GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
APPLIED BEHAVIOR ANALYSIS CERTIFICATE PROGRAM

EDSE 623 6A4
APPLIED BEHAVIOR ANALYSIS: ASSESSMENT AND INTERVENTION
Spring 2 2010
Tuesdays, 4:30 pm – 8:30 pm
Ivymount School, 11614 Seven Locks Rd, Rockville MD, 20854
Rooms 133 and 134

PROFESSOR

NAME	Meghan Hoffman, M.Ed., B.C.B.A. Adjunct Professor, College of Education and Human Development
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OFFICE HOURS	Meeting times are available, please contact me through email

COURSE DESCRIPTION

A Prerequisite

Completion of EDSE 619

B Description

This course further expands on the basic content of applied behavior analysis and teaches course participants to implement behavioral procedures and to develop behavioral programs for clients with fundamental behavioral needs. More specifically, instruction focuses on conducting functional assessments and functional analyses; developing instructional and other intervention procedures based on outcome of these assessments and analyses; writing instructional or treatment procedures; implementing and training others to implement these procedures; managing implementation; data-based decision making in instructional and service delivery; and ethical issues in functional assessment, functional analysis, and function-relevant treatment or instructional delivery.

NATURE OF COURSE DELIVERY

Lecture, discussion, written assignments, in-class exercises, and asynchronous online discussion.

STUDENT OUTCOMES AND PROFESSIONAL STANDARDS

This course is designed to enable students to perform as described by the Council for Exceptional Children's Standard 7 (Instructional Planning) and as described by the following objectives, which are taken from the Behavior Analyst Certification Board's *Task List* and *Guidelines for Responsible Conduct*:

Course Objective Number	Objective	BACB TL or GRC Item
1	Obtain informed consent within applicable ethical and legal standards.	TL 1-4
2	Assist the client with identifying lifestyle or systems change goals and targets for change that are consistent with applied dimension of applied behavior analysis, applicable laws, and the ethical and professional standards of the profession of applied behavior analysis.	TL 1-5, a-c
3	Initiate, continue, modify, or discontinue behavior analysis services only when the risk-benefit ratio of	TL 1-6

	doing so is lower than the risk-benefit ratio of taking alternative actions.	
4	Use the most effective assessment and behavior change procedures within applicable ethical standards, taking into consideration the guideline of minimal intrusiveness of the procedure to the client.	TL 1-8
Course Objective Number	Objective	BACB TL or GRC Item
6	Give preference to assessment and intervention methods that have been scientifically validated, and use scientific methods to evaluate those that have not yet been scientifically validated.	TL 1-12
7	Explain and behave in accordance with the philosophical assumptions of behavior analysis, such as the lawfulness of behavior, empiricism, experimental analysis, and parsimony.	TL 2-1
8	Interpret articles from the behavior analytic literature.	TL 2-7
9	State the primary characteristics of and rationale for conducting a descriptive assessment.	TL 4-1
10	Gather descriptive data.	TL 4-2
11	Select and use various assessment methods.	TL 4-2, 4-3, & 4-5 a & b
12	Organize and interpret descriptive data.	TL 4-3
13	State the primary characteristics of and rationale for conducting a functional analysis as a form of assessment	TL 4-4
14	Conduct functional analyses.	TL 4-5
15	Organize and interpret functional analysis data.	TL 4-6
16	Systematically manipulate independent variables to analyze their effects on treatment.	TL 5-1
17	Use competency based training for persons who are responsible for carrying out behavioral assessment and behavior change procedures.	TL 10-1
18	Use effective performance monitoring and reinforcement systems.	TL 10-2
19	Design and use systems for monitoring treatment integrity.	TL 10-3
20	Establish support for behavior analysis services from persons directly and indirectly involved with these services.	TL 10-4
21	Secure support of others to maintain the clients' behavioral repertoires in their natural environments.	TL 10-5
22	Provide behavior analysis services I collaboration with others who support and / or provide services to one's clients.	TL 10-6
23	Reliance on scientific knowledge	GRC 1.01
24	Professional and scientific relationships	GRC 1.06B
25	Responsibility	GRC 2.02
26	Definition of client	GRC 2.01
27	Consultation.	GRC 2.03
28	Treatment efficacy.	GRC 2.09
29	Interrupting or terminating services.	GRC 2.15
30	Assessing behavior.	GRC 3.0
31	Environmental conditions that preclude implementation.	GRC 3.01
32	Environmental conditions that hamper implementation.	GRC 3.02
33	Functional Assessment.	GRC 3.03
34	Describing Program Objectives.	GRC 3.06
35	Behavioral Assessment Approval.	GRC 3.07
36	Describing conditions for program success.	GRC 3.08
37	Explaining assessment results.	GRC 3.09
38	The behavior analyst and the individual behavior change program.	GRC 4.0
39	Approving interventions.	GRC 4.01
40	Reinforcement / punishment.	GRC 4.02
41	Avoiding harmful reinforcers.	GRC 4.03
42	Ongoing data collection.	GRC 4.04
43	Program modifications.	GRC 4.05
44	Program modification consent.	GRC 4.06
45	Least restrictive procedures.	GRC 4.07
46	Termination criteria.	GRC 4.08
47	Terminating clients.	GRC 4.09
48	The behavior analyst as teacher and/or supervisor.	GRC 5.0
49	Designing competent training programs.	GRC 5.01
50	Limitations on training.	GRC 5.02

REQUIRED TEXTS

O'Neill, R.E., Horner, R.H., Albin, R.W., Sprague, J.R., Storey, K., & Newton, J.S. (1997). *Functional assessment and program development for problem behavior: A practical handbook.*

(2nd Ed.). New York, NY: Brooks/Cole. ISBN 0-534-26022-5.

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

REQUIRED INTERNET ACCESSIBLE TEXT MATERIALS

Download a **Task List (3rd Ed.)** and **Guidelines for Responsible Conduct (2004 Ed.)** from the Behavior Analyst Certification Board's website (www.bacb.com).

ARTICLES

Download articles by going to Journal Finder from the Library's website, clicking on the journal's title, then locating the article through the journal's contents. Articles published in *Journal of Applied Behavior Analysis* may be downloaded directly from that journal's website. Alternatively, you could: 1) search the article in PsychInfo and download it from that site, or 2) go to the Fenwick Library and copy the article.

Asmus, J.M., Vollmer, T.R., & Borrero, J.C. (2002). Functional behavioral assessment: A school-based model. *Education and Treatment of Children, 25* (1), 37-90.

Bosma, A., & Mulick, J.A. (1990). Brief report: Ecobehavioral assessment using transparent scatter plots. *Behavioral Residential Treatment, 5* (2), 167-140.

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.

Charlop-Christy, M.H., & Carpenter, M.H. (2000). Modified incidental teaching sessions: A procedure for parents to increase spontaneous speech in their children with autism. *Journal of Positive Behavior Interventions*, *2* (20), 98-112.

Crosland, K.A., Dunlap, G., Sager, W., Neff, B., Wilcox, C., Blanco, A., & Giddings, T. (2008). The effects of staff training on the types of interactions observed at two group homes for foster care children. *Research on Social Work Practice, 18* (5), 410-420.

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.

Gresham, F.M., & Elliot, S.N. (1987). The relationship between adaptive behavior and social skills: Issues in definition and assessment. *The Journal of Special Education, 21* (1), 167-181).

Hagopian, L.P., Fisher, W.W., Thompson, R.H., Owen-DeSchryver, J., Iwata, B.A., & Wacker, D.P. (1997). Toward the development of structured criteria for interpretation of functional analysis data. *Journal of Applied Behavior Analysis, 30* (2), 313-326.

Hanley, G.P., Iwata, B.A., & McCord, B.E. (2003). Functional analysis of problem behavior: A review. *Journal of Applied Behavior Analysis, 36* (2), 147-185.

Hoch, T.A. (2007). Why is my kid doing this and what can I do? Facilitating family problem solving using scatterplots. In D. Linville and K.M. Hertlein (Eds.), *The therapist's notebook for family health care.* Binghamton, NY: Haworth Press, pp. 83-89.

Houlihan, D., Sloane, H.N., Jenson, W.R., & Levine, H.D. (1991). Treating preschool children with multiple behavior problems: Testing for the response covariation phenomenon. *Behavioral Residential Treatment, 6* (5), 321-340.

Kahng, S.W., Iwata, B.A., Fischer, S.M., Page, T.J., Treadwell, K.R.H., Williams, D.E., & Smith, R.G. (1998). Temporal distributions of problem behavior based on scatter plot analysis. *Journal of Applied Behavior Analysis, 31* (4), 593-604.

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.

Kuhn, S.A.C., Lerman, D.C., & Vorndran, C.M. (2003). Pyramidal training for families of children with problem behavior. *Journal of Applied Behavior Analysis, 36* (1), 77-88.

Mason, S.A., McGee, G.G., Farmer-Dougan, V., & Risley, T.R. (1989). A practical strategy for ongoing rienforcer assessment. *Journal of Applied Behavior Analysis, 22* (2), 171-179.

Matson, J.L., Mayville, S.B., & Laud, R.B. (2003). A system of assessment for adaptive behavior, social skills, behavioral function, medication side-effects, and psychiatric disorders. *Research in Developmental Disabilities, 24*, 75 – 81.

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.

O'Reilly, M.F. (1997). Functional analysis of episodic self-injury correlated with recurrent otitis media. *Journal of Applied Behavior Analysis, 30* (1), 165 – 167.

Paclawskyj, T.R., & Volllmer, T.R. (1995). Reinforcer assessment for children with developmental disabilities and visual impairments. *Journal of Applied Behavior Analysis, 28* (2), 219-224.

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.

Symons, F.J., Davis, M.L., & Thompson, T. (2000). Self-injurious behavior and sleep disturbance in adults with developmental disabilities. *Research in Developmental Disabilities, 21*, 115 – 123.

Tertinger, D.A., Green, B.F., & Lutzker, J.R. (1984). Home safety: Development and validation of one component of an ecobehavioral treatment program for abused and neglected children. *Journal of Applied Behavior Analysis, 17* (2), 159-174.

Wilder, D.A., Schadler, J., Higbee, T.S., Haymes, L.K., Bajagic, V., & Register, M. (2008). Identification of olfactory stimulus reinforcers ion individuals with autism: A preliminary inestigation. *Behavioral Interventions, 23*, 97-103.

BLACKBOARD

As has been the practice in other courses in this sequence, we'll use Blackboard for communication, class management, and asynchronous discussion. You have been enrolled in Blackboard for this course, and your username and password are the same as they were when you last used Blackboard. The web address for GMU's Blackboard system is http://blackboard.gmu.edu.

COURSE REQUIREMENTS

Requirements, Performance Based Assessments, and Criteria for Evaluation

Blackboard Discussion Board Forums. For weeks indicated below, and in conjunction with readings from Sidman (2001), respond to assigned Discussion Board Forums. Read the instructor's question and your classmates' responses. Next, respond directly to the instructor's question or to content posted by your classmates. Posts must be made before the class session for which they're assigned. Posts made on time earn two points; late posts earn one point. Up to **56 points**.

Written Assignments. Each assignment is due at the time of the class session indicated on the syllabus. On-time submissions can potentially earn all of the points for the given assignment; late submissions up to 90% of the possible points. All written assignments must be written in your own words unless properly cited. Failure to do so will result in a 0 for that portion of the assignment.

Project 1: Behavioral Definition, Normative Rate, and Behavioral Objective Project. You will be given links to three behavioral scenarios, and you'll be told which behavior (and whose) to consider. For each, you'll write either a topographical or a functional behavioral definition for the behavior. Next, you'll conduct a normative rate study for each of the behaviors. Finally, you'll write a behavioral objective for each of the behaviors using the format provided in class. **Up to 10 points (1 for each correctly written definition; 1 for each correctly derived normative rate; 1 for each correctly written objective; and 1 for correct spelling, grammar, and punctuation).**

Project 2: Scatterplot and ABC Data Project. You will be provided with four stimulus control scatterplots and four ABC Data Collection records. Based on these, you will correctly describe patterns regarding occurrence and nonoccurrence of the targeted behaviors with regard to time and other events; and identify the types of contingencies most likely evoking and maintaining the behaviors. **Up to 20 points (1 point for correctly identifying patterns of occurrence and 1 for patterns of nonoccurrence for each scatterplot; 1 for listing additional questions to ask for each scatterplot; 1 for naming types of contingencies likely maintaining the target behavior using the ABC data records, and 1 for each correctly answered question at the end of the assignment)**

Project 3: FAI Project. You will be provided with a completed FAI. You will correctly identify apparently maintaining MOs, immediate antecedents, and consequences, and name the type(s) of contingencies that appear to be maintaining the behavior. Next, you will state three types of additional information that would be needed before further action could be taken. **Up to 10 points (up to 2 points for each of parts A – E for this assignment).**

Project 4: Analogue Functional Analysis Outcome Interpretation Project. You will be provided with five graphs depicting outcomes of analogue functional analyses. For each, you will follow the procedure described by Hagopian et al. (1997), and will determine the type(s) of contingencies that have been demonstrated to be maintaining the behaviors. **Up to 10 points (one point per analysis for correctly following the guidelines put forth by Hagopian et al. (1997), and one point for correctly identifying maintaining contingencies).**

Project 5: 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 targeted behavior, 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), and circle the competing behavior (e.g., the replacement behavior or alternative behavior) you will teach; 2) determine the normative rate for the competing behavior you've selected; 3) determine the normative rate for the problem behavior; 4) write a behavioral objective for the terminal state of the competing behavior; 5) write a behavioral objective for the terminal state of the problem behavior; 6) name the contingencies currently maintaining the problem behavior; 7) compose step-by-step instructional procedures to teach or accelerate the competing behavior you've selected, using one of the teaching methodologies covered in this course; 8) compose step-by-step reactive procedures to enact should the problem behavior happen; 9) and compose step-by-step practical procedures to implement should the problem behavior occur under unfavorable conditions. **Up to 30 points (3 points for each of parts 1 – 9, and 1 point each for correct spelling, punctuation, and grammar).** ***Please note: This assignment is the Signature Assignment for this course. You will need to submit it on paper in class, and electronically to Taskstream.*** **You will receive your score which will count toward your final course grade on the paper your submit in class, and, should you submit the assignment by the beginning of the twelfth session, it will be given back to you, scored, by the fourteenth session, so you can determine whether or not you wish to revise and resubmit your project. Resubmitted projects must be given to your instructor, on paper, no later than 4:30 on 5.6.10. Should you opt not to submit your assignment early, it will be due on 5.6.10. In addition to your score (which will count toward your final grade), the electronic version of this paper you submit on Taskstream will be rated using the following rubric:**

Does not meet expectations	Meets expectations	Exceeds expectations
Earned a score of less than 21 points on Function Relevant Treatment and Instruction Project	Earned a score of 22 – 29 points on Function Relevant Treatment and Instruction project	Earned a score of 30 points on Function Relevant Treatment and Instruction project

Final Examination. This test will consist of 50 items, and will be given as a pretest on the first night of class, and as a final exam on the last night of class. Credit toward your final score will only be given for your performance on this test on the last night of class.

Grading Scale

The distribution of total possible points per assignment type and grading scale are:

Description	Possible Points	Total Possible Points
Discussion Board Forums	32 points	32 points
Project 1	10 points	42 points
Project 2	20 points	62 points
Project 3	10 points	72 points
Project 4	10 points	82points
Project 5	30 points	112 points
Final Examination	50 points	162 points

A = 146 - 162 points; B = 130 – 145 points; C = 114-129 points; F < 113 points

COURSE SCHEDULE

Class Date	Read Before Class	Do Before Class / Submit at Beginning of Class	Do During Class
3.16.10 1st Ssn			Review syllabus; Introduction to functional analysis and functional assessment
3.23.10 2nd Ssn	Sidman, Ch 1 and 2, Hoch et al. (1996), Mason et al. (1989), Paclawskyj & Vollmer 1995), Schanding et al. (2009), and Wilder et al. (2008)		Lecture, discussion, and practice on how to write, writing behavioral (operational) definitions, determining normative rates, range of appropriate targets, and writing behavioral objectives, stimulus preference and reinforcer assessment, and writing procedures
3.30.10	SPRING BREAK!		
4.6..10 3rd Ssn	Sidman Ch. 3, 4 and 5, Bosma & Mulick (1990), Hoch (2007), Houlihan et al (1991), and Kahng et al. (1998).	Respond to DB 1and 2; Submit Project 1	Lecture, discussion and practice on observation, ABC Data collection, scatterplots, and writing procedures functional assessment interviews and checklists, and on writing procedures
4.13.10 4th Ssn	Sidman Ch. 6 and 7. O'Neill et al. (1997), pp. 1 – 98. Hagopian et al. (1997), Hanley et al. (2003), Iwata et al. (2004)	Respond to DB 3 and 4 Submit Project 2	Lecture, discussion, and practice on the Functional Assessment Interview package, and on writing procedures experimental functional analysis, and on writing procedures
4.20.10 5th Ssn	Sidman Ch. 8 and 9, Asmus et al. (2002), Gresham & Elliot (1987) Sidman Ch. 11, Matson et al. (2003), O'Reilly et al. (1997), Symons et al. (2000)	Respond to DB 5 and 6; Submit Project 3	Lecture, discussion, and practice on adaptive behavior assessment and on writing procedures symptom assessment and medical issues as important variables, and on writing procedures
4.27.10 6th Ssn	Sidman Ch 10 and 11, Crosland et al. (2008), Kuhn et al. (2003), Mueller et al. (2003), Schepis et al. (2000)	Respond to DB 7 and 8. Submit Project 4	Lecture, discussion, and practice on parent / staff skills assessment and parent / staff training, and on writing procedures

Class Date	Read Before Class	Do Before Class / Submit at Beginning of Class	Do During Class
5.4.10 7h Ssn	Sidman Ch. 12 and 13, Ellis & Magee (1999), Tertinger et al. (1984)	Respond to DB 9 and 10; *Submit Project 5 if you'd like the opportunity to make revisions*	Lecture, discussion, and practice on environmental assessment, and on writing procedures
5.11.10 8th Ssn	Sidman Ch. 14 and 15, Chapman et al. (2005), Charlop-Kristy & Carpenter (2000), Ghezzi (2007), Kerry et al. (2003)	Respond to DB 11 and 12	Lecture, discussion, and practice on discrete trial instruction, teaching interactions, incidental teaching, and precision teaching
5.18.10 9th Ssn	Sidman Ch 16 and 17.	Respond to DB 13 and 14	Peer review of behavior intervention program presentations
5.25.10 10th Ssn		Respond to DB 15 and 16, Submit Project 5	Final Examination

ATTENDANCE

You are expected to arrive on time for all class sessions, attend all class sessions, remain in class for the duration of each session, and to participate actively throughout the session. Should you need to be absent, please contact a classmate regarding notes and other activities that took place in your absence.

COMPUTERS, CELL PHONES, AND BLACKBERRIES

Please turn all of these off, and keep them put away during class time.

CONTACTING YOUR INSTRUCTOR

You may contact Ms. Hoffman by phone at 240-603-5801 prior to 9 PM. You may also e-mail at mdougher@gmu.edu.

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS

The Graduate School of Education (GSE) expects that all students abide by the following:

Students are expected to exhibit professional behavior and dispositions. See http://gse.gmu.edu for a listing of these dispositions.

Students must follow the guidelines of the University Honor Code. See http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code.

Students must agree to abide by the university policy for Responsible Use of Computing. http://mail.gmu.edu and click on Responsible Use of Computing at the bottom of the screen.

Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See www.gmu.edu/student/drc or call 703.993.2474 to access the DRC.

Students will refrain from consuming intoxicating substances in any quantity on the day of class, prior to or during class. Any student suspected of having consumed intoxicants will be asked to leave class. The student will be asked to arrange for transportation away from Ivymount that does not involve the student operating a motor vehicle. Participation in this course indicates that the student understands and agrees to refrain from consuming intoxicants in any quantity on class days prior to or during class, to leave class at the request of the instructor if the instructor has reason to believe the student has consumed intoxicants, and to arrange for transportation away from Ivymount that does not involve the student operating a motor vehicle.