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

Fall 2013
EDSE 621 5S1: Applied Behavior Analysis: Empirical Bases
CRN: 75314, 3 - Credits

Instructor: Dr. Kristy Park	**Meeting Dates:** 8/26/2013 - 12/18/2013
Phone: 7039935251	**Meeting Day(s):** Thursdays
E-Mail: kparkc@gmu.edu	**Meeting Time(s):** 4:30 pm-7:10 pm
Office Hours: Thursdays 2:30 – 4:30 and by appointment	**Meeting Location:** Off-campus, KAI 102 Kellar Annex, Room 102 3708 University Drive, Fairfax, VA 22030

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

Prerequisite(s): EDSE 619

Co-requisite(s): 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) 993-3145 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 philosophical assumptions underlying data-based decision making in applied behavior analysis.
• Define, describe, identify, exemplify, and use direct measures of behavior.
• Define, describe, identify, exemplify, and use indirect measures of behavior.
• Construct and interpret equal interval graphs.
• Construct and interpret standard celeration charts.
• Describe, identify, and exemplify single subject experimental design.
• Describe and exemplify data-based decision making using visual inspection of graphically presented behavioral data in the context of single subject experimental designs.
• Describe and identify utility and factors affecting use of single subject designs for evaluating instructional, behavioral, and other interventions in applied settings.
• Describe, identify, and exemplify ethical factors regarding data collection, data management, and data based decision making as described by the Guidelines for Responsible Conduct and the Disciplinary Standards.
• Read, interpret, and evaluate articles from the behavior analytic literature.

Required Textbooks

Cooper, J.O., Heron, T.E., & Heward, W.L. (2007). *Applied Behavior Analysis, (2nd ed.)* Upper Saddle River, NJ: Pearson

Jacobson, J. W., Foxx, R. M., & Mulick, J. A. (Eds.). (2005). *Controversial therapies for developmental disabilities: Fad, fashion, and science in professional practice*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Digital Library Option

The Pearson textbook(s) for this course is available as part of the **George Mason University Division of Special Education and disAbility Research Digital Library**. 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.bncollege.com and search the ISBN.

- 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.pearsonhighered.com/. Search by author, title, or ISBN.

Required Internet Accessible Resources
Go to the Behavior Analyst Certification Board website (www.bacb.com) and download the **Task List (4th ed.)** and the **Guidelines for Responsible Conduct.** We will refer to these documents throughout this course and all others in this Certificate Program.

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. The CEC standard that will be addressed in this class is Standard 8: Assessment.

GMU POLICIES AND RESOURES FOR STUDENTS:
a. Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/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.

It is expected that students attend all class sessions. Please arrive on time and remain in class for the entire class session. Participation in class activities are designed to enhance learning objectives and often used as guided practice on assignments due for the course.

Late Work.

Assignments are due at the start of class the day the assignment is due. Work submitted after the due date will be deducted 1 point on a weekly basis.

TaskStream Submission

Every student registered for any Special Education course with a required performance-based assessment is required to submit these assessments, Make Your Own Experiment and Final Exam Feedback 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

A = 95-100%
A- = 90-94%
B = 85-89%
B- = 80-84%
C = 70-79%
F = <70%

Course Requirements	**Possible Points**	**Earned Points**
Make your own experiment (Taskstream assignment)	30	
Final Exam (Feedback form onto Taskstream)	25	
SAFMEDS (10 SAFMEDS sets)	10	
Problem Sets (10 problem sets, each worth 1 point)	10	
Controversial Therapies (Facilitate discussion and respond to DB, each worth 5 points)	10	
Research Outlines (3 research outlines, each worth 5 points)	15	
Total	**100**	

Assignments

NCATE/TaskStream Assignments.

<u>Make Your Own Experiment (TASKTREAM)</u>

Given a hypothetical scenario, you will define, describe, and exemplify the use of data-based decision making in a single subject research design. As you identify, measure, and assess behaviors, you will incorporate ethical and professional guidelines outlined by the BACB. The components of the assignment are listed in the evaluation rubric.

	Possible Points	Points Earns

Document professional services based on the BACB Guidelines for Responsible Conduct by describing with operational detail on the following: -2.0 Behavior analyst responsibility to clients (2 points) -3.0 Assessing Behavior (1 point)	3	
Define behavior (1 point) in - observable terms (1 point) and - measurable terms (1 point)	3	
Select a measure for the behavior of interest (1 point) Accurate rationale for selecting this measure (2 points)	3	
Develop a recording form for collecting data	3	
Step by step instructions for collecting data	3	
Select a design that will best answer the question asked (1 point) Accurate rationale for that design (2points)	3	
Describe how and how long you will collect baseline data (i.e., decision rule for when to introduce the intervention)	3	
Describe how you will implement the single subject research design and how functional control is determined	3	
Describe how you will control for relevant threats to internal validity	3	
Construct a graph of possible data that would show functional control of the intervention over the behavior, using the design you chose	3	
Total	30	

Final Exam Feedback Form (TASKSTREAM)

A final exam will be given to test knowledge of measurement, assessment, and experimental design concepts. Each test item is correlated to the BACB Task List to help the student identify strengths and weaknesses in empirical methods. The instructor will provide written feedback on students' correct and incorrect response. Upload the final exam feedback form onto Taskstream.

Common Assignments.

SAFMEDS Demonstration.

SAFMEDS is an acronym for Say All Fast Minute Each Day Shuffled. Students will be given a list of terms and definitions. You will demonstrate fluency with the SAFMEDS terms assigned for that week by responding correctly to each card within the specified time limit. There will be 10 SAFMED opportunities. Full points are earned by responding correctly to all cards within the specified time limit.

Problem Sets.

Problem sets provide additional practice on specific objectives in measurement, assessment, and experimental design concepts. Problem sets due on the date assigned. There will be 10 problem sets throughout the course, each worth 1 point.

Controversial Therapies

Controversial Therapies for Developmental Disabilities addresses the present status and perpetuation of fad treatments and areas of controversy within the field of developmental disabilities. Through in class discussions and Blackboard Discussion Board (DB), questions will be posed about selected chapters. For in class discussion, students will sign up for a chapter to facilitate. Student facilitators will provide a summary of the chapter and engage students in discussion and/or activities. For DB, students will comment, question, or make a related post to a classmates' response. Please follow the syllabus and answer Discussion Board questions the week it is assigned. Facilitating the class discussion will be 5 points and participating in DB responses will be 5 points.

Research Outlines

Students will review and interpret articles from the behavior-analytic literature. The student will choose one article from the three categories listed. The student will provide a written 1-paged outlined summary of the article and present the results to the class. The student will do this for 3 articles, each worth 5 points.

Science, Theory, and Technology

Hayes, S.C. (1991). The limits of technological talk. *Journal of Applied Behavior Analysis, 24* (3), 417 – 420.

Hayes, S.C., Rincover, A., & Solnick, J.V. (1980). The technical drift of applied behavior analysis. *Journal of Applied Behavior Analysis, 13* (2), 275 – 285.

Iwata, B.A. (1991). Applied behavior analysis as a technological science. *Journal of Applied Behavior Analysis, 24*(3), 421 – 424.

Mace, F.C. (1991). Technological to a fault or faculty approach to technology development? *Journal Applied Behavior Analysis, 44* (3), 433 – 435.

Morris, E.K. (1991). Deconstructing "Technological to a fault." *Journal of Applied Behavior Analysis, 24*(3), 411 – 416.

Compliance:

Normand, M.P., & Beaulieu, L. (2011). Further evaluation of response-independent delivery of preferred stimuli and child compliance. *Journal of Applied Behavior Analysis, 44* (3), 665 – 669.

Normand, M.P., Kestner, K., & Jessel, J. (2010). An analysis of stimuli that influence compliance during the high-probability instruction sequence. *Journal of Applied Behavior Analysis, 43 (*4), 735-738.

Schiff, A., Tarbox, J., Lanagan, T., & Farag, P. (2011). Establishing compliance with liquid medication administration in a child with autism. *Journal of Applied Behavior Analysis, 44* (2), 381-385.

Stephenson, K.M., & Hanley, G.P. (2010). Preschoolers' compliance with simple instructions: A descriptive and experimental evaluation. *Journal of Applied Behavior Analysis, 43* (2), 229-247.

Wilder, D.A., Allison, J., Nicholson, K., Abellon, O.E., & Saulnier, R. (2010). Further evaluation of antecedent interventions on compliance: The effects of rationales to increase compliance among preschoolers. *Journal of Applied Behavior Analysis, 4* (43), 601-613.

Education:

Hofstadter-Duke, K.L., & Daly, E.J. (2011). Improving oral reading fluency with a peer mediated intervention. *Journal of Applied Behavior Analysis, 44* (3), 641-646.

Lannie, A.L., & Martens, B.K. (2004). Effects of task difficulty and type of contingency on students' allocation of responding to math worksheets. *Journal of Applied Behavior Analysis, 37* (1), 53-65.

Melchiori, L.E., deSouza, D.G., & deRose, J.C. (2000). Reading, equivalence, and recombination with students with different learning histories. *Journal of Applied Behavior Analysis, 33* (1), 97-100.

Moore, J.W., & Edwards, R.P. (2003). An analysis of aversive stimuli in classroom demand contexts. *Journal of Applied Behavior Analysis, 36* (3), 339-348.

Resetar, J.L., & Noell, G.H. (2008). Evaluating preference assessments for use in the general education population. *Journal of Applied Behavior Analysis, 41* (3), 447-451.

Extra Credit –Behavior Development Solutions.

Completing the following Behavior Development Solutions modules:

☐ Experimental Evaluation of Interventions
☐ Measurement of Behavior
-certificates of completion will earn 3 points of extra credit for each certificate submitted

Extra Credit – Research Worksheets.
Completion of additional research worksheets will earn an additional 2 points for each research worksheet submitted with a maximum value of 6 points.

Other Assignments.

Schedule
ABA refers to the Cooper, Heron, and Heward text (*Applied Behavior Analysis*) and CT refers to the *Controversial Therapies* text.

Date	Topic / Objectives	Assignments Due
Aug 29	Review Syllabus Pretest	
Sept 5	Science and the Philosophical assumptions of behavior analysis	Read ABA Chpt 2, 159-164
Sept 12	General issues in assessment and measurement of behavior Phases of behavioral assessment Selecting socially significant target behaviors Indirect assessments Student facilitated discussion- Controversial Therapies: General Issues	Read ABA Chpt 4 Read CT Chpt 1 and 2 **Problem Set 1** **SAFMEDS 1** **Student Facilitator: Controversial Therapies**
Sept 19	General data collection issues, dimensions and measures of behavior, selecting appropriate measures, direct assessments Student facilitated discussion: Controversial Therapies: nature of empirically validated	Read ABA Chpt 4 Read CT Chpt 3 **Problem Set 2** **SAFMEDS 2** **Student Facilitator: Controversial Therapies**
Sept 26	Blackboard Module: Introduction to Single-subject designs Components of experiments in ABA Controversial therapies: The appeal	Read ABA Chpt 7, 226-228 Read CT Chpt 4 **Problem Set 3** **SAFMEDS 3** **Respond to Blackboard Discussion Board**
Oct 3	Research designs: Withdrawals and Alternating Treatment Component and Parametric analysis Demonstration of functional control	Read ABA Chpt 8 Read CT Chpt 15 **Problem Set 4**

	Controversial theories and fads: Autism	**SAFMEDS 4** **Student Facilitator: Controversial Therapies**
Oct 10	Research designs: Multiple Baseline Designs and Changing Criterion Controversial theories and fads: Nonaversive	Read ABA Chpt 9 Read CT Chpt 24, 25 **Problem Set 5** **SAFMEDS 5** **Student Facilitator: Controversial Therapies**
Oct 17	Constructing and interpreting graphic displays-bar graphs, line graphs, cumulative graphs Controversial therapies: Credulity and gullibility	Read ABA Chpt 6 Read CT Chpt 9 **Problem Set 6** **SAFMEDS 6** **Student Facilitator: Controversial Therapies**
Oct 24	Blackboard Module: Responsible and ethical practices in research Internal and External validity	Read CT Chpt 16 See BB for readings **Problem Set 7** **SAFMEDS 7** **Respond to Blackboard Discussion Board**
Oct 31	Research article presentations: Science, Theory, and Technology Controversial therapies: Sensory Integrative Therapy	Read CT Chpt 20 **Problem Set 8** **SAFMEDS 8** **Respond to Blackboard Discussion Board** **Research Article Presentation**
Nov 7	Overview of Standard Celeration Charts, practice graphing SCC data, and interpreting results Controversial therapies: Fads in General Education	Read ABA Ch 6 Read CT Ch 9 **Problem Set 9** **SAFMEDS 9** **Respond to Blackboard Discussion Board**
Nov 14	Single-subject research to identify evidence-based practices Visual Analysis to determine trend lines Controversial therapies: Helping Parents	Read CT Chpt 16 **Problem Set 10** **SAFMEDS 10** **Respond to Blackboard Discussion Board**
Nov 21	Basic and Applied Research Scenarios Selecting behaviors, measurement systems, research designs, graphing, and interpreting results	**Draft of Research Experiment**
Nov 28	Have a Great Thanksgiving Break!	
Dec 5	Research article presentations:	**Make your own Experiment Due** **Research Article Presentation**
Dec 12	Course Evaluations Final Exam	You will be emailed your Final Exam Feedback Form. Please upload the form onto Taskstream.

Appendix