-	<b>Midterm Exam</b>	
	W	Appendix B; 8	APA Exercises; Hypothesis testing; validity	Assignment
8	M	8; 13	Threats to Validity Survey Research	
	W	13	Survey Research	
9	M		<b>Exam 4</b>	
	W		After Midterm, focus on writing	
10	M		Guide students through the development of various parts of the research proposal with written and verbal feedback through end of semester	
	W		Guide Students through the development and use of a survey instrument.	
11	M		Each part will be typed and turned in – as will other assignments throughout the remainder of the semester.	
	W			
12	M			
	W			
13	M		Survey Research “Hands on” work -continued	
	W			
14	M			
	W		Paper –Proposal Due	Go Jags/Bayou Classic/T'Giving
15	M			
	W		Last Day of Class	
16		4p-6p	Final Examination	Rm 304
	F		Commencement-Congrats Grads!!	