

EDF 6944 Advanced Single Case Design

3 Semester Graduate Course Credit Hours

BCBA Test Content Outline (6th ed.)

45 hours in Measurement, Data Display, Interpretation, and Experimental Design (BACB)

45 hours Behavior Change Procedures

Syllabus Effective Date: August 1, 2024

Prerequisites

Students must be eligible to enroll in Master's level courses and have completed EDF 6225, 6226, 6223, & 6437 with a B or higher. Students must also have supervision under a Board Certified Behavior Analyst (BCBA) to conduct research, as well as meet other standards for research with human participants.

Course Description

This course prepares students to work in an applied environment using behavior analytic measurement procedures, and visual data display and interpretation, while adhering to ethical and professional issues relevant to the practice of behavioral intervention and research design. This course serves as an elective for non-degree-seeking students or as part of a degree plan cognate. The content is based on the Behavior Analyst Certification Board (BACB) Test Content Outline (6th ed.) (see below under Topics Covered). This course serves as one in a series of courses that prepare students to develop a foundation in research-centered endeavors in behavior analysis.

Course Format/Type

This course is 100% Online. Students will be required to participate in asynchronous online modules. In addition, students are required to access supporting documents from the Internet, including the syllabus, assignments, and assessments. Weekly attendance to weekly content is mandatory and proctored using the online educational platform provided by the University of West Florida.

Course Learning Outcomes

1. Apply previous concepts of behavior change systems to experimental design via vignettes as evidenced by scoring at least an 82% on weekly quizzes.
2. Synthesize relevant literature on a topic of interest in Applied Behavior Analysis as evidenced by at least 82% score on rubric.
3. Justify the selection of experimental design as evidenced by at least an 82% score based on final paper rubric.
4. Compile a research proposal package (NIH training, consent forms, etc.) with at least an 82% score based on proposal package rubric.
5. Maintain concepts under Topics Covered via cumulative assessments throughout the course sequence to 100% acquisition scores on exams.

Topics Covered

BACB Measurement, Data Display, and Interpretation (C)

C-1	Create operational definitions of behavior.
C-2	Distinguish among direct, indirect, and product measures of behavior.
C-3	Measure occurrence.
C-4	Measure temporal dimensions of behavior (e.g., duration, latency, interresponse time).
C-5	Distinguish between continuous and discontinuous measurement procedures.
C-6	Design and apply discontinuous measurement procedures(e.g., interval recording, time sampling).
C-7	Measure efficiency (e.g., trials to criterion, cost-benefit analysis, training duration).
C-8	Evaluate the validity and reliability of measurement procedures.
C-9	Select a measurement procedure to obtain representative data that accounts for the critical dimension of the behavior and environmental constraints.
C-10	Graph data to communicate relevant quantitative relations (e.g., equal-interval graphs, bar graphs, cumulative records).
C-11	Interpret graphed data.
C-12	Select a measurement procedure to obtain representative procedural integrity data that accounts for relevant dimensions (e.g., accuracy, dosage) and environmental constraints.

BACB Experimental Design (D)

D-1	Distinguish between dependent and independent variables.
D-2	Distinguish between internal and external validity.
D-3	Identify threats to internal validity (e.g., history, maturation).
D-4	Identify the defining features of single-case experimental designs (e.g., individuals serve as their own controls, repeated measures, prediction, verification, replication).
D-5	Identify the relative strengths of single-case experimental designs and group designs.
D-6	Critique and interpret data from single-case experimental designs.
D-7	Distinguish among reversal, multiple-baseline, multielement, and changing-criterion designs.
D-8	Identify rationales for conducting comparative, component, and parametric analyses.
D-9	Apply single-case experimental designs.

BACB Behavior-Change Procedures (G)

G-1	Design and evaluate positive and negative reinforcement procedures.
G-2	Design and evaluate differential reinforcement (e.g., DRA,DRO, DRL, DRH) procedures with and without extinction.
G-3	Design and evaluate time-based reinforcement (e.g., fixed-time) schedules.
G-4	Identify procedures to establish and use conditioned reinforcers (e.g., token economies).
G-5	Incorporate motivating operations and discriminative stimuli into behavior-change procedures.
G-6	Design and evaluate procedures to produce simple and conditional discriminations.
G-7	Select and evaluate stimulus and response prompting procedures (e.g., errorless, most-to-least, least-to-most).
G-8	Design and implement procedures to fade stimulus and response prompts (e.g., prompt delay, stimulus fading).
G-9	Design and evaluate modeling procedures.
G-10	Design and evaluate instructions and rules.
G-11	Shape dimensions of behavior.
G-12	Select and implement chaining procedures.
G-13	Design and evaluate trial-based and free-operant procedures.
G-14	Design and evaluate group contingencies.
G-15	Design and evaluate procedures to promote stimulus and response generalization.
G-16	Design and evaluate procedures to maintain desired behavior change following intervention (e.g., schedule thinning, transferring to naturally occurring reinforcers).
G-17	Design and evaluate positive and negative punishment (e.g., time-out, response cost, overcorrection).
G-18	Evaluate emotional and elicited effects of behavior-change procedures.
G-19	Design and evaluate procedures to promote emergent relations and generative performance.

Required Texts and Materials

Cooper, J.O., Heron, T.E., & Heward, W.L. (2019). *Applied Behavior Analysis*. (3rd Ed.). Prentice Hall.

American Psychological Association (APA). (2019). *Publication manual of the American Psychological Association*. (7th ed.). APA.

Richards, S.B. (2019). *Single Subject Research: Applications in Educational Settings*. (3rd Ed.).

Grading System

Points will be allocated using the following weighted system

1. Participation in weekly assignments (35%)
3. Research Project (35 %)
4. Final Exam Score (30 %)

Exams

All exams are cumulative and are available on the UWF eLearning system. Computers must be able to take the exam using a lock-down browser.

Assignments

Content hours have been carefully calculated. Assignments submitted beyond one week from the due date will not receive points, but assignments still must be placed in eLearning by the end of the course in order to earn a passing grade. If any assignments are not submitted to eLearning by the end of course, a 10% response cost to the final grade per missing assignment will be administered. If 3 or more assignments are missed, this will result in an automatic (F) failing grade assigned for the course.

Grading scale

A	92-100
A-	90-91
B+	88-89
B	82-87
B-	80-81 An 82% are required for courses with prerequisites in the program
C+	78-79
C	72-77
C-	70-71
D	60-69
F	59 or below

Incomplete grades (I) will not be given except under very extreme circumstances. Please see the UWF catalog for rules about Incomplete grades

Special Technology Requirements

Each student is expected to activate a MyUWF account and access it 2-3 times per week and access their UWF email account 2-3 times per week. Students will need broadband internet (laptop or desktop computer preferred) via a compatible web browser (complete list in Canvas). Students are expected to participate in the online learning environment by downloading files from Canvas and uploading and attaching files to send to others. Students will need audio input, built-in, or external computer speakers, as well as an internal or external webcam (recommended) in order to actively participate.

ITS offers support to online students via phone (850.474.2075), online request form, and through email (helpdesk@uwf.edu) for non-Canvas (eLearning) questions or problems. Visit the [Help Desk website](#) to learn more about their resources and services.

Other support links

- Canvas Support Hotline (Open 24/7) - 1-844-866-3349
- CR Institute Help Desk - institute-support@centralreach.com
- [New to UWF?](#)
- [Computer Specifications for eLearning \(Canvas\)](#)
- [MyUWF & ArgoNet](#)
- [Computer Security](#)
- [Files Storage](#)
- [Google Apps](#)
- [Internet Access](#)
- [Software](#)
- [Student Guide](#) (helpful links to various technology support topics organized by tool)

Student Accessibility Resources

The University of West Florida supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, such as time-limited exams, inaccessible web content, or the use of non-captioned videos and podcasts, reasonable accommodations can be arranged. Prior to receiving accommodations, you must [register with Student Accessibility Resources](#) and submit a semester request each semester. Appropriate academic accommodations will be determined based on the documented needs of the individual. For information regarding the registration process, visit [the SAR website](#), e-mail sar@uwf.edu or call 850.474.2387.

Expectations for Academic Conduct

The Student Code of Conduct sets forth the rules, regulations, and expected behavior of students enrolled at the University of West Florida. Violations of any rules, regulations or behavioral expectations may result in a charge of violating the Student Code of Conduct. It is the student's responsibility to read the Student Code of Conduct and comply with these expectations. The Student Code of Academic Conduct defines various forms of academic misconduct including cheating and plagiarism and describes the process for addressing allegations of academic misconduct. More information and links to the University regulations governing both student conduct and academic conduct can be found on the Dean of Students website listed under the Office of Student Rights and Responsibilities

UWF maintains a university license agreement for an online text matching service called Turnitin. At our discretion, we may use the Turnitin service to evaluate the originality of student papers. We also may employ other services and techniques to evaluate your work for evidence of appropriate authorship practices as needed.

Respondus LockDown Browser is a client-based application that "locks down" a computer or device during an online exam delivered on a third-party assessment platform, such as a Learning Management System (LMS).

[Privacy information for Respondus LockDown Browser.](#)

Respondus Monitor is a companion product for LockDown Browser that enables students to record themselves with a webcam and microphone during an online exam. The recordings and other data from the exam session are processed automatically; summary information is provided to the instructor, such as if the student left the video frame during the exam session. [Privacy information for Respondus Monitor.](#)

Military and Veterans' Resource Center

The [UWF Military & Veterans Resource Center \(MVRC\)](#) serves as a leading campus advocate for military and veteran students, working to ensure the needs of these individuals are met through coordinating with multiple university offices and services. The center provides assistance with the following: GI Bill ® education benefits, active duty tuition assistance, out-of-state fee waiver, tutoring, paper reading, counseling, disability accommodations, coordinating academic advising, and referral to state /federal resources and services. The MVRC is located in bldg. 38. For more information on MVRC service, call 474-2550.

Mental Health Support

At the University of West Florida, we recognize that to learn, thrive, and flourish, you may need a little assistance. Please take advantage of the free resources online or on campus.

- For health concerns, contact Student Health Services at (850) 474-2172.
- For mental health or substance use concerns, contact Counseling and Psychological Services at 850-474-2420.
- For 24/7 crisis counseling, call 850-474-2420 and press option 6.

All students are encouraged to utilize Therapy Assistance Online (TAO) to strengthen skills to cope with anxiety, depression, stress management, and more. TAO is an interactive web-based self-help program that is available 24/7. Access TAO anonymously at uwf.edu/tao.

If you feel like you need somewhere to talk anonymously to others who can support you, peer support is available to all students 24/7 via TogetherAll. TogetherAll is an online community where members are anonymous and can share how they are feeling and support each other. Learn more and join TogetherAll at uwf.edu/togetherall

Mental Health is one aspect of holistic health, which encompasses all of the eight wellness dimensions. The eight dimensions do not have to be equally balanced. Instead, you should strive to achieve your own authentic personal harmony. You have unique goals, priorities, and aspirations. You determine how to live your best life. ArgoWell is here to help you make the healthy choice, the easy choice, and support you in your wellness journey. [Meet ArgoWell](#)

Discrimination or Harassment Reporting

The University of West Florida faculty members are committed to supporting students and upholding the University's non-discrimination and harassment policies. Under Title IX, discrimination and harassment based upon sex or gender (including sexual violence and sexual misconduct) are prohibited. If you experience an incident of sex/gender-based discrimination or harassment, you do not have to go through the experience alone. Know that while you may talk to a faculty member, understand that as a "Responsible Employee" of the University, the faculty are required to notify the University's Title IX Coordinator so that support services can be provided to you. If you would like to speak with someone confidentially, you may schedule an appointment

with the UWF's Counseling and Psychological Services at (850) 474-2420. This service is free for students. Faculty can also help direct you, or you may refer to the [University's Title IX website](#).

Emergency Information and Course Continuity Statement

In the case of severe weather or another emergency, the campus might be closed and classes canceled. Official closures and delays are announced on the UWF website and broadcast on WUWF-FM.