

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

Summer 2015

EDSE 621 N01: Applied Behavior Analysis: Empirical Bases CRN: 42920, 3 - Credits

| Instructor: Dr. Kristy Park | Meeting Dates: 5/18/2015 - 7/23/2015 |
|--|--|
| Phone: 703 993 5251 | Meeting Day(s): 5 synchronous Thursdays on the following dates: May 28, June 4, July 2, July 9, July 16 |
| E-Mail: <u>kparkc@gmu.edu</u> | Meeting Time(s): Online and synchronous sessions on BB Collaborate from 5:00-6:00pm |
| Office Hours: Thurdays 6-8pm through BB Collaborate | Meeting Location: Internet |

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) 993-3670 for assistance. All other students should refer to their faculty advisor.

DELIVERY METHOD:

This course will be delivered online using an asynchronous and synchronous model via the Blackboard learning management system (LMS) housed in the MyMason portal. You will log into the Blackboard course site using your Mason email name (everything before "@masonlive.gmu.edu) and email password. The course site will be available on May 14, 2015. There will be 5 synchronous sessions held on the following Thursdays: May 28, June 4, July 2, July 9, July 16 from

TECHNICAL REQUIREMENTS:

To participate in this course, students will need the following resources:

- High-speed Internet access with a standard up-to-date browser, either Internet Explorer or Mozilla Firefox. Opera and Safari are not compatible with Blackboard;
- Consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of the course requirements.
- The following software plug-ins for Pcs and Macs respectively, available for free downloading by clicking on the link next to each plug-in:
 - Adobe Acrobat Reader: <u>http://get.adobe.com/reader/</u>
 - Windows Media Player: <u>http://windows.microsoft.com/en-</u> <u>US/windows/downloads/windows-media-player</u>
 - Apple QuickTime Player: <u>www.apple.com/quicktime/download/</u>
- A headset microphone for use with the Blackboard Collaborate web conferencing tool

EXPECTATIONS:

- **Course Week:** Refer to the asynchronous bullet below is your course is asynchronous or the synchronous bullet if your course is synchronous.
 - Asynchronous: Because online courses do not have a "fixed" meeting day, our week will start on Monday, and finish on Sunday.
 - Synchronous: Our course week will begin on the week of May 18, 2015 and our synchronous meeting will take place as indicated on the Schedule of Classes.
- **Log-in Frequency**: Refer to the asynchronous bullet below is your course is asynchronous or the synchronous bullet if your course is synchronous.

- Asynchronous: Students must actively check the course Blackboard site and their GMU email for communications from the instructor, at a minimum this should be 2 times per week.
- Synchronous: Students must log-in for all scheduled online synchronous meetings. In addition, students must actively check the course Blackboard site and their GMU email for communications from the instructor, at a minimum this should be 2 times per week.
- **Participation**: Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- **Technical Competence**: Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance if they are struggling with technical components of the course. Contact ITU (http://itservices.gmu.edu/help.cfm) at (703) 993-8870 or support@gmu.edu.
- **Technical Issues**: Students should expect that they could experience some technical difficulties at some point in the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload: Expect to log in to this course at least three times a week to read announcements, participate in the discussions, and work on course materials. Remember, this course is not self-paced. There are specific deadlines and due dates listed in the CLASS SCHEDULE section of this syllabus to which you are expected to adhere. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.

Netiquette: Our goal is to be **collaborative**, not combative. Experience shows that even an innocent remark in the online environment can be misconstrued. I suggest that you always re-read your responses carefully before you post them to encourage others from taking them as personal attacks. **Be positive in your approach to others and diplomatic with your words.** I will do the same. Remember, you are not competing with each other but sharing information and learning from one another as well as from the instructor.

Nature of Course Delivery

Learning activities include the following:

- 1. Video module lectures and online discussions
- 2. Application activities
- 3. Small group activities and assignments
- 4. Video and other media supports
- 5. 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 for teachers (2nd 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 Earbaum 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.

Required 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.

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/ProfessionalStanda rds/. 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 4: Assessment. (Updated Fall 2014 to align with the revised CEC Standards)

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/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 <u>http://caps.gmu.edu/</u>].

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 <u>http://ods.gmu.edu/</u>].

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 <u>http://writingcenter.gmu.edu/</u>].

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 <u>http://cehd.gmu.edu/values/</u>]

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

Course Policies & Expectations

Attendance.

Students are expected to attend all 5 synchronous class meetings and complete all asynchronous assignments. 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 additional material may be presented during synchronous class meetings. During synchronous meetings, cell phones must be turned off and/or set on vibrate.

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 point deductions after the assignment has been graded. 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 paper has been submitted to Blackboard.

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.

| Course Requirements and Evaluation | | | Due Date 6:00 pm on scheduled date |
|--|-------|-----------|--|
| BB Collaborate Session Participation: May 28, June 4, July 2, July 9, July 16 | | 25 points | See scheduled dates |
| Discussion Boards (7 opportunities, 4 points each) | | 28 points | See scheduled dates |
| Research outlines (4 opportunities, 5 points each) | | 20 points | See scheduled dates |
| Weekly Active Engagement Activities (7 opportunities, 10 points each) | | 70 points | See scheduled dates |
| CITI module training | | 10 points | 6/4/2015 |
| Final Exam (Submit to Taskstream) | | 50 points | 7/23/2015 |
| Make Your Own Experiment: Applied (Submit to Taskstream) | | 20 points | 7/23/2015 |
| Make Your Own Experiment: Basic (Submit to Taskstream) | | 15 points | 7/23/2015 |
| | Total | 168 | possible points |

Grading Scale

| 95-100% = A | 92-94% = A- |
|-------------|-------------|
| 89-91% = B+ | 85-88% = B |
| 80-83% = B- | 70-79% = C |
| <69% = F | |

Assignments

Performance-based Assessment (TaskStream submission required).

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 Make Your Own Applied project is worth 20 points and the Basic project is worth 15 points, for a total of **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).

Synchronous Session Participation

There will be five synchronous sessions held through BB Collaborate on the following dates: May 28, June 4, July 2, July 9, July 16, 2015 from 5:00-6:00pm EST. Points will be accumulated for on time arrival and participation (i.e., vocal verbal, textual (chat box), polls), , or other methods (i.e., polls) for the remainder of the session. 5 points will be awarded for each session for a total of 25 points.

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 writing prompt as it relates to your experience in clinical and educational settings, the readings, class discussion, and your own personal experience. 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 7 DB prompts, 28 points possible)

Other Assignments.

Quizzes

Students will be responsible for a 20 item multiple choice quiz that students will take through Blackboard. 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. (4 quizzes, each 10 points, for a total of 40 points)

Research Outlines

Students will review and interpret 4 articles from the behavior-analytic literature, 2 articles will come focus on basic research and 2 articles will focus on applied research. Students will identify the research components of the research article (i..e, research question, participant selection, methodology, discussion). (4 research outlines, each 5 points, for a total of 20 points)

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 dropbox in the weekly folder. You will earn 10 points for completing this module.

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.

Guided notes

Guided chapter notes will be available to assist with engagement during the chapter readings from Applied Behavior Analysis (Cooper, Heron, & Heward, 2005). Submit a guided note packet and earn up to 1 extra credit point for correct and complete work documents.

| Date | Topic / Objectives | Assignments Due / Activities |
|------------------------|--|------------------------------------|
| 1 Week of May 18 | Review Course Objectives BB course tour | Read syllabus |
| | | Activities: |
| | | - Pretest |
| | | - Defining Online Learning Success |

Schedule

| Week of June 29 | Changing Criterion Design | Read CT 15 Activities: | |
|------------------------------|--|--|--|
| 6 Week of June 22 7 | Withdrawal Designs (AB, ABA, ABAB, BAB, etc.); Component Analysis; Parametric Analysis Alternating Treatments Designs | Read ABA ch 8 Read CT 12 Activities: - Respond to Discussion Board 4 - Identify research components - Research outline due Read ABA pp 187-194, chapter 9 | |
| 5 Week of June 15 | Data Management: Graphic data display and graph preparation Standard Celeration | Read ABA chapter 6 Read CT 11 Activities: - Respond to Discussion Board 3 - Practice with constructing graphs - Writing step-by-step data collection procedures | |
| 4 Week of June 8 | Measurement of indirect measures of behavior General data collection issues Selecting appropriate measures | Read ABA pp. 81 – 82, 85 – 87, 90 – 100 Read <u>CT</u> Ch 3 and 4 Activities: - Respond to Discussion Board 2 - Measurement summary continued - Writing step-by-step data collection procedures - CITI MODULE due | |
| Week of June 1 June 4 | General Issues in Measurement Direct measures of behavior BB Colli | Read ABA pp. 73 – 80, 83 – 90 Read <u>CT</u> Ch 1 and 2; Activities: - Respond to Discussion Board 1 - Measurement summary aborate 5:00-6:00 pm | |
| May 28 | BB Collaborate 5:00-6:00 pm | | |
| 2 Week of May 25 | Science and the Philosophical assumptions of behavior analysis Evidence-based practice, data-based decision making, and research basics | Read ABA Chpt 1 65-69; Chpt 2, 159-164 Activities: - Identify the philosophical assumptions of behavior analysis - Professional Practice: What it means to me | |

| | | Respond to Discussion Board 5 Define baseline data collection and decision rules for when to start the intervention Research outline due |
|--------------------------|---|--|
| July 2 | BB Coll | aborate 5:00-6:00 pm |
| 8 Week of July 6 | Multiple Baseline Designs, Multiple Probe Designs | Read ABA ch 9 Read CT 16 |
| | | Activities: - Respond to Discussion Board 6 - Research outline due |
| July 9 | BB Collaborate 5:00-6:00 pm | |
| 9 Week of July 13 | Make your own Experiment Week | Read CT Activities: |
| | | Respond to Discussion Board 7 Research outline due |
| July 16 | BB Collaborate 5:00-6:00 pm | |
| 10 Week of July 20 | Final Exam Opens on July 16 at 6:00pm and closes on July 23 at 6:00 pm Course Evaluations | Final Exam due on July 23 at 6:00pm Make your own experiment – Applied and Basic due |

Appendix