



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

Spring 2016

EDSE 621: Applied Behavior Analysis: Empirical Bases

Section 6W4 - CRN: 18523, 3 - Credits

Section 6Y1 – CRN: 23841, 3 - Credits

<b>Instructor:</b> Dr. Kristy Park	<b>Meeting Dates:</b> 01/11/16 - 04/11/16
<b>Phone:</b> 703 993 5251	<b>Meeting Day(s):</b> Monday
<b>E-Mail:</b> kparkc@gmu.edu	<b>Meeting Time(s):</b> 7:30 pm-10:00 pm
<b>Office Hours:</b> By appointment	<b>Meeting Location:</b> Fairfax; Krug Hall 15

***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.

Hours of Lecture or Seminar per week: 3

Hours of Lab or Studio per week: 0

**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) 993-3670 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 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 acceleration 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 for teachers* (2<sup>nd</sup> Ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall. ISBN 0-13-142113-1

Jacobson, J.W., Foxx, R.M., & Mulick, J.A. (2005). *Controversial therapies for developmental disabilities: Fad, fashion, and science in professional practice*. Mahwah, NJ: Lawrence Erlbaum Associates. ISBN 0-8058-4192-X.

### **Digital Library**

Effective summer 2015, the Division of Special Education and disAbility Research will discontinue the use of the Pearson Digital Library. No further registrations will be accepted. Students who hold current subscriptions will continue to have access to the library for the remainder of their subscription time. However, no further updates will be made to the digital library. During this time, should a textbook be revised or a new book is adopted for a class where the text is included in the digital library, Pearson will have options available to you and

will provide you with an individual e-text or, if there is no e-text, a printed copy. Students, who have purchased a 3-year subscription directly through Pearson Education, will also have an option to obtain a prorated refund. However, 3-year subscription access cards purchased via the GMU bookstore will need to speak with a George Mason Bookstore Representative. Please be aware that the issuance of a refund, in this case, is at the discretion of the George Mason bookstore. Concerns or questions may be directed to Molly Haines at Molly.Haines@pearson.com.

### **Recommended Textbooks**

None

### **Required Resources**

Go to the Behavior Analyst Certification Board website ([www.bacb.com](http://www.bacb.com)) and download two documents: 1) Task List (4<sup>th</sup> ed.) and 2) Professional and Ethical Compliance Code of Conduct for Behavior Analysts (2016). We will refer to these documents throughout this course and all others in this Certificate Program

### **Additional Readings**

Additional Readings may be assigned at the discretion of the course instructor. These readings will be available through Blackboard. Students are responsible for reading any supplemental materials.

### **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 4: Assessment. (Updated Fall 2014 to align with the revised CEC Standards)

### **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 George Mason University Disability Services and inform their instructor, in writing, as soon as possible. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor. <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 sessions, arrive by the start of class, and remain in class for the duration of the session. Only students in class can accrue participation points and these points cannot be made up; however, it is the student's responsibility to make up all missed work if they are absent for any reason.

*Late Work.*

Assignments are on-time when submitted by the start of the class session on the assigned date due. Written and/or tasks that are submitted after the assigned date will be assessed a 10% possible point penalty, which will be deducted on a weekly basis. Discussion Board responses entered after the due date will be assessed a 50% point penalty. All work must be submitted before the final examination. All assignments must be submitted through Blackboard with the exception of assignments required to be submitted through TK20 (i.e., Graded Make Your Own Experiment and Final Exam Feedback Form). Emailed copies of assignments will be returned to the user.

**Tk20 Performance-Based Assessment Submission Requirement**

Every student registered for any Special Education course with a required performance-based assessment is required to submit the Make Your Own Experiment and Final Exam Feedback to Tk20 through Blackboard (regardless of whether the student is taking the course as an elective, a onetime course or as part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in Tk20 through Blackboard. Failure to submit the assessment to Tk20 (through Blackboard) will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required Tk20 submission, the IN will convert to an F nine weeks into the following semester.

**Grading Scale**

<b>Course Requirements and Evaluation</b>		<b>Due Date 7:20 pm on scheduled date</b>
Discussion Boards (10 opportunities, 4 points each)	40 points	Week 2-11
CITI module training	10 points	2/1/16
Participation Activities (3 opportunities, 10 points each)	30 points	Weeks 4, 5, 6
Research worksheet (3 opportunities, 10 points each)	30 points	Week 8, 9,10
Controversial Therapies chapter summary	10 points	Week 2,7,11,12
<b>Make Your Own Experiment: Applied (Submit to Tk20)</b>	20 points	4/4/16
<b>Make Your Own Experiment: Basic (Submit to TK20)</b>	20 points	4/4/16
<b>Final Exam (Submit to TK20)</b>	25 points	4/11/16
Total	185 possible points	

Based on the total number of points, final grade will be calculated based on the percentages

below:	95-100% = A	92-94% = A-
	89-91% = B+	85-88% = B
	80-83% = B-	70-79% = C

<69% = F

## **Assignments**

### **Performance-based Assessment (TK20 submission required).**

The **Make Your Own Applied project** includes 2 components, basic and applied research activities. Each is worth 20 points for a total of **40 points**. Both basic and applied research add to the field of behavior analysis. Experimental behavior analysis involves basic research designed to add to the knowledge about behavior, whereas; applied behavior analysis focus on the application of these behavior principles to real-world situations. Given two hypothetical scenarios (one basic, one applied), 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.

The second assessment that you will submit to Tk20 is the **Final Exam Feedback Form**. The 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 a written feedback form on students' correct and incorrect responses, which students will upload to Tk20. (**25 points**)

### **Performance-based Common Assignments (No TK20 submission required).**

#### **CITI Training Module**

Students will complete the CITI Human Subjects Protections training module on Human Subjects Ethics Training. Information about how to register and access will be located in the weekly folder. Once you complete the module upload the certificate of completion in the assignment link in the weekly folder. You will earn **10 points** for completing this module.

#### **Discussion Boards**

Students will be divided into groups to complete the weekly discussion boards. On the selected weeks indicated on the syllabus, students will respond to Discussion Board prompts. The question prompts will be in conjunction with the readings from *Controversial Therapies for Developmental Disabilities* (Jacobson, Foxx, & Mulick, 2005).

You are responsible for posting a response that answers the question prompt. Questions are targeted to incorporate assigned readings, class discussions, and your experience in clinical and educational settings. In addition, you must also leave a comment on the post of *at least* one of your group members. Build comments from other group members' ideas and connect to other ideas we have explored in class. Points will be accumulated for posting (2 points) and responding (2 points) to the DB item.

When posting or commenting, it is important to stay on-topic, and to treat other individuals and their comments with respect. Please refrain from using specific names, agencies, or school personnel. Derogatory conversation will not be tolerated, and may result in a 0 for the poster. Discussion boards will not be graded after one week past the due date unless arrangements are made with the instructor in advance. Once the discussion board is graded, the student may not edit or add to the post to increase their grade. (**4 Points for 10 DB prompts, 40 pts possible**)

Week	Date	<b>Topics</b> <i>Readings required before class</i> <i>(CT=Controversial Therapies and ABA-Cooper, Heron, &amp; Heward text)</i>	<b>Assignment Due</b> <i>On the date listed, at the start of class</i>
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### **Participation Activities**

Participation activities are designed to provide students with more practice and feedback on the empirical skills discussed in class, such as continuous and discontinuous direct observations. Students will be provided with specific instructions and rubric for each activity posted in the Participation Activity folder. **(3 participation activity, each 10 points, for a total of 30 points)**

### **Research Worksheet**

Students will review and interpret 3 articles from the behavior-analytic literature. Students will select behavior-analytic articles that use single-subject methodology. Using the template provided, students will identify the components of the research design. **(3 research worksheets, each 10 points, for a total of 30 points)**

### **Controversial Therapies Chapter Summary**

Students will choose a chapter of interest from Controversial Therapies for Developmental Disabilities (Jacobson, Foxx, & Mulick, 2005). Chapter summaries can be completed individually or with a partner. Student(s) will present the selected chapter on the scheduled date. Students will prepare a power-point or other visual media then orally present the information in 8 minutes or less. Provided below is an example in which students can organize their presentation: 1) summary points (2 min), 2) evidence provided in the chapter to support the points (2 min), 3) explanation of how evidence supports the points (2 min), and lastly, 4) link the topic to the field of behavior analysis (2 min).

#### **Other Assignments.**

#### **Extra Credit: SAFMEDS Demonstration**

SAFMEDS is an acronym for Say All Fast Minute Each Day Shuffled. Students will be given a list of terms and definitions. There are 10 SAFMEDS opportunities for 2 points of extra credit for each SAFMEDS set. Two points are earned by responding correctly to all cards within the specified time limit (30sec). Submit a video demonstration of your fluency with the SAFMEDS terms.

#### **Schedule**

1	1/11	Review Syllabus, Course Objectives, and course assignments Sign up for CT chapter  Science and the Philosophical assumptions of behavior analysis	Download Respondus and Pretest Due
	1/18	MLK Holiday - No Class <i>Celebrate!</i>	
2	1/25	Evidence-based practice, data-based decision making, and research basics  Read before class: ABA 65-69, 159-164 Bear, Wolf, and Risley 1968	DB 1  CT 10,17: Speech and FC CT 14, 15, 16, 18, 19, 20, 24
3	2/1	Dimensions qualities of behavior, Operationalize behavior, Continuous measures of behavior  Read before class: CT 2,3 ABA Ch 4, pp. 73 – 80, 83 – 90	DB 2 CITI Module Due
4	2/8	General Issues of Measurement Discontinuous measures of behavior Inter-observer agreement  Read before class: CT 4 ABA Ch 5, pp. 81 – 82, 85 – 87, 90 – 100	DB 3 Participation Activity
5	2/15	Data Management: Graphic data display and graph preparation Standard Behavior Charts Read before class: CT 6 ABA Ch 6	DB 4 Participation Activity
6	2/22	Intro to Single Subject Designs Planning, conducting, and evaluating research Read before class: CT 12, 13 ABA Ch	DB 5 Participation Activity
7	2/29	Withdrawal Designs Read before class: CT 17 ABA Ch 8	DB 6 CT 5, 8, 9: Special Education
	3/7	GMU Spring Break – No Class <i>Relax!</i>	
8	3/14	Multiple Baseline Designs, Multiple Probe Design  Read before class: CT 3,4 ABA Ch 9	DB 7 Research Worksheet Due
9	3/21	Alternating Treatments Design, Changing	DB 8



		Criterion Designs, Component Analysis, Parametric  Read before class: CT 3,4 ABA Ch 8, 9	Research Worksheet Due
10	3/28	Controversial Therapies Putting it all together Planning out research designs  Read before class: CT 9 ABA Ch	DB 9 Research Worksheet Due
11	4/4	Toward a professional consensus on using single subject research Evidence-based practices  Read (Horner et al., 2005)	DB 10 Make Your Own Experiment Due (applied) Make Your Own Experiment Due (basic)  CT: Autism
12	4/11	Controversial Therapies Final Exam Course Evaluations	Final Exam Due CT: 25, 26 23

## Appendix