

HSC 3102 HEALTH SCIENCE ESSENTIALS OF BEHAVIOR ANALYSIS

3 Semester Undergraduate Course Credit Hours

45 Content Hours

BACB 5th Edition Task BCaBA Task List (partial) / BACB RBT 2nd Edition (complete)

QASP-S Standards (partial)/ QABA ABAT Standards (complete)

Syllabus Effective Date: August 1, 2021

Prerequisites

Students must be eligible to enroll in Bachelor level courses.

Course Description.

This course provides content for students interested in an advanced career path in the field of behavior analysis and is the first in a series of courses designed to meet the curriculum requirements to become a Board Certified assistant Behavior Analyst (BCaBA) or a Qualified Autism Service Practitioner-Supervisor (QASP-S). Content in the course serves as a basic introduction to behavior analytic principles, definitions, characteristics, processes, and concepts, measurement, assessment, behavior change procedures, ethics, and autism spectrum disorder basics. This course is designed to provide all of the curriculum requirements necessary to become a BACB Registered Behavior Technician (RBT) or a QABA Applied Behavior Analysis Technician (ABAT), with employment opportunities in the field of healthcare after course completion. The content is based on the Behavior Analyst Certification Board (BACB) 5th Edition Task List, the Registered Behavior Technician 2nd Edition Task List, and the ABAT and QASP-S certifications from the QABA. The course is offered independent of the BACB and QABA.

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. Define and provide examples and non-examples of vocabulary terms related to autism spectrum disorders, concepts Define and provide examples and non-examples of vocabulary terms related to: autism spectrum disorders, concepts and core principles of behavior analysis, assessment procedures, measurement techniques, and behavior change procedures.
2. Select appropriate terminology related to: concepts, and core principles of behavior analysis, assessment procedures, measurement techniques, behavior change procedures concepts, core principles of behavior analysis, assessment procedures, measurement techniques, and behavior change procedures.
3. Compare and contrast (when appropriate) concepts, and core principles of: behavior analysis, assessment procedures, measurement techniques, and behavior change procedures.
4. Summarize key ideas (when appropriate), concepts, and core principles of: behavior analysis, assessment procedures, measurement techniques, and behavior change procedures.
5. Identify legal and ethical criteria when applying behavior analytic procedures.
6. Apply concepts and core principles of behavior analysis, assessment procedures, measurement techniques, and behavior change procedures.

7. Organize concepts under all topics covered via cumulative assessments throughout the course sequence.
8. Identify the purpose of credentialing requirements, especially as it pertains to the treatment of autism spectrum disorders.

Topics Covered

Registered Behavior Technician- 2nd Edition Topics Covered

A. Measurement

A-01	Prepare for data collection.
A-02	Implement continuous measurement procedures (e.g., frequency, duration).
A-03	Implement discontinuous measurement procedures (e.g., partial & whole interval, momentary time sampling).
A-04	Implement permanent product recording procedures.
A-05	Enter data and update graphs.
A-06	Describe behavior and environment in observable and measurable terms.

B. Assessment

B-01	Conduct preference assessments.
B-02	Assist with individualized assessment procedures (e.g., curriculum-based, developmental, social skills).
B-03	Assist with functional assessment procedures.

C. Skill Acquisition

C-01	Identify the essential components of a written skill acquisition plan.
C-02	Prepare for the session as required by the skill acquisition plan.
C-03	Use contingencies of reinforcement (e.g., conditioned/unconditioned reinforcement, reinforcement schedules)
C-04	Implement discrete-trial teaching procedures.
C-05	Implement naturalistic teaching procedures (e.g., incidental teaching).
C-06	Implement task analyzed chaining procedures.
C-07	Implement discrimination training.
C-08	Implement stimulus control transfer procedures.
C-09	Implement stimulus fading procedures.
C-10	Implement prompt and prompt fading procedures.
C-11	Implement shaping procedures
C-12	Implement token economy procedures

D. Behavior Reduction

D-01	Identify the essential components of a written behavior reduction plan.
D-02	Describe common functions of behavior.
D-03	Implement interventions based on modification of antecedents such as motivating/ establishing operations and discriminative stimuli.
D-04	Implement differential reinforcement procedures (e.g., DRA, DRO).
D-05	Implement extinction procedures.
D-06	Implement crisis/emergency procedures according to protocol.

E. Documentation and Reporting

E-01	Effectively communicate with a supervisor in an ongoing manner
E-02	Actively seek clinical direction from supervisor in a timely manner
E-03	Report other variables that might affect the client in a timely manner
E-04	Generate objective session notes for service verification by describing what occurred during the session, in accordance with applicable legal, regulatory, and workplace requirements
E-05	Comply with applicable legal, regulatory and workplace requirements for data collection, storage and transportation.

F. Professional Conduct and Scope of Practice

F-01	Describe the BACB's RBT supervision requirements and the role of the RBT in the service delivery system
F-02	Respond appropriately to feedback and maintain or improve performance accordingly.
F-03	Communicate with stakeholders (e.g., family, caregivers, other professionals) as authorized.
F-04	Maintain professional boundaries (e.g., avoid dual relationships, conflicts of interest, social media contacts).
F-05	Maintain client dignity.

BCaBA Topics Covered

A. Philosophical Underpinnings

A-1	Identify the goals of behavior analysis as a science (i.e., description, prediction, control).
A-2	Explain the philosophical assumptions underlying the science of behavior analysis (e.g., selectionism, determinism, empiricism, parsimony, pragmatism).
A-3	Describe and explain behavior from the perspective of radical behaviorism.
A-4	Distinguish among behaviorism, the experimental analysis of behavior, applied behavior analysis, and professional practice guided by the science of behavior analysis.
A-5	Describe and define the dimensions of applied behavior analysis (Baer, Wolf, & Risley, 1968).

B. Concepts and Principles

B-1	Define and provide examples of behavior, response, and response class.
B-2	Define and provide examples of stimulus and stimulus class.
B-3	Define and provide examples of respondent and operant conditioning.
B-4	Define and provide examples of positive and negative reinforcement contingencies.
B-5	Define and provide examples of schedules of reinforcement.
B-6	Define and provide examples of positive and negative punishment contingencies.
B-7	Define and provide examples of automatic and socially mediated contingencies.
B-8	Define and provide examples of unconditioned, conditioned, and generalized reinforcers and punishers.
B-9	Define and provide examples of operant extinction.
B-10	Define and provide examples of stimulus control.
B-11	Define and provide examples of discrimination, generalization, and maintenance.
B-12	Define and provide examples of motivating operations.
B-13	Define and provide examples of rule-governed and contingency-shaped behavior.
B-14	Define and provide examples of the verbal operants.
B-15	Define and provide examples of derived stimulus relations.

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.

E. Ethics

E-1	Responsible conduct of behavior analysts
E-2	Behavior analysts' responsibility to clients
E-3	Assessing behavior
E-4	Behavior analysts and the behavior-change program
E-5	Behavior analysts as supervisors

E-6	Behavior analysts' ethical responsibility to the profession of behavior analysis
E-7	Behavior analysts' ethical responsibility to colleagues
E-8	Public statements
E-9	Behavior analysts and research
E-10	Behavior analysts' ethical responsibility to the BACB

G. Behavior-Change Procedures

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.

I. Personnel Supervision and Management

I-1	State the reasons for using behavior-analytic supervision and the potential risks of ineffective supervision (e.g., poor client outcomes, poor supervisee performance).
I-2	Establish clear performance expectations for the supervisor and supervisee.
I-3	Select supervision goals based on an assessment of the supervisee's skills.
I-4	Train personnel to competently perform assessment and intervention procedures.
I-5	Use performance monitoring, feedback, and reinforcement systems.
I-6	Use a functional assessment approach (e.g., performance diagnostics) to identify variables affecting personnel performance.
I-7	Use function-based strategies to improve personnel performance.
I-8	Evaluate the effects of supervision (e.g., on client outcomes, on supervisee repertoires).

ABAT Topics Covered

A. Autism Core Knowledge

1.	ASD and common characteristics and deficits
2.	Autism as a spectrum disorder with a triad of primary impairments
3.	'Red flags' used in early diagnosis
4.	Risk factors to autism spectrum disorder
5.	Terminology associated with diagnosis, such as pragmatic language, receptive and expressive language, sensory-motor, social skills, joint attention, stereotypy.
6.	How and when diagnosis disorders commonly associated in differential diagnosis, such as learning disabilities, processing disorders, etc.
7.	Identify co-morbid disorders associated with ASD

B. Legal, Ethical, and Professional Considerations

1.	Scope and role of practice for the ABAT
2.	QABA code of ethics, policies and procedures
3.	Limitations of confidentiality
4.	HIPAA
5.	Advocacy and collaborative approach to intervention
6.	Identify the following acronyms: IEP, IDEA

C. Core Principles of ABA

1.	Basic assumptions in behaviorism and behavior modification
2.	Classical and operant conditioning, conditioned and unconditioned reinforcement and punishment
3.	Three-part contingency; antecedents, behaviors, consequences
4.	Foundational behavioral terminology including, extinction, extinction burst, spontaneous recovery, deprivation, satiation, stimulus, discriminative stimulus, stimulus control, responses, motivation operations, establishing operations, setting events
5.	Principles and types of schedules of reinforcement and punishment
6.	Contingent and non-contingent; primary and secondary reinforcement and punishment
7.	Terms and definitions of Applied Verbal Behavior (AVB)

D. Antecedent Interventions

1.	Define and identify positive behavior support systems
2.	Premack principle, behavioral momentum, priming, forced choice
3.	Identify common environment and visual supports and benefits of each such as, functional communication training, PECS, TEACCH, social stories, video modeling, visual schedules

E. Skill Acquisition Programming

1.	Elements of effective goals and objectives
2.	Task analysis
3.	Types of prompts
4.	Prompt dependence and fading
5.	Demands and demand fading 6. Pairing
7.	Modeling
8.	Imitation
9.	Verbal operants
10.	Memetic behavior
11.	Motor behavior
12.	Errorless learning
13.	Error correction procedures
14.	Stimulus control and transfer
15.	Transfer trials
16.	Discrete trial teaching (DTT)
17.	Discrimination training
18.	Shaping
19.	Backward and forward chaining
20.	Natural environment teaching (NET) 21. Generalization and maintenance
22.	Pivotal behavior
23.	Pivotal response training (PRT)

F. Behavior Reduction Interventions

1.	Behavior Intervention Plan (BIP)
2.	Name 4 functions of behavior and define FBA
3.	Contingency interventions, such as token economy, positive practice, over-correction, response cost, time out
4.	Differential reinforcement procedures: DRO, SRA, DRI, DRL, DRH

G. Data Collection and Analysis

1.	Reliability and validity
2.	Operational definitions
3.	Types of assessments: preference, self-monitoring, ABC, environmental evaluation
4.	Types of measurement, such as frequency/event recording, duration, time sampling, interval, partial interval, and latency
5.	Continuous and discontinuous; direct and indirect data recording
6.	Basic graphs; line, scatterplot, bar
7.	Define and identify the benefits of IOA

QASP-S Topics Covered

A. Autism Spectrum Disorder Basics

1.	DSM-IV and DSM-V (or current DSM) related to autism spectrum disorders
2.	CDC risk factors and comorbidities related to autism spectrum disorders
3.	Developmental milestones (e.g., typical and atypical, age appropriate)
4.	Autism diagnostic process

B. Legal, Ethical, and Professional Considerations

1.	QABA Code of Ethics
2.	HIPAA regulations (e.g., confidentiality including limitations, mandated reporting, reportable documents, duty to warn vs. duty to protect)
3.	Educational laws (e.g., IDEA, LRE, IEP, ADA, Rehabilitation Act, 504 Plan)
4.	Positive behavior supports
5.	Person-centered planning
6.	Methods of collaboration (e.g., treatment adherence, referral methods)

C. Core Principles of ABA

1.	Four-term contingency
2.	Respondent behavior vs. operant behavior
3.	Stimulus (e.g., stimulus control, discriminative stimulus, stimulus delta, SD-p, generalization, discrimination, response)
4.	Motivating operations including satiation and deprivation
5.	dead man's test
6.	Reinforcement and punishment (e.g., positive and negative)
7.	matching law (e.g., rate, magnitude)
8.	Conditioned vs. unconditioned reinforcers/punishers
9.	Basic schedules of reinforcement (e.g., fixed-interval, fixed-ratio, variable-interval and variable ratio)
10.	Risks to extinction procedures (e.g., extinction burst, spontaneous recovery and resurgence)
11.	Basic verbal operants (e.g., mand, tact, echoic and intraverbal)
12.	Scientific understanding: description, prediction, and control
13.	Six attitudes of science
14.	Seven dimensions of applied behavior analysis

D. Antecedent Interventions

1.	Antecedent strategies (e.g., priming, choices, behavior momentum, visual supports, Premack Principle, environmental modifications)
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2.	Non-contingent reinforcement procedures
3.	Functional communication training
4.	effects of setting events

E. Skill Acquisition Programming

1.	goal writing criteria (e.g., objective measurable mastery criteria, targets)
2.	social/cultural factors necessary for program success
3.	error correction methods
4.	prompts (e.g., hierarchy, procedures, fading, types, prompt dependency)
5.	ABA instructional and educational methodologies

F. Behavior Reduction Interventions

1.	components of behavior intervention plans
2.	components of token economies (e.g., backup reinforcers, generalized reinforcers, response- cost, ratio strain)
3.	time-out procedures
4.	differential reinforcement procedures
5.	behavior contrast
6.	functional assessments and functions of behaviors
7.	group contingencies
8.	components of contingency contracts
9.	ethical considerations related to behavior reduction interventions (e.g., extinction, time- out procedures, group contingencies, punishment procedures)

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 and Materials

Tarbox, J., & Tarbox, C. (2016). *Training manual for behavior technicians: Working with individuals with autism*. Academic Press. ISBN 978-0128094082

Grading System

Points will be allocated using the following weighted system

1. Participation in weekly assignments (50% of final grade)
2. Exams (50% 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 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 - <i>Grades of 82% or higher are required for courses with prerequisites in the program</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.

- Canvas Support Hotline (Open 24/7) - 1-844-866-3349
- UWF ITS Help Desk - 1-850-474-2075 or email itshelpdesk@uwf.edu

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 the Student Accessibility Resources (SAR). Appropriate academic accommodations will be determined based on the documented needs of the individual. For information regarding the registration process, 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 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 ® 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.