EDF 6227 Experimental Analysis of Behavior

3 Semester Graduate Course Credit Hours

BACB 5th Edition Task List / IBAO Objectives

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

30 hours Behavior Change Procedures (BACB)
15 Hours Behavioral Interventions/ 15 Hours Teaching and Variations (IBAO)
10 Hours Recording and Measuring Behavior / 5 Hours Single Case Design (IBAO)

Syllabus Effective Date: August 1, 2023

Prerequisites

Students must be eligible to enroll in Master's level courses and have completed EDF 6225, 6226, & 6223 with a B or higher.

Course Description

In this course, participants learn foundational knowledge and concepts of experimental analysis of behavior to include demonstrating the operations of principles of behavior in the context of basic research in multiple areas of investigation such as schedules of reinforcement, stimulus control, conditioned reinforcement choice, and establishing/motivational operations. These basic concepts are then synthesized into applied research relevant in the field of Applied Behavior Analysis. 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) 5th edition Task List, the Qualified Applied Behavior Analysis Credentialing Board (QABA) Competency Standards, and the International Behavior Analysis Organization (IBAO) (see below under Topics Covered). This course serves as the first in a series of courses that prepares students to apply for the exams from the BACB, QABA, or IBAO.

Course Format/Type

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

Course Learning Outcomes

1. Analyze dimensions of experimental analysis of behavior in context by executing basic research in a simulated laboratory using common behavior change procedures as evidenced by at least 82% on group labs.
2. Valuate dimensions of experimental analysis of behavior in the context of relevant academic literature assessed through examinations and assignments.
3. Evaluate operations of principles of behavior in the context of basic research under topics covered as evidenced by at least 82% on group labs.
4. Differentiate the similarities and differences between basic and applied research and their implications to the field of behavior analysis relating to real-life scenarios and examples as evidenced by at least 82% score on discussion post rubrics.
5. Synthesize required readings with independently located literature to defend concepts related to behavior change procedures from the lab and how it translates to applied behavior analysis, relating to real-life scenarios and examples, as evidenced by at least 82% score on discussion post rubrics.
6. Maintain concepts under Topics Covered via cumulative assessments throughout the course sequence to 82% scores on exams

Topics Covered

BACB Measurement, Data Display, and Interpretation (C)

C-1	Establish operational definitions of behavior.
C-2	Distinguish among direct, indirect, and product measures of behavior.
C-3	Measure occurrence (e.g., frequency, rate, percentage).
C-4	Measure temporal dimensions of behavior (e.g., duration, latency, interresponse time).
C-5	Measure form and strength of behavior (e.g., topography, magnitude
C-6	Measure trials to criterion.
C-7	Design and implement sampling procedures (i.e., interval recording, time sampling).
C-8	Evaluate the validity and reliability of measurement procedures.
C-9	Select a measurement system to obtain representative data given the dimensions of behavior and the logistics of observing and recording.
C-10	Graph data to communicate relevant quantitative relations (e.g., equal-interval graphs, bar graphs, cumulative records).
C-11	Interpret graphed data.

BACB Experimental Design (D)

D-1	Distinguish between dependent and independent variables.
D-2	Distinguish between internal and external validity.
D-3	Identify the defining features of single-subject experimental designs (e.g., individuals serve as their own controls, repeated measures, prediction, verification, replication).
D-4	Describe the advantages of single-subject experimental designs compared to group designs.
D-5	Use single-subject experimental designs (e.g., reversal, multiple baseline, multielement, changing criterion).
D-6	Describe rationales for conducting comparative, component, and parametric analyses

BACB Behavior-Change Procedures (G)

G-1	Use positive and negative reinforcement procedures to strengthen behavior.
G-2	Use interventions based on motivating operations and discriminative stimuli.
G-3	Establish and use conditioned reinforcers.
G-4	Use stimulus and response prompts and fading (e.g., errorless, most-to-least, least-to-most, prompt delay, stimulus fading).
G-5	Use modeling and imitation training.
G-6	Use instructions and rules.
G-7	Use shaping.
G-8	Use chaining.
G-9	Use discrete-trial, free-operant, and naturalistic teaching arrangements.
G-10	Teach simple and conditional discriminations.
G-11	Use Skinner's analysis to teach verbal behavior.
G-12	Use equivalence-based instruction.
G-13	Use the high-probability instructional sequence.
G-14	Use reinforcement procedures to weaken behavior (e.g., DRA, FCT, DRO, DRL, NCR).
G-15	Use extinction.
G-16	Use positive and negative punishment (e.g., time-out, response cost, overcorrection).
G-17	Use token economies.
G-18	Use group contingencies.
G-19	Use contingency contracting.
G-20	Use self-management strategies.
G-21	Use procedures to promote stimulus and response generalization.
G-22	Use procedures to promote maintenance.

IBAO Behavioral Interventions

Use Shaping to change the topography of a behavior
Use Forward Chaining to teach a complex behavior
Use Backwards Chaining to teach a complex behavior
Use Behavioral Momentum to increase compliance
Use Differential Reinforcement of Other Behavior to decrease a behavior
Use Differential Reinforcement of Alternative Behavior to decrease a behavior
Use Differential Reinforcement of Incompatible Behavior to decrease a behavior
Use appropriate Extinction procedures based on function to decrease behavior
Use Antecedent Modifications to increase and decrease behavior
Use Noncontingent Reinforcement to decrease behavior
Use Common Punishment Strategies to decrease behavior

IBAO Teaching and Variations

Teach with Discrete Trials
Teach with Natural Environment Teaching
Use Discrimination Training
Teach Stimulus Equivalence of various stimuli
Use the concepts of Verbal Behavior to increase language
Teach with Least to Most Prompting
Teach with Errorless Learning
Use Group/Class-wide Strategies to increase appropriate behavior/decrease problem behavior
Teach in ways that promote Generalization
Teach in ways that promote Maintenance in natural environments
Use Data Analysis strategies to make decisions regarding behavior change
Use data to make Treatment Changes and Modifications
Determine when to implement Treatment Fading

IBAO Recording and Measuring Behavior

Create Behavioral Definitions
Evaluate Permanent Products as a data collection
Demonstrate data collection with Frequency Recording
Demonstrate data collection with Rate
Demonstrate data collection with Partial and Whole Interval Recording
Demonstrate data collection with Time-based Measurement
Explain the importance of Accuracy Based on Observing Behavioral Definitions
Demonstrate data collection with Percentage Accuracy
Explain the importance and considerations in choosing Appropriate Measurement Systems
Demonstrate data collection with Trial by Trial Data
Demonstrate data collection with Cold Probe Data

IBAO Single Case Design

Explain the Dependent Variable and how it is used
Explain the Independent Variable and how it is used
Explain what defines Functional Relationships

Required Texts and Materials

Catania, A.C. (2013). Learning. (5th ed.). Sloan Publishing.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2020). Applied Behavior Analysis. (3rd Ed.). Prentice Hall.

CyberRat Software.

Grading System

Points will be allocated using the following weighted system

1. Participation in weekly assignments (10 %)
2. Participation in weekly labs (60%)
3. 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 earned towards BACB, QABA, and IBAO requirements have been carefully calculated. If a student neither attends the live virtual class nor views the recorded lectures for each week, a 10% response cost to the final grade will be administered for each missed session or recording. If 3 or more class sessions are missed, this will result in an automatic (F) failing grade assigned for the course. Students must also complete weekly assignments to receive a passing grade in the course. 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.

Virtual Class

Our students have choices in attendance and participation: Students are encouraged to attend all live, real-time, class sessions. If students cannot attend live, they must watch the recording each week, in addition to any other pre-recorded lectures.

Grading scale

A	92-100
A-	90-91
B+	88-89
B	82-87
B-	80-81 An 82% or higher is 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 in the on-line live classroom and check ins.

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.