

# Psy 525: Behavior Analysis Applied to Autism Spectrum Disorders and Developmental Disorders Fall 2024

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# **COURSE DESCRIPTION**

This course covers assessment and intervention strategies for working with individuals with autism and other neurodevelopmental disorders from a behavior analytic perspective to teach, strengthen, generalize, and maintain behaviors. Students will learn how to provide behaviorally based training and supervision.

# **COURSE OBJECTIVES**

- 1. Apply the principles of behavior analysis to addressing the learning and behavior support needs of individuals with autism and other neurodevelopmental disorders.
- 2. Describe the process of selecting behavior targets for intervention and developing instructional programs to teach desired behaviors.
- 3. Compare and contrast various intervention strategies such as natural environment teaching with discrete trial teaching.
- 4. Develop language programming based on verbal behavior.
- 5. Provide training and supervision for the delivery of behavioral practices.

BACB 5 <sup>th</sup> Edition Task List				
Section 1: Foundations	Task List Items	Content Hours		
B: Concepts and Principles	B-10-14	5 hours		
Section 2: Applications	Task List Items			
G: Behavior-Change Procedures	G-1-12, G-20-22	30 hours		
H: Selecting and Implementing	H-1-9			
Interventions				
I: Personnel Supervision and	I-1, I-2, I-4, I-5	10 hours		
Management				
I: Personnel Supervision and	I-1, I-2, I-4, I-5	10 hours		
Management				

The Behavior Analyst Certification Board is transitioning from the 5<sup>th</sup> Edition Task List to the 6<sup>th</sup> Edition Test Content Outline.

# READINGS

Listed in Course Readings below the course schedule and posted in Blackboard.

## **COURSE INFORMATION**

#### **BCBA Certification Information**

This course is one of seven courses in the 21-credit Applied Behavior Analysis Graduate Certificate Program at GVSU. Successful completion of the course sequence results in the GVSU Graduate Certificate in Applied Behavior Analysis. The ABA Graduate Certificate is a Verified Course Sequence (VCS) by the Association of Behavior Analysis International (ABAI). The BACB has approved the GVSU course sequence as meeting the 5<sup>th</sup> edition Task List 315-hour coursework requirements for eligibility to pursue certification as a BCBA. Additionally, the BACB requires that you show proof of a master's degree and evidence that you have accrued the required number of supervised experience hours before you can register to take the BCBA exam. You are responsible for ensuring that you meet all of the current BACB standards. For more information about the Behavior Analyst Certification Board, go to www.bacb.com.

Because this course is part of the GVSU VCS, it must meet specific competency requirements from the BACB 5<sup>th</sup> edition Task List. Therefore, this course will cover the ways that ABA is used to understand the behavior of individuals with ASD and develop programs that improve their learning, social interaction, and behavior. This course does not include information about diagnostic evaluation or interventions that are not related to ABA. However, feel free to ask questions outside of the realm of ABA and I will help you access the information you are looking for.

#### **Required Equipment**

- High-speed internet access
- Operating system that meets current Blackboard browser requirements
- Computer with a sound card and speakers
- Microphone (built in or external)
- Computer camera for videoconference, synchronous meetings (most laptops have a camera)

#### Blackboard is the Course Management System

To access Blackboard, go to <u>https://lms.gvsu.edu/</u> and enter your log in and password.

Take a look at the GVSU Online Learning pages to find numerous materials about using Blackboard and online learning <u>http://www.gvsu.edu/online/</u>.

Check the current technical requirements to use Blackboard and preferred browser information.

If you experience technical problems, check the help website <u>http://www.gvsu.edu/it/learn/</u>. If you need further assistance, contact the help desk by email or phone - <u>helpdesk@gvsu.edu</u> or 616-331-3513.

#### Accessing the Library

Many of GVSU's library resources can be accessed online <u>Distance and Off-Campus Learning Services</u> with many journal articles available on demand. You must have an active GVSU student account to take advantage of the library's resources and services. General library <u>help site</u>.

#### **Graduate Writing Resources**

The <u>Graduate Writing Resources</u> available to assist with all kinds of writing tasks and they will give feedback on writing assignments. It is not just for students who struggle with writing. They can help any student improve writing skills.

## Accommodations for Students with Disabilities

If you are in need of accommodations due to a learning, physical, or other disability you must present a memo to me from Disability Support Resources (DSR), indicating the existence of a disability and the suggested reasonable accommodations. If you have not already done so, please contact the <u>Disability Support Resources</u> office (4015 JHZ) by calling 331-2490 or email to dsrgvsu@gvsu.edu. Please note that I cannot provide accommodations based upon disability until I have received a copy of the DSR issued memo. All discussions will remain confidential.

# **COURSE ORGANIZATION and ASSIGNMENTS**

## Synchronous Meeting (participate in 3 synchronous meetings)

Synchronous meetings will provide an opportunity to talk about course materials and assignments, as well as prepare for exams. We may guest speakers on occasion. The date and time for these meeting is listed on Blackboard.

## Readings (weekly)

You will have book chapters and articles to read weekly. It is critical to stay up on the readings. This is where you will learn much of the content along with the ABA terminology, which is cumulative over the course of the ABA sequence and is important for course exams and the BCBA exam. Most importantly, the reading content is necessary for your work as a practitioner.

## Learning Units (two-week units)

The learning units will be a foundational part of the course, and this is where you will find instructions for each two-week segment of the course including reading assignments, course content presentations, practice activities, and assignments. Units will open up two weeks at a time and an assignment will be due at the end of the two-week period. All previous units will be open throughout the course.

## **Discussion** – (each Learning unit)

The discussion topic will be posted with each unit to promote discussion related to the topics covered in the unit. It is important to have interactions with others around the ABA terminology and application. A grading rubric is provided on the Blackboard site under Course Information.

## Assignments – (each Learning Unit)

You will have an assignment associated with each learning unit. These will vary in type and length, but most will involve practice or application of concepts from the unit content. These are graded and will constitute an important part of your learning and grade for the course. All written assignments must be prepared in a professional manner. More information about each assignment will be provided on Blackboard.

#### Exams - (3 exams)

You will have 3 open-note, timed exams scheduled throughout the semester focused on two units of course content. The exams will include primarily short answer and essay questions but may also include multiple choice and fill in the blank questions. The exams will be administered through Blackboard. You will have a specific amount of time to complete the exam. Although you may use notes for the exam, it will be necessary to complete all readings and study to become fluent in the content to complete the questions in the allotted time. Many of the questions will ask you to synthesize and apply information and you will not find the answers directly in the materials.

\*Note: We will <u>not</u> use Respondus Lockdown since these are open-note exams.

## POINTS AND GRADING

Assignment	Points	Total Points for Semester
Synchronous meetings (3)	8	24
Discussion board (6)	10	60
Assignments (6)	20	120
Exams (3)	50	150
TOTAL POINTS		354

## **Final Grade Requirement**

Students seeking the ABA Graduate Certificate must complete all courses with a B- or higher in each course and finish with a minimum 3.0 grade point average in the course sequence.

Letter Grade	Percentage Range	
A	94-100%	
A-	90-93%	
B+	87-89%	
В	83-86%	
В-	80-82%	
C+	77-79%	
С	70-76%	
D	61-69%	
F	0-60%	

# **GVSU POLICIES**

This course is subject to GVSU's general requirements for courses. A full list with pointers to resources may be found at <u>www.gvsu.edu/coursepolicies</u>.

#### Academic Integrity

GVSU Student Code regarding Integrity of Scholarship and Grades:

#### Section 223.00: Integrity of Scholarships and Grades

Truth and Honesty. The principles of truth and honesty are recognized as fundamental to a community of teachers and scholars. The University expects that both faculty and students will honor these principles, and in so doing protect the validity of University grades. This means that all academic work will be done by the student to whom it is assigned without unauthorized aid of any kind. Instructors, for their part, will exercise care in the planning and supervision of academic work, so that honest effort will be positively encouraged.

#### Section 223.01: Plagiarism

Any ideas or material taken from another source for either written or oral presentation must be fully acknowledged. Offering the work of someone else as one's own is plagiarism. The language or ideas taken from another may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodicals, speeches or the writings of other students. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgment also is considered plagiarism. Any student who fails to give credit in written or oral work for the ideas or materials that have been taken from another is guilty of plagiarism.

## Use of Artificial Intelligence (AI) Policy

Many faculty and students are exploring the ways that ChatGPT and other AI resources can facilitate their learning and communication. You may explore these options for this course, including the possibility of meeting with the Writing Center to learn more about best practices for leveraging AI in the development of your original work products. If you utilize ChatGPT for an assignment that you submit in this class, please follow <u>guidance from the American Psychological Association</u> for explaining the role of AI and citing any specific information from AI sources.

#### **Attendance Policy**

In the event of an unavoidable absence from a synchronous meeting or exam window (e.g., illness, family emergency, weather-related disruption), students will have the opportunity to complete an alternative activity or to reschedule the exam as soon as possible, ideally within 48 hours. Please notify your instructor of any planned, non-emergency scheduling conflicts within the first week of the semester.

#### Makeup/Late Work Policy

Students will not have the opportunity to make up points lost due to late or missing discussion posts, assignments, or practice quizzes. Please notify your instructor if you are aware of circumstances that could affect your timely completion of assigned work in this course.

#### **Religious Observances**

Your instructor is dedicated to maintaining the rights of students to observe religious holidays. If you need to miss a class to observe a religious holiday, please contact your instructor a week in advance to discuss any arrangements.

#### **Student Support**

GVSU and your instructors are dedicated to helping you meet your academic and career goals. Please do not hesitate to contact your instructors if you wish to discuss your course performance or other academic issues. Additionally, if you would like to talk to a professional counselor about mental health concerns, phone the GVSU Counseling Center during normal business hours at 616-331-3266. If you are experiencing a crisis or are considering suicide you can call 1-800-273-TALK at any time.

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Unit Dates	Learning Unit	Readings	Assignments
Unit 1	Foundational concepts and principles	• Boutot & Hume (2012)	Assignment 1
Aug 26-	for teaching students with ASD/DD	Spencer et al (2012)	Discussion board
Sept 8		Livanis et al. (2013)	
Evidence-b	Evidence-based interventions	• Test et al. (2014)	
Unit 2	Foundations of Behavior Change and	• Odom et al. (2021)	Synch mtg 1 - 9/12
Sept 9-22	Intervention Practices	<ul> <li>Adcock &amp; Cuvo (2009)</li> </ul>	Assignment 2
	School based services	Carnett et al. (2014)	Discussion board
	<ul> <li>Selecting, implementing, and</li> </ul>	• Noel & Getch (2016)	
	evaluating interventions		
	Motivation & choice		
Exam 1 – Sept			
Unit 3	Instructional supports in a school	• Hart & Whalon (2008)	Assignment 3
Sept 23-	setting	• Cohen et al. (2018)	Discussion board
Oct 6	Inclusive support	• Schulze (2016)	
	Academic engagement	<ul> <li>Koegel et al. (2014)</li> </ul>	
	Peer to peer support	• Ziegler et al. (2020)	
	Self-management		
Unit 4	Intensive, individualized instructional	• Steege et al. (2007)	Synch mtg 2-10/16
Oct 7-20	practices	<ul> <li>Weiss &amp; Zane (2010)</li> </ul>	Assignment 4
	Discrete trial teaching	Ferriaoli et al. (2005)	Discussion board
	Errorless teaching	• Haq & Aranki (2019)	
•	Generalization and maintenance	<ul> <li>Noell et al. (2011)</li> </ul>	
		Schwartz et al. (2013)	
Exam 2 – Oct 2	3rd		
	Functional Communication	• Green (2001)	Assignment 5
Unit 5	PECS and Functional Comm	• Ganz et al. (2012)	Discussion board
Oct 21-Nov 3		Homilitas et al. (2014)	Term fluency
	Intro to Equivalence-based instruction		
Unit 6	Verbal Behavior	• Cooper et al. (2020) – Ch. 18 OR	Assignment 6
Nov 4-17		Carr & Miguel (2013)	Discussion board
		Sundberg & Michael (2001)	
		Ward and Mehta (2019)	
		<ul> <li>Pyles et al. (2021)</li> </ul>	
Unit 7	Training	DiGennaro et al. (2018)	Synch mtg 3 - 11/21
Nov 18-Dec 8		Plavnick (2010)	Assignment 6
		Anderson et al. (2018)	Discussion board
3-week unit		• Fryling (2014)	
		Ingersoll et al. (2016)	
Exam 3 – Dec 1	9th		

#### **Course Readings**

Adcock, J., & Cuvo, A. J. (2009). Enhancing learning for children with autism spectrum disorders in regular education by instructional modifications. *Research in Autism Spectrum Disorders*, *3*(2), 319-328.

Anderson, C. M., Smith, T., & Iovannone, R. (2018). Building capacity to support students with autism spectrum disorder: A modular approach to intervention. *Education and Treatment of Children, 41*(1), 107-137.

Boutot, E. A., & Hume, K. (2012). Beyond time out and table time: Today's applied behavior analysis for students with autism. *Education and Training in Autism and Developmental Disabilities*, 47(1), 23-38.

Carnett, A., Raulston, T., Lang, R., Tostanoski, A., Lee, A., Sigafoos, J., & Machalicek, W. (2014). Effects of a perseverative interest-based token economy on challenging and on-task behavior in a child with autism. *Journal of Behavioral Education*, doi:http://dx.doi.org/10.1007/s10864-014-9195-7

Carr, J. E., & Miguel, C. F. (2013). The analysis of verbal behavior and its therapeutic applications. In G. J. Madden, W. V. Dube, T. D. Hackenberg, G. P. Hanley, & K. A. Lattal (Eds.), *APA handbook of behavior analysis, Vol. 2. Translating principles into practice* (pp. 329–352). American Psychological Association. (chapter 13)

Cengher, M., Shamoun, K., Moss, P., Roll, D., Feliciano, G., & Fienup, D. M. (2015). A comparison of the effects of two prompt-fading strategies on skill acquisition in children with autism spectrum disorders. *Behavior Analysis in Practice*, *9*(2), 115-125.

Cohen, A., & Demchak, M. (2018). Use of visual supports to increase task independence in students with severe disabilities in inclusive educational settings. *Education and Training in Autism and Developmental Disabilities*, *53*(1), 84-99.

DiGennaro Reed, F. D., Blackman, A. L., Erath, T. G., Brand, D., & Novak, M. D. (2018). Guidelines for using behavioral skills training to provide teacher support. *Teaching Exceptional Children, 50*(6), 373-380.

Ferriaoli, S., Hughes, C., & Smith, T. (2005). A model for problem solving in discrete trial training for children with autism. *Journal of Early and Intensive Behavior Intervention*, *2*(4), 224-246.

Fryling, M. J. (2014). Contextual intervention for caregiver non-adherence with behavioral intervention plans. *Child & Family Behavior Therapy*, *36*(3), 191–203.

Ganz, J. B., Simpson, R. L., & Lund, E. M. (2012). The picture exchange communication system (PECS): A promising method for improving communicating skills of learners with autism spectrum disorders. *Education and Training in Autism and Developmental Disabilities*, *47*(2), 176-186.

Haq, S. S., & Aranki, J. (2019). Comparison of traditional and embedded DTT on problem behavior and responding to instructional targets. *Behavior Analysis in Practice*, doi:10.1007/s40617-018-00324-3

Hart, J. E., & Whalon, K. J. (2008). 20 ways to promote academic engagement and communication of students with autism spectrum disorder in inclusive settings. *Intervention in School and Clinic, 44*(2), 116-120.

Homlitas, C., Rosales, R. & Candel, L. (2014). A further evaluation of behavioral skills training for implementation of the picture exchange communication system. *Journal of Applied Behavior Analysis, 47*, 198-203.

Ingersoll, B., Wainer, A. L., Berger, N. I., Pickard, K. E., & Bonter, N. (2016). Comparison of a self-directed and therapist-assisted telehealth parent-mediated intervention for children with ASD: A pilot RCT. *Journal of Autism and Developmental Disorders, 46*(7), 2275-2284.

Koegel, L. K., Park, M. N., & Koegel, R. L. (2014). Using self-management to improve the reciprocal social conversation of children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 44(5), 1055-1063.

Livanis, A., Benvenuto, S., Mertturk, A., & Hanthorn, C. A. (2013). Treatment integrity in autism spectrum disorder interventions. In S. Goldstein, & J. A. Naglieri (Eds.), *Interventions for autism spectrum disorders: Translating science into practice; interventions for autism spectrum disorders: Translating science into practice; New York*, NY.

Noel, C. R., & Getch, Y. Q. (2016). Noncontingent reinforcement in after-school settings to decrease classroom disruptive behavior for students with autism spectrum disorder. *Behavior Analysis in Practice*, doi 10.1007/s40617-016-0117-0

Noell, G. H., Call, N. A., & Ardoin, S. P. (2011). Building complex repertoires from discrete behaviors by establishing stimulus control, behavioral chains, and strategic behavior. In W. W. Fisher, C. C. Piazza & H. S. Roane (Eds.), *Handbook of applied behavior analysis* (Chapter 15 - pp. 250-269).

Odom, S.L., Hall, L.J., Morin, K.L. *et al.* (2021). Educational interventions for children and youth with autism: A 40-year perspective. *Journal of Autism Developmental Disord*ers, 1-16. https://doi.org/10.1007/s10803-021-04990-1

Plavnick, J. B., Ferreri, S. J., & Maupin, A. N. (2010). The effects of self-monitoring on the procedural integrity of a behavioral intervention for young children with developmental disabilities. *Journal of Applied Behavior Analysis*, 43(2), 315-320.

Pyles, M. L., Chastain, A. N., & Miguel, C. F. (2021). Teaching children with autism to mand for information using "why?" as a function of denied access. *Analysis of Verbal Behavior*, 37, 17–34.

Schulze, M. A. (2016). Self-management strategies to support students with ASD. *Teaching Exceptional Children, 48*(5), 225-231.

Schwartz, I., Thomas, C. J., McBride, B., & Sandall, S. (2013). A school-based preschool program for children with ASD: A quasi-experimental assessment of child change in project DATA. *School Mental Health: A Multidisciplinary Research and Practice Journal, 5*(4), 221-232.

Spencer, T. D., Dietrich, R. & Slocum, T. A. (2012). Evidence-based practice: A framework for making effective decisions. *Education and Treatment of Children, 35*(2), 127-151.

Steege, M. W., Mace, F. C., Perry, L., & Longnecker, H. (2007). Applied behavior analysis: Beyond discrete trial teaching. *Psychology in the Schools, 44*(1), 91-99.

Sundberg, M. L. (2014). VB-MAPP. Verbal Behavior Milestones Assessment and Placement Program (2<sup>nd</sup> ed.). AVB Press (pp. 1-15).

Sundberg, M. L., & Michael, J. (2001). The benefits of Skinner's analysis of verbal behavior for children with autism. *Behavior Modification*, *25*(5), 698–724.

Test, D. W., Smith, L. E., & Carter, E. W. (2014). Equipping youth with autism spectrum disorders for adulthood: Promoting rigor, relevance, and relationships. *Remedial and Special Education*, *35*(2), 80-90.

Ward, K. D., & Shukla Mehta, S. (2019). The use of a stimulus control transfer procedure to teach motivation-controlled mands to children with autism. *Focus on Autism and Other Developmental Disabilities*, *34*(4), 215-225.

Weiss, M.J., & Zane, T. (2010). Three important things to consider when starting intervention for a child diagnosed with autism. *Behavior Analysis in Practice*, *3*, 58-60.

Ziegler, M., Matthews, A., Mayberry, M., Owen-DeSchryver, J., & Carter, E. W. (2020). From barriers to belonging: Promoting inclusion and relationships through the peer to peer program. *Teaching Exceptional Children*, *52*(6), 426-434.

#### **Tips for a Successful Learning Experience**

\*Although these might seem obvious and simple, they will make a difference

- **Read the syllabus and all course information on Blackboard**
- Stay organized and track due dates
- Plan weekly study times
- □ KEEP UP ON THE READING
- Log into Blackboard at least 3-4 times per week to check announcements, discussion board, and interact with course material
- □ Get to know the other students in the class and help each other learn the language and the concepts
- Post questions, comments, and ideas on discussion board
- Engage with the instructor and ask questions