

# **HSC 4936 ACCELERATED TOPICS IN BEHAVIOR ANALYSIS IN HEALTH SCIENCE**

2 Semester Course Credit Hours

Based on the BACB 5<sup>th</sup> Edition Task List

10 hours Measurement

5 Hours Experimental Design

15 hours Identification of the Problem and Assessment

Syllabus Effective Date: August 1, 2021

## **Prerequisites**

Students must be eligible to enroll in Bachelor level courses and have completed HSC 3102, HSC 3114, HSC 4720, and HSC 4580 with a grade of 82% (B) or higher.

## **Course Description**

For those interested in pursuing a career path in the field of health, this course is among the final two in a series of courses designed to meet the curriculum requirements to become a Board Certified assistant Behavior Analyst (BACB) or a Qualified Autism Service Practitioner-Supervisor. This course utilizes previous knowledge of behavior analysis and synthesizes key components into a comprehensive application of expertise regarding measurement, assessment, behavior change procedures. The content is based on the Behavior Analyst Certification Board (BACB) Task List and consists of (10) Hours of Measurement, Data Display and Interpretation, (5) Hours Experimental Design and (15) Hours Identification of the Problem and Assessment. The content is also based on the QABA QASP-S Standards and consists of (5) Data Collection, (20) hours of assessment, and (5) hours of training and supervision. This course is offered independently of the BACB and QABA.

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**Course Format/Type.** This course is 100% Online. Students will be required to participate in weekly online videoconference style classes and applied assignments. 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**

Students will be able to:

1. Apply topics related to ethics, measurement, behavior change, and personnel supervision and management.
2. Interpret and discuss concepts related to ethics, measurement, behavior change, and personnel supervision and management.
3. Justify appropriate procedures and outcomes based on case studies.
4. Formulate best practice procedures when addressing behavior assessment and change.

## BCaBA Topics Covered.

### C. Measurement, Data Display, and Interpretation

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.

### D. Experimental Design

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

## F. Behavior Assessment

F-1	Review records and available data (e.g., educational, medical, historical) at the outset of the case.
F-2	Determine the need for behavior-analytic services.
F-3	Identify and prioritize socially significant behavior-change goals.
F-4	Conduct assessments of relevant skill strengths and deficits.
F-5	Conduct preference assessments.
F-6	Describe the common functions of problem behavior.
F-7	Conduct a descriptive assessment of problem behavior.
F-8	Conduct a functional analysis of problem behavior.
F-9	Interpret functional assessment data.

## H. Selecting and Implementing Interventions

H-1	State intervention goals in observable and measurable terms.
H-2	Identify potential interventions based on assessment results and the best available scientific evidence.
H-3	Recommend intervention goals and strategies based on such factors as client preferences, supporting environments, risks, constraints, and social validity.
H-4	When a target behavior is to be decreased, select an acceptable alternative behavior to be established or increased.
H-5	Plan for possible unwanted effects when using reinforcement, extinction, and punishment procedures.
H-6	Monitor client progress and treatment integrity.
H-7	Make data-based decisions about the effectiveness of the intervention and the

	need for treatment revision.
H-8	Make data-based decisions about the need for ongoing services.
H-9	Collaborate with others who support and/or provide services to clients.

## QASP-S Topics Covered

### G. Data Collection and Analysis

1.	types of measurement (e.g., frequency/rate, duration, force/magnitude, response latency, and inter-response time)
2.	types of ABA graphs
3.	data collection methods
4.	continuous vs. discontinuous measurement systems (e.g., partial interval recording, whole interval recording, momentary time sampling)
5.	types of IOA (e.g., total count IOA and trial by trial IOA)
6.	visual analysis (e.g., trend, level, and variability)
7.	characteristics of trustworthy measurements (e.g., reliability, accuracy, and validity)

### H. Assessment

1.	types of preference and reinforcement assessments (i.e., limitations and benefits, implementation)
2.	components of functional behavior assessment (e.g., including direct (descriptive) and indirect assessments and their advantages and limitations, definition and components of a FBA)
3.	behavior assessment scales (interviews and scales)
4.	conditional probability components
5.	environmental analysis components
6.	criteria for operational definitions

### H. Training and Supervision

1.	Identify the elements to Behavior Skills Training (BST)
2.	Identify systems for monitor treatment and program integrity.
3.	Identify systems for evaluating staff performance.
4.	Identify effective strategies for providing support for staff and family.
5.	Identify methods to mitigate observer drift and reactivity.
6.	Identify effective feedback that is clear, concise, and timely.
7.	Identify elements of poor supervision.
8.	Identify the need for cultural values awareness.

## Required Texts.

Brodhead, M. (2020). *A workbook in behavioral systems analysis and ethical behavior*. ISBN 978-1-7346228- 0-5

O'Neill, R. E., Albin, R. W., Storey, K., Horner, R. H., & Sprague, J. R. (2014). *Functional assessment and*

program development. Cengage Learning. ISBN 978-1285734828

**Grading System.** Points will be allocated using the following weighted system:

1. Participation in weekly applied assignments and quizzes (100% of final grade)

### 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 requirements and QABA requirements have been carefully calculated. If a student neither attends the live virtual class nor views the recorded lecture for each week, a 10% response cost to the **final grade** will be administered. 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.

### Grading scale.

A	92-100
A-	90-91
B+	88-89
B	82-87 <i>Grades higher than 82% are a prerequisite for the next course in the sequence.</i>
B-	80-81
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](mailto: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](mailto: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](mailto: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 veterans 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<sup>®</sup> 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](http://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](http://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.