

**SOUTHEAST MISSOURI STATE UNIVERSITY
COURSE SYLLABUS**

Department of: Human Environmental Studies

Course No: CF 532

Title of Course: Behavioral Assessment & Data Analysis

New: Fall 2008

I. Catalog Description and Credit Hours of Course:

Measuring various dimensions of behaviors, functional relationships between independent and their dependent variables within applied settings; designing, conducting, and evaluating single-subject research; developing assessment strategies and data sheets. (3 Cr.)

II. Prerequisite(s):

CF 531: Basic Principles of Applied Behavior Analysis; or permission of the instructor and program director.

III. Purposes or Objectives of the Course:

Students will:

- A. Demonstrate an understanding of the principles for designing and conducting an effective single-subject research.
- B. Identify and operationally define behaviors of interest and measure variables influencing the behaviors.
- C. Design data collection forms and develop procedures to conduct behavioral evaluation and assessment.
- D. Demonstrate the skills to measure the validity and reliability of data collection procedures.
- E. Assess behavioral excesses and deficits in an applied setting and demonstrate the knowledge to display and interpret behavioral data.
- F. Interpret the results of standardized assessment measures and choose appropriate intervention targets, outcomes, and strategies.
- G. Understand and design withdrawal, reversal, multiple baseline, alternating treatments, changing criterion, and component analysis research designs.
- H. Interpret and evaluate the designs and results of published single-subject research studies.

IV. Expectations of Students:

- A. Attend class regularly;
- B. Read the text and assigned readings from professional journals; participate in class and group discussions;
- C. Successfully complete all quizzes, exams, and assignments.

V. Course Content or Outline:

- 1. Historical Basis of Single Subject Methodology.....1 hrs.**
 - Evaluating Treatment Effects: Statistical Analysis
 - Evaluating Treatment Effects: Graphic Data Displays
 - Single-Subject Research and Analysis Designs

- 2. Dimensions of Behavior.....5 hrs.**
 - Selecting a Target Behavior
 - Operationally Defining Behavior
 - Event Recording: Frequency and Rate
 - Duration Recording
 - Latency Recording and IRT
 - Percentage of Responding
 - Trials to Criterion
 - Mean, Mode, and Median
 - Choosing and Designing Measurement Systems
 - Using Microsoft Word Tables Function to Create Data Sheets

- 3. Assessing Behavior through Observation.....3 hrs.**
 - Factors Impacting Measurement
 - Continuous Recording Methods
 - Whole Interval Recording
 - Partial Interval Recording
 - Momentary Time Sampling
 - Internal and External Validity of Measurements
 - Reliability of Measurements

- 4. Assessing Skills.....6 hrs.**
 - Surveys, Rating Scales, Tests
 - Standardized vs. Non-Standardized Assessments
 - Norm-Referenced Assessments and Results
 - Raw Scores and Transformed Scores
 - The Normal Curve and Confidence Intervals
 - Age Equivalent and Grade Equivalent
 - Standard Scores and Percentile Ranks
 - Criterion-Referenced Assessments
 - Using Task Analyses as Assessment Instruments
 - Curriculum-Based Assessment

- 5. Assessing Negative Behavior.....12 hrs.**
 - Review of the Positive Behavior Support Model
 - Using Surveys and Rating Scales
 - Behavioral Interviews
 - Direct Observation Functional Assessment
 - Direct Observation Antecedent Assessment

Functional Analysis
Antecedent Analysis
Structured Descriptive Assessment

6. Visual Data Displays.....6 hrs.

Benefits of Graphic Data Displays
Components of a Graph
Equal-Interval Graphs
Interpreting Graphs
Trend, Level, and Variability
Creating Visual Displays of Data
Graphing By-Hand
Using Microsoft Excel for Graphing

7. Systematic Manipulations and Single-Subject Designs.....12 hrs.

Baseline Data/Logic
Withdrawal (Reversal) Designs
Alternating Treatment Designs
Changing Criterion Designs
Multiple Baseline Designs
Component and Parametric Analyses
Managing Potential Confounds

Total: 45 hours

VI. Textbook(s) and/or Other Required Materials:

Required Textbooks:

Kazdin, A.E. (1982). *Single-Case research designs: Methods for clinical and applied settings*. New York: Oxford University Press.
O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J.R., Storey, K., & Newton, J.S.(1997). *Functional Assessment and Program Development for Problem Behavior* (2nd Ed.). Pacific Grove, CA: Brooks/Cole.
Cooper, J.O., Heron, T.E., and W.L. Heward. (1987). *Applied Behavior Analysis*. Columbus, OH: Merrill Publishing Company.
Carr, J. E., & Burkholder, E. O. (1998). Creating single-subject design graphs with Microsoft Excel. *Journal of Applied Behavior Analysis*, 31, 245-251.
Behavior Analyst Certification Board BCABA Task List – 3rd Edition (www.bacb.com)

VII. Basis for Undergraduate Student Evaluation:

Evaluation:

Quizzes	15%
Assignments/ Projects.....	25%
Exams	50%
Class participation.....	<u>10%</u>
TOTAL	100

Grading Scale:

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

The weight of the evaluation criteria may vary according to each instructor and will be communicated at the beginning of the course.

VIII. Basis for Graduate Student Evaluation:

Graduate students additional assignments will include an extensive and analytical evidenced-based research/practice review and a 50 minute lecture to the class.

Evaluation:

Quizzes.....	15%
Assignments/ Projects.....	25%
Exams	50%
Class participation.....	10%
TOTAL	100

Grading Scale:

- 93-100%=A
- 85-92% = B
- 76-84% = C
- 75 or less=F

The weight of the evaluation criteria may vary according to each instructor and will be communicated at the beginning of the course.

IX. Academic Policy Statement:

Students will be expected to abide by the University Policy for Academic Honesty regarding plagiarism and academic honesty. Refer to:

<http://www6.semo.edu/judaffairs/code.html>

X. Student with Disabilities Statement:

If a student has a special need addressed by the Americans with Disabilities Act (ADA) and requires materials in an alternative format, please notify the instructor at the beginning of the course. Reasonable efforts will be made to accommodate special needs.