



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

Spring 2015

EDSE 621 6W3: Applied Behavior Analysis: Empirical Bases

CRN: 18106, 3 - Credits

<b>Instructor:</b> Dr. Christine Barthold	<b>Meeting Dates:</b> 1/12/2015 - 4/13/2015
<b>Phone:</b> 703-993-5450	<b>Meeting Day(s):</b> Mondays
<b>E-Mail:</b> choffner@gmu.edu	<b>Meeting Time(s):</b> 4:30 pm-7:00 pm
<b>Office Hours:</b> By Appointment	<b>Meeting Location:</b> Fairfax-Krug Hall #208

***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 Corequisite(s): EDSE 619 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
7. Discussion via Blackboard Collaborate

### **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 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 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.bncollege.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**

Students are expected to log in to Blackboard Collaborate via computer for each class session. Access to the internet and high-quality headphones are needed. It is not recommended that students log into the site using a tablet (ipad) or smartphone.

Go to the Behavior Analyst Certification Board website ([www.bacb.com](http://www.bacb.com)) and download the Fourth edition task list, and the Guidelines for Responsible Conduct. 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 instructor. Readings will be posted on Blackboard. Students are responsible for all posted readings and resources.

### **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 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 Blackboard for those who either missed class or need additional time with the materials, but will not necessarily cover class discussion or in-class activities. Attendance will be assessed through a virtual index card (described under "course requirements") **within the week of each scheduled class, unless arrangements are made in advance with the instructor.** (That is, index cards will not be accepted after one week.) Cell phones must be turned off and/or set on vibrate. Students observed to be working on assignments or other activities not related to course objectives will be asked to stop, and may forfeit attendance points for that day.

### Late Work.

Work is considered on-time if it is submitted by **11:59pm** on the date that it is due. Work submitted after the assigned due date will be assessed a 10% possible point penalty. Discussion Board Item responses entered after the due date will be assessed a 50% point penalty. *No Discussion Board revisions will be accepted once a grade has been submitted for the week. No work will be accepted after the final examination has been submitted.*

Students are responsible for following these guidelines for grading:

- All assignments must be submitted through Blackboard, with the exception of assignments required to be submitted through TaskStream (i.e., Graded Make Your Own Experiment and Final Exam Feedback Form).
- Emailed and hard copies of assignments will not be graded unless approved in advance by the instructor, as these methods of submission lead to a high probability of lost student work.
- Assignments, whenever possible, should be in Word format and in one continuous file.
- Your Make Your Own Experiment and Research Outlines must be accompanied by a self-evaluation of your work. You can self evaluate by grading yourself using the rubric for the assignment. You do not have to justify your choice. The instructor will not track down missing self evaluations. Any assignment without a self evaluation submitted with it will be immediately assigned a grade of 0.
- Detailed information about each assignment, including grading rubrics and a task analysis, is posted on Blackboard. Due dates for all assignments are available through Google calendar. Failure to review all documents available often results in low performance.

## 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

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.

#### Grading Criterion:

Grade	Percentage	Grade	Percentage	Grade	Percentage
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				

Assignment	Points
Make your own experiment Applied	20
Make your own experiment Basic	15
Unit Quizzes (4 at 20 points apiece)	80
Final Exam	50
Index Cards (10 at 2 points apiece)	20
Discussion Boards (9 at 15 points apiece)	135
Research Outlines (2 at 5 points apiece)	10
<b>Total Points</b>	<b>330</b>

### Assignments

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

**Make Your Own Experiment (TASKSTREAM)**

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. **(35 Points)**

### **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. **(50 Points)**

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

#### **Unit Quizzes**

This course is broken into four units. For each unit, students will be responsible for a 20 item Multiple Choice quiz. Quizzes will be delivered online through Blackboard. Students will have up to 3 chances to increase their grade, but note that questions will be randomized from a pool of questions. It is not possible to memorize answers to increase your grade. Students are encouraged to complete guided lecture notes, all activities and readings, and actively participate in study groups, as these are the basis for the weekly quizzes. Quizzes will be the basis for the final exam. Due dates for quizzes are available on the Google Calendar. **(4 quizzes at 20 points apiece – 80 points total)**

#### **Weekly Discussion Boards**

Students will be divided into groups. Each week, a writing prompt will be developed for your group based upon readings, coursework, and field experiences. Discussion Board prompts will be open-ended enough that there will be room for discussion.

You are responsible for posting a response that answers the writing prompt as it relates to your experience in clinical and educational settings, the readings, class discussion, and your own personal experience. You must also leave a comment on the post of *at least* one of your group members. Any questions posted on your thread should be answered. Comments should build upon the blogger's ideas, and connect to other ideas we have explored in class. Posts and responses **MUST** stay in the group assigned, unless arrangements are made with the instructor. Once the discussion board is graded, the student may not edit or add to the post to increase their grade.

A schedule of writing prompts and due dates will be posted in Blackboard (NOTE THAT DUE DATES DO NOT NECESSARILY CORRESPOND TO CLASS MEETINGS TO INSURE THAT THERE IS ENOUGH TIME TO FOSTER CONVERSATION). *No student or school personnel should be referred to by name.* When posting or commenting, it is important to stay on-topic, and to treat other

individuals in the class with respect. Flames or other 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. **(15 Points for 9 weeks or 135 Points)**

### **Research Outlines**

Students will review and interpret articles from the behavior-analytic literature. Students will read, interpret, and summarize the article using the template discussed in class. Articles and summary templates will be posted on Blackboard, and there will be class time to complete the summaries. The student will do this for 2 articles, each worth 5 points. **(10 Points total)**

### **Other Assignments.**

#### **Attendance Index Cards**

Students are expected to complete an index card and return it at the end of class that delineates at least two things that were learned in the day's lecture (in their OWN WORDS - not copied from PowerPoints or verbatim from lectures). Asking questions for clarification about the day's lecture is also acceptable. Each index card is worth two points, and will be graded on the following scale:

0 points – no index card (considered an unexcused absence if a virtual index card is not completed)
.5 point – points written verbatim from lecture
1 point – one statement or question in the student's own words
2 points – two statements or questions in the student's own words

Students who are absent have the opportunity to be excused by viewing the day's lecture and completing a virtual index card on Blackboard. Virtual Index cards must be completed within ONE WEEK of the absence to be considered. **(2 points apiece for 10 weeks = 20 points)**

### **Schedule**

Class Schedule, due dates, and readings are available as a separate document available on Blackboard as a Google Calendar or PDF. Students have the opportunity to subscribe to the Google Calendar and can set reminders as necessary to keep them on track.

#### **Jan 12, 2015**

Introduction to Class Review Syllabus and Blackboard site

#### **Jan 19, 2015**

**NO CLASS**

#### **Jan 26, 2015**

Evidence-Based Practice, Data-based Decision Making, and Research Basics



Cooper, Chapter 1 & 2; Jacobsen, Ch. 1-3; 22-25

**Feb 2, 2015**

Ethics and Informed Consent

Cooper, Ch. 29; Jacobsen, Ch. 26-28

**Feb 9, 2015**

Operational Definitions and Indirect Assessment

Cooper, Ch. 4; Jacobsen, Ch. 4-7

**Feb 16, 2015**

Data Collection Systems

Cooper, Ch. 4; Jacobsen, Ch. 7-9

**Feb 23, 2015**

Inter-Observer Agreement and Treatment Integrity

Cooper, Ch. 4 & 7; Jacobsen, Ch. 7-9

**Mar 2, 2015**

Graphing and Graph Interpretation

Cooper, Ch. 4-7; Jacobsen, Ch. 7-9

**Mar 9, 2015**

**NO CLASS**

**Mar 16, 2015**

Celeration

Readings TBA

**Mar 23, 2015**

Withdrawal and Reversal Designs

Multiple Baseline Designs

Cooper, Ch 5 & 9; Jacobsen, Ch. 10-12 & 16-18

**Mar 30, 2015**

Alternating Treatment Designs

Changing Criterion Designs

Component Analyses

Cooper, Ch 5 & 9; Jacobsen, Ch. 16-18

**Mon Apr 6, 2015**

In-Class Work on Make Your Own Experiment

**Appendix**