



**College of Education and Human Development  
Division of Special Education and disAbility Research**

Summer 2014

EDSE 623 688: Applied Behavior Analysis: Assessments and Interventions  
CRN: 42052, 3 - Credits

<b>Instructor:</b> Dr. Kristy Park	<b>Meeting Dates:</b> 04/03/14 - 06/26/14
<b>Phone:</b> 703 993 5251	<b>Meeting Day(s):</b> Thursday
<b>E-Mail:</b> kparkc@gmu.edu	<b>Meeting Time(s):</b> 4:30 pm-9:00 pm
<b>Office Hours:</b> by appointment	<b>Meeting Location:</b> KAII 113/Video Conference

**Note:** This syllabus may change according to class needs. Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.

### **Course Description**

Further expands on basic content of applied behavior analysis and teaches how to implement behavioral procedures and develop behavioral programs for clients with fundamental behavioral needs.

**Prerequisite(s):** EDSE 619

**Co-requisites:** EDSE 619

### **Advising Contact Information**

Please make sure that you are being advised on a regular basis as to your status and progress through your program. Mason M.Ed. and Certificate students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other students should refer to their faculty advisor.

### **Nature of Course Delivery**

Learning activities include the following:

1. Class lecture and discussion
2. Application activities
3. Small group activities and assignments
4. Video and other media supports
5. Research and presentation activities
6. Electronic supplements and activities via Blackboard

## Learner Outcomes

Upon completion of this course, students will be able to:

- Describe and identify ethical standards regarding behavior analytic assessment, instruction, and intervention.
- Describe the rationale for conducting a functional analysis and a functional assessment.
- Describe, identify, and demonstrate procedures for conducting a functional assessment.
- Describe and identify procedures for conducting a functional analysis.
- Interpret functional assessment and functional analysis data.
- Select and develop function-relevant instructional and intervention procedures on the basis of functional assessments or functional analyses.
- Write well-composed, parsimonious instructions for implementers of behavior analytic instructional and intervention procedures.
- Describe and develop procedures for competency based training of others who will implement behavior analytic instructional and intervention procedures.
- Incorporate interobserver agreement, procedural fidelity, and implementer behavior management procedures into written behavior analytic instructional and intervention procedures.
- Describe conditions relevant to development and success of behavior analytic instruction, training sessions, workshops, seminars, and staff management.

## Required Textbooks

Cooper, J.O., Heron, T.E., & Heward, W.L. (2007). *Applied behavior analysis*. Upper Saddle River, NJ: Pearson-Merrill-Prentice Hall. ISBN: 0-13-142113-1

Sidman, M. (2001). *Coercion and its fallout*. Boston, MA: Authors Cooperative. ISBN 1-888-83001-8

## Digital Library Option

The Pearson textbook(s) for this course may be available as part of the **George Mason University Division of Special Education and disAbility Research Digital Library**. Please note that not all textbooks are available through this option. Visit the links below before purchasing the digital library to ensure that your course(s) text(s) are available in this format. The division and Pearson have partnered to bring you the Digital Library; a convenient, digital solution that can save you money on your course materials. The Digital Library offers you access to a complete digital library of all Pearson textbooks and MyEducationLabs used across the

Division of Special Education and disAbility Research curriculum at a low 1-year or 3-year subscription price. Access codes are available in the school bookstore. Please visit <http://gmu.bnccollege.com> and search the ISBN. To register your access code or purchase the Digital Library,  
visit: <http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html>

- 1 year subscription \$200 ISBN-13: 9781269541411
- 3 years subscription \$525 ISBN-13: 9781269541381
- Individual e-book(s) also available at the bookstore link above or  
at <http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html>

### **Recommended Textbooks**

None

### **Required Resources**

None

### **Additional Readings**

- Bethke, S.A., Pruitt, A.E., Oberdorff, A.J., & Layer, S.A. (2003). Training parents to implement pediatric feeding protocols. *Journal of Applied Behavior Analysis, 36*, 545-562.
- Bloom, S.E., Lambert, J.M., Dayton, E., & Samaha, A.L. (2013). Teacher-conducted trial-based functional analyses as the basis for intervention. *Journal of Applied Behavior Analysis, 46*(1), 208-218.
- Borgmeier, C., & Horner, R. H. (2006). An evaluation of the predictive validity of confidence ratings in identifying Functional Behavioral Assessment hypothesis statements. *Journal of Positive Behavior Interventions, 8*, 100-105.
- Chapman, S.S., Ewing, C.B., & Mozzoni, M.P. (2005). Precision teaching and fluency training across cognitive, physical, and academic tasks in children with traumatic brain injury: A multiple baseline study. *Behavioral Interventions, 20*, 37-49.
- Crone, D. A., & Horner, R. H. (2000). Contextual, conceptual, and empirical foundations of functional behavioral assessment in schools. *Exceptionality, 8*(3), 161.
- Davis, T.N., Durand, S., Fuentes, L., Dacus, S., & Blenden, K. (2014). The effects of a school-based functional analysis of subsequent classroom behavior. *Education and Treatment of Children, 37*(1), 95-110.
- Ellis, J., & Magee, S.K. (1999). Determination of environmental correlates of disruptive classroom behavior: Integration of functional analysis into public school assessment process. *Education and Treatment of Children, 22* (3), 291-316.
- Ghezzi, P.M. (2007). Discrete trials teaching. *Psychology in the Schools, 44* (7), 667-679.

- Grow, L. L., Carr, J. E., & LeBlanc, L. A. (2009). Treatments for attention-maintained problem behavior: Empirical support and clinical recommendations. *Journal of Evidence-Based Practices for Schools, 10*, 70-92.
- Horner, R. H. (1994). Functional assessment: Contributions and future directions. *Journal of Applied Behavior Analysis, 27*, 401-404.
- Iwata, B. A., Dorsey, M. F., Slifer, K. J., Bauman, K. E., & Richman, G. S. (1994). Toward a functional analysis of self-injury. *Journal of Applied Behavior Analysis, 27*, 197-209.
- Kahng, S.W., Iwata, B.A., & Fischer, S.M. (1998). Temporal distributions of problem behavior based on scatter plot analysis. *Journal of Applied Behavior Analysis, 31* (4), 503-604.
- Kerr, K.P., Smyth, P., & McDowell, C. (2003). Precision teaching in children with autism: Helping design effective programmes. *Early Child Development and Care, 173* (4), 39-410.
- Lerman, D.C., Hovanetz, A., Strobel, M., & Tetreault, A. (2009). Accuracy of teacher-collected descriptive analysis data: A comparison of narrative and structured recording formats. *Journal of Behavioral Education, 18*, 157 – 172.
- Mayer, K.L. & DiGennaro-Reed, F.D. (2014). Effects of a training package to improve the accuracy of descriptive analysis of data recording. *Journal of Organizational Behavior Management, 33*, 226-243.
- McIntosh, K., Borgmeier, C., Anderson, C., Horner, R. H., Rodriguez, B. J., & Tobin, T. J. (2008). Technical adequacy of the Functional Assessment Checklist: Teachers and staff (FACTS) FBA interview measure. *Journal of Positive Behavior Interventions, 10*, 33-45.
- MacDonald, A., & Hume, L. (2010). The use of multi-element behaviour support planning with a man with severe learning disabilities and challenging behaviour. *British Journal of Learning Disabilities, 38*, 280 – 285.
- Mueller, M.M., Piazza, C.C., Moore, J.W., Kelley, M.E., Bethke, S.A., Pruett, A.E., Oberdorff, A.J., & Layer, S.A. (2003). Training parents to implement pediatric feeding protocols. *Journal of Applied Behavior Analysis, 36* (4), 545-562.
- Paclawskyj, T.R., & Vollmer, T.R. (1995). Reinforcer assessment for children with developmental disabilities and visual impairments. *Journal of Applied Behavior Analysis, 28* (2), 219-224.
- Pelios, L., Morren, J., Tesch, D.,& Axelrod, S. (1999). The impact of functional analysis methodology on treatment choice for self-injurious and aggressive behavior. *Journal of Applied Behavior Analysis, 32*, 185-195.
- Park, K.L. (2007). Facilitating effective team-based Functional Behavior Assessments in typical school settings. *Beyond Behavior, 17*, 21-31.
- Schanding, G.T., Tingstrom, D.H., & Sterling-Turner, H.E. (2009). Evaluation of stimulus preference assessment methods with general education students. *Psychology in the Schools, 46* (2), 89-99.
- Schepis, M.M., Ownbey, J.B., Parsons, M.B., & Reid, D.H. (2000). Training support staff for teaching young children with disabilities in an inclusive preschool setting. *Journal of Positive Behavior Interventions, 2* (3), 170-178.

- Scott, T. M., Nelson, C. M., & Zabala, J. (2003). Functional behavior assessment training in public schools: Facilitating systemic change. *Journal of Positive Behavior Interventions*, 5(4), 216-225.
- Stichter, J., & Conroy, M. (2005). Using structural analysis in natural settings: A responsive functional assessment strategy. *Journal of Behavioral Education*, 14(1), 19-34.
- Sugai, G., & Lewis, T. J. (1996). Preferred and promising practices for social skills instruction. *Focus on Exceptional Children*, 29(4), 1-16.
- Touchette, P. E., MacDonald, R. F., & Langer, S. N. (1985). A scatter plot for identifying stimulus control of problem behavior. *Journal of Applied Behavior Analysis*, 18, 343- 351.
- Tarbox, J., Wilke, A.E., Najdowski, A.C., Findel-Pyles, R.S., Balasanyan, S., Caveney, A.C., Chilingaryan, V., King, D.M., Niehoff, S.M., Slease, K., & Tia, B. (2009). Comparing indirect, descriptive, and functional assessments of challenging behavior in children with autism. *Journal of Developmental and Physical Disabilities*, 21, 493 – 514.
- Ward-Horner, J., & Sturmey, P. (2012). Component analysis of behavior skills training in functional analysis. *Behavioral Interventions*, 27(2), 75-92.
- Whitby, P.J., Ogilivie, C., & Mancil, G.R. (2012). A framework for teaching social skills to students with Asperger Syndrome in the general education classroom. *Journal of Developmental Disabilities*, 18(1), 62-71.
- Zarcone, J.R., Crosland., K., Fisher, W.W., Wordsell, A.S., & Herman, K. 1999). A brief method for conducting a negative-reinforcement assessment. *Research in Developmental Disabilities*, 20 (2), 107 – 124.

### **Course Relationships to Program Goals and Professional Organizations**

This course is part of the George Mason University, Graduate School of Education (GSE), Special Education Program for Applied Behavior Analysis Graduate Certificate. This program complies with the standards for teacher licensure established by the Council for Exceptional Children (CEC), the major special education professional organization. The CEC Standards are listed on the following website:

<http://www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandards/>. The content of the courses in this program is derived from the Task List published by the national Behavior Analyst Certification Board (BACB) as well as the Board's Guidelines for Responsible Conduct. The BACB Standards are listed on the following website: For more information on the Board and the examination, please visit the Board's website at [www.bacb.com](http://www.bacb.com). The CEC standard that will be addressed in this class is Standard 8: Assessment.

### **GMU POLICIES AND RESOURCES FOR STUDENTS:**

a. Students must adhere to the guidelines of the George Mason University Honor Code [See <http://oai.gmu.edu/the-mason-honor-code/>].

b. Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>].

- c. Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu/>].
- e. Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- g. The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].

## **PROFESSIONAL DISPOSITIONS**

Students are expected to exhibit professional behaviors and dispositions at all times.

## **CORE VALUES COMMITMENT**

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See <http://cehd.gmu.edu/values/>]

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <http://gse.gmu.edu/>]

## **Course Policies & Expectations**

### **Attendance.**

Students are expected to attend all class meetings. It is the student's responsibility to make up all missed work if they are absent for any reason. Presentations on course materials are available on [Please keep cell phones must be turned off and/or set on vibrate and use computers for note taking and course-related work ONLY.](#)

### **Late Work.**

Work is considered on-time if it is submitted by 4:30pm on the date that it is due. Work submitted after the assigned due date will be assessed a 10% possible point penalty. No work will be accepted after the final examination has been submitted.

### **TaskStream Submission**

Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, *Functional Relevant Treatment and Instruction Project* to TaskStream (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in TaskStream. Failure to submit the assessment to TaskStream will result in the course instructor reporting the course grade as Incomplete(IN). Unless the IN grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

If you have never used TaskStream before, you MUST use the login and password information that has been created for you. This information is distributed to students through GMU email, so it is very important that you set up your GMU email. For more TaskStream information, go to <http://cehd.gmu.edu/api/taskstream>

### **Grading Scale**

Point values are assigned to exams and assignments. Letter grades will subsequently be assigned on the basis of overall class performance. That is, percentages will be determined by dividing the TOTAL number of points earned by the total possible points.

<b>Grade</b>	<b>Percentage</b>	<b>Grade</b>	<b>Percentage</b>	<b>Grade</b>	<b>Percentage</b>
A+	97-100%	A	96-93%	A-	92-90%
B+	87-89%	B	83-86%	B-	80-82%
C+	77-79%	C	73-76%	C-	70-72%
D+	67-69%	D	63-66%	D-	60-62%
F	59% and below				

<b>Assignment</b>	<b>Points Possible</b>
Attendance and Participation	24
Discussion Board (18 discussion board questions, 2 points each)	36
Facilitate article summary	15
Final Exam	25
Application Projects 1. Functional assessment interview and interpretation	15 points 60

2. Data collection and interpretation	15 points	
3. Functional analysis and structural analysis	15 points	
4. Behavior intervention plans	15 points	
Function relevant treatment and instruction project		30
<b>Total Points</b>	<b>178</b>	

## Assignments

### **Performance-based Assessment (TaskStream submission required).**

#### Function Relevant Treatment and Instruction Project

You will be provided with the text of a completed functional assessment, which will include an operational definition of the behavior targeted for reduction, a completed FAI, ABC data collection records, and a scatterplot. You will need to:

1. Complete the Competing Behavior Model as described by O'Neill et al. (1997), (up to 3 points)
2. Identify and write an operational definition for the competing behavior (e.g., the replacement behavior or alternative behavior) you will teach; (up to 1 point)
3. determine the normative rate for the competing behavior you've selected; (up to 2 points)
4. determine the normative rate for the problem behavior; (up to 2 points)
5. write a behavioral objective for the terminal state of the competing behavior; (up to 2 points)
6. write a behavioral objective for the terminal state of the problem behavior; (up to 2 points)
7. name the contingencies currently maintaining the problem behavior; (up to 1 point)
8. compose step -by-step instructions telling the reader how to make environmental modifications to decrease probability of the problem behavior (up to 3 points)
9. compose step-by-step instructions telling the reader how to make environmental modifications that will increase the probability that the competing behavior will be evoked; (up to 3 points)
10. compose step by step instructions telling the reader how to teach or accelerate the competing behavior; (up to 3 points)
11. compose step-by-step reactive procedures to enact should the problem behavior happen; and (up to 3 points)
12. compose step -by-step practical procedures to implement should the problem behavior occur under unfavorable conditions. (up to 3 points)

**Up to 30 points (with the last two points being for correct spelling and punctuation (1 point) and for correct grammar (1 point). Must be submitted through Taskstream by the date and time listed in the schedule (below).**

### **Performance-based Common Assignments (No TaskStream submission required).**

**Blackboard Discussion Board Forums.**

For weeks indicated below, read the assigned chapters from the Sidman (2001) text. Then, go to the week's discussion board items. For each item, respond by answering the question(s) posed by the instructor. Then, on another day on or before the due date, respond again, but this time to a classmate's post. You will earn 1 point for responding to the instructor's question (1/2 point for posting after the due date), and 1 point for responding to a classmate's post on a second date (1/2 point for responding late).

**Other Assignments.****Facilitate article summary**

You will be provided with a list of research articles. Select one article that interest you and prepare a class discussion on that article for the designated week on the schedule. This oral presentation will include a summary of the article's main points followed by a discussion of further application or relevance to you.

**Final exam**

A final exam consisting of 25 multiple choice questions will be set up through Blackboard. You must download Respondus Lockdown Browser.

**Application projects**

Students will be completing three application projects in the following areas: Functional assessment interview and interpretation, data collection and interpretation, and selecting behavior interventions. Students will be completing the application projects in groups.

Information about each project will be posted in BB.

**Schedule**

Class Date	Read Before Class	Do Before Class / Submit at Beginning of Class	Do During Class
Week 1 April 3			Review syllabus  Pre-test
Week 2 April	Sidman, Ch 1  Crone & Horner (2000)  Park (2007)	Respond to DB 1 and 2	Overview of Assessment, Treatment, and Instruction  Participate in Discussion

10			
April 17	Spring Break ☺		
Week 3 April 24	Sidman, Ch 2 Horner (1994) McIntosch et al., (2008) Borgmeier & Horner (2006)	Respond to DB 3 & 4	Conducting the FBA: Descriptive assessment procedures
Week 4 May 1	Sidman, Ch 3 and 4 Tarbox et al (2009) Touchette et al (1985)	Respond to DB 5 & 6 Submit Project 1	ABC data collection, scatterplots
Week 5 May 8		See Blackboard activities	Function-based logic
Week 6 May 15	Sidman Ch. 5	Respond to DB 7 & 8	Experimental manipulations functional and structural analysis
Week 7 May 22	Schanding et al. (2009) Zarcone (1999)	Respond to DB 9 & 10 Submit Project 2	
Week 8 May 29	Sidman Ch. 6 & 7 Ellis & Magee (1999) Iwata et.al (2004) Stichter & Conroy (2005)	Respond to DB 11 & 12 Submit Project 3	Function-based interventions competing behavior model
Week	Sidman Ch. 8 Ghezzi (2007)	Respond to	Developing the intervention

9 June 5	Sugai & Lewis (1996)	DB 13 & 14 Project 4	Competing pathways
Week 10 June 12	Sidman Ch. 9 & 10 Paclawskyj & Vollmer (1995) Chapman, Ewing, & Mozzoni (2005) Kerr, Smyth, & McDowell (2003)	Respond to DB 15 & 16	Effective instruction Reinforcer Assessments Group contingencies
Week 11 June 19	Sidman Ch. 12  Mueller, Piazza, Moore, Kelley, Bethke, Pruett, Oberdorff, & Layer, (2003)  Schepis, Ownbey, Parsons, & Reid, D.H. (2000)  Loman & Horner (2014)	Respond to DB 17 & 18	Parent and staff training
Week 12 June 26		Function relevant treatment and instruction Due	Final Examination

## Appendix