

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

Spring 2017
EDSE 621 636: Applied Behavior Analysis: Empirical Bases
CRN: 21158, 3 – Credits

<b>Instructor</b> : Dr. Christine Barthold	<b>Meeting Dates</b> : 01/09/17 – 03/27/17
<b>Phone</b> : 703-993-5450	<b>Meeting Day(s)</b> : Monday
E-Mail: choffner@gmu.edu	<b>Meeting Time(s)</b> :10:00 am - 7:00 pm
Office Hours: By Appointment	<b>Meeting Location</b> : Internet
<b>Office Location</b> : Suite 100, Finley	Other Phone: N/A

Note: This syllabus may change according to class needs. Teacher Candidates/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): B- or higher in EDSE 619 must be completed prior to or concurrently with EDSE 621.

Prerequisite(s) enforced by registration system.

Corequisite(s): EDSE 619

Schedule Type: LEC

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 teacher candidates/students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other teacher candidates/students should refer to their faculty advisor.

#### **Advising Tip**

Have you met with an advisor? All students should make an appointment to meet with an advisor to outline a plan for completing coursework and non-course requirements such as testing. To make an appointment by phone or in person, go to http://gse.gmu.edu/special-education/advising/.

#### **Course Delivery Method**

Learning activities include the following:

- 1. Class lecture and discussion
- 2. Weekly 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, teacher candidates/students will be able to:

- 1. Describe philosophical assumptions underlying data-based decision making in applied behavior analysis.
- 2. Define, describe, identify, exemplify, and use direct measures of behavior.
- 3. Define, describe, identify, exemplify, and use indirect measures of behavior.
- 4. Construct and interpret equal interval graphs.
- 5. Construct and interpret standard celeration charts.
- 6. Describe, identify, and exemplify single subject experimental design.
- 7. Describe and exemplify data-based decision making using visual inspection of graphically presented behavioral data in the context of single subject experimental designs.
- 8. Describe and identify utility and factors affecting use of single subject designs for evaluating instructional, behavioral, and other interventions in applied settings.
- 9. 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.
- 10. Read, interpret, and evaluate articles from the behavior analytic literature.

## **Course Relationship 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. 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 Professional and Ethical Compliance Code for Behavior Analysts. The Professional and Ethical Compliance Code for Behavior Analysts is listed on the following website: http://bacb.com/wp-content/uploads/2016/03/160321-compliance-code-english.pdf. For more information on the Board and the examination, please visit the Board's website at www.bacb.com.

#### **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. (2015). *Controversial therapies for developmental disabilities: Fad, fashion, and science in professional practice (2<sup>nd</sup> Ed).* Mahwah, NJ: Lawrence Earbaum Associates. ISBN 978-1138802230.

## It is imperitive you purchase the second edition, NOT the first. There are substantial changes to the book.

#### **Recommended Textbooks**

American Psychological Association. (2010). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author.

## **Required Resources**

Students should have access to reliable internet and basic learning technologies such as a scanner, printer, and the ability to send and receive audio and video. Webcams are required for this course.

#### **Additional Readings**

Readings may be assigned by the instructor throughout the semester and will be posted to Blackboard. Students are responsible for ALL readings.

#### **Course Performance Evaluation**

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

#### **Tk20 Performance-Based Assessment Submission Requirement**

It is critical for the special education program to collect data on how our students are meeting accreditation standards. Every teacher candidate/student registered for an EDSE course with a required Performance-based Assessment (PBA) is required to upload the PBA to Tk20 (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor). A PBA is a specific assignment, presentation, or project that best demonstrates one or more CEC, InTASC or other standard connected to the course. A PBA is evaluated in two ways. The first is for a grade, based on the instructor's grading rubric. The second is for program accreditation purposes. Your instructor will provide directions as to how to upload the PBA to Tk20.

For EDSE 621, the required PBA is Make Your Own Experiment and Final Exam Feedback. Failure to submit the assignment to Tk20 will result in reporting the course grade as Incomplete (IN). Teacher candidates/students have until five days prior to the University-stated grade change deadline to upload the required PBA in order to change the course grade. When the PBA is uploaded, the teacher candidate/student is required to notify the instructor so that the "IN" can be changed to a grade. If the required PBA is not uploaded five days prior to the University-stated grade change deadline and, therefore, the grade not changed, it will

become an F. Please check to verify your ability to upload items to Tk20 before the PBA due date.

#### **Assignments**

## Performance-based Assessment (Tk20 submission required) <u>Make your own experiment</u>

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. Drafts of components of this assignment will be due on Google docs throughout the semester and will be revisable up to the full points. *The final submission must be in Word and one Continuous Document* (55 Points for Each Assignment).

#### **Final Exam Feedback Form**

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 Blackboard. (100 Points)

## **College Wide Common Assessment (Tk20 submission required)**

No common Assignment for this Course

# Performance-based Common Assignments (No Tk20 submission required.) <u>Partner Activities</u>

This assignment will allow you to have hands-on access to the reading materials, as well as discussion. Each week, you will be given an activity that will extend your knowledge of the readings. This will consist of a study sheet. While you may choose to complete parts of the assignment independently, the goal is for you to work with a partner to discuss the readings and complete the study guide together. You will be responsible for completing a study guide relating to the readings and any class activity. This guide will consist of both factual and open-ended questions. Your study guides will be the basis for your unit quizzes and final exam. (5 points per assignment).

#### **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. 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. (20 Points per Quiz). An additional quiz

on academic honesty and syllabus requirements will be administered at the beginning of the semester and is worth **20 points**.

#### **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 Google Calendar (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)** 

# Other Assignments **CITI Training**

You will be responsible for completing the basic human subjects research modules recommended for anyone conducting research at GMU. These modules are available through <a href="https://www.citiprogram.org/">https://www.citiprogram.org/</a>. Please be sure to take the Social and Behavioral Science Research Basic course. Registering for the wrong course will not count towards this class and may result in significant time lost (30 Points).

## **Course Policies and Expectations**

## Attendance/Participation

Due to the interactive nature of the course, students are expected to log in at least three times per week and coordinate with their partner to complete assignments. It is the student's responsibility to make up all missed work if they are absent for any reason. Students must log in to synchronous sessions and stay until dismissed by the instructor. **SYNCHRONOUS SESSION ATTENDANCE CANNOT BE MADE UP.** 

Students are responsible for following these guidelines for grading:

- All students are required to create a Google Account and send the address to the instructor within one week of the first class meeting.
- All assignments must be submitted through Blackboard, with the exception of drafts and Partner Assignments submitted through Google docs.
- 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 (with the exception of those submitted through Google docs).
- 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.

#### **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.* 

## **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.

Note: The George Mason University Honor Code will be strictly enforced. Students are responsible for reading and understanding the Code. "To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: **Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.**" Work submitted <u>must</u> be your own or with proper citations (see <a href="http://oai.gmu.edu/the-mason-honor-code/">http://oai.gmu.edu/the-mason-honor-code/</a>).

#### **Grading Criterion:**

Grade	Percentage	Grade	Percentage	Grade	Percentage
A+	97-100%	A	96-93%	A-	92-90%
B+	87-89%	В	83-86%	B-	80-82%
С	77-79%	F	76% and Below		

Assignment	Points
Make your own experiment Applied	55
Make your own experiment Basic	55
Academic Honesty and Syllabus Quiz	20
Unit Quizzes (4 at 20 points apiece)	80
Final Exam	100
Partner Assignments (10 at 5 points apiece)	130
Discussion Boards (10 at 15 points apiece)	195
CITI Training	30
Total Points	665

#### **Professional Dispositions**

Students are expected to exhibit professional behaviors and dispositions at all times.

#### **Core Values Commitment**

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <a href="http://cehd.gmu.edu/values/">http://cehd.gmu.edu/values/</a>

#### **GMU Policies and Resources for Students**

#### **Policies**

- Students must adhere to the guidelines of the Mason Honor Code (see <a href="http://oai.gmu.edu/the-mason-honor-code/">http://oai.gmu.edu/the-mason-honor-code/</a>).
- Students must follow the university policy for Responsible Use of Computing (see http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).
- Students are responsible for the content of university communications sent to their Mason 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.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <a href="http://ods.gmu.edu/">http://ods.gmu.edu/</a>).

• Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

## **Campus Resources**

- Support for submission of assignments to Tk20 should be directed to <a href="mailto:tk20help@gmu.edu">tk20help@gmu.edu</a> or <a href="mailto:https://cehd.gmu.edu/api/tk20">https://cehd.gmu.edu/api/tk20</a>. Questions or concerns regarding use of Blackboard should be directed to <a href="mailto:http://coursessupport.gmu.edu/">https://coursessupport.gmu.edu/</a>.
- 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 <a href="http://writingcenter.gmu.edu/">http://writingcenter.gmu.edu/</a>).
- 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 <a href="http://caps.gmu.edu/">http://caps.gmu.edu/</a>).
- The George Mason University Office of Student Support staff helps students negotiate life situations by connecting them with appropriate campus and off-campus resources. Students in need of these services may contact the office by phone (703-993-5376). Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to <a href="http://studentsupport.gmu.edu/">http://studentsupport.gmu.edu/</a>, and the OSS staff will follow up with the student.

For additional information on the College of Education and Human Development, please visit our website <a href="https://cehd.gmu.edu/">https://cehd.gmu.edu/</a>.

#### Class Schedule

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Changes made to this class schedule will be made on the Google Calendar. Students are encouraged to consult the Google calendar at least weekly and not rely on instructor reminders.

Week	Date	Topic	Readings	Assignments
1	1/9	• Introduction to Class		Pre-test Due
	(S)	APA Style and		
		Summing Sources		
		Evidence-Based		
		Practices		

Week	Date	Topic	Readings	Assignments
2	1/17	<ul><li>Research Ethics</li><li>Research Basics</li></ul>	Cooper, Ch. 7 Foxx, Ch. 1-3	<ul> <li>DB 1</li> <li>Activity 1</li> <li>CITI Training Due</li> <li>Syllabus and Academic Honesty Quiz Due</li> </ul>
3	1/23 (S)	<ul><li>Defining Behavior</li><li>Sampling</li></ul>	Cooper, Ch. 3 Foxx, Ch. 4-6	<ul> <li>DB 2</li> <li>Activity 2</li> <li>Quiz 1</li> <li>Informed Consent Form for Make your Own Experiment Due</li> </ul>
4	1/30	Continuous     Measurement	Cooper, Ch. 4 Foxx, Ch. 8-10	<ul> <li>DB 3</li> <li>Activity 3</li> <li>Operational Definitions for Make your Own Experiment Due</li> </ul>
5	2/6	<ul><li>Discontinuous Measurement</li><li>Choice</li></ul>	Foxx, Ch. 11-12	<ul><li>DB 4</li><li>Activity 4</li></ul>
6	2/13	<ul><li>Treatment Integrity</li><li>Inter-observer agreement</li></ul>	Cooper, Ch. 5 Cooper, Ch. 10 Foxx, Ch 13-14	<ul><li>DB 5</li><li>Activity 5</li></ul>
7	2/20	Equal Interval     Graphing	Cooper, Ch. 6 Foxx, Ch. 15-17	<ul> <li>DB 6</li> <li>Activity 6</li> <li>Data collection for Make your Own Experiment Due</li> <li>Quiz 2</li> </ul>
8	2/27 (S)	Celeration and Scatterplot	Foxx, Ch 18-20	<ul><li>DB 7</li><li>Activity 7</li></ul>
9	3/6	<ul><li>Designing an Experiment</li><li>Withdrawal Design</li></ul>	Cooper, Ch. 8 Foxx, Ch 21-22	<ul><li>DB 8</li><li>Activity 8</li><li>Quiz 3</li></ul>
10	3/13 (S)	Multiple     Baseline/Multiple     Probe	Cooper, Ch. 9 Foxx, Ch. 23-24	<ul><li>DB 9</li><li>Activity 9</li><li>Quiz 3</li></ul>
11	3/20 (S)	<ul> <li>Alternating         Treatments     </li> <li>Component and         Parametric Analyses     </li> </ul>	Review Cooper, Ch. 8 Foxx, Ch. 25, 28	<ul> <li>DB 10</li> <li>Activity 10</li> <li>Quiz 4</li> <li>Methods for Make Your Own Experiment Due</li> </ul>

Week	Date	Topic	Readings	Assignments
12	3/27	Work on Make Your		Make your Own Experiment
		Own Experiment		Final Exam

- (S) = Synchronous Session. Option of 10-11am or 6-7pm
- DB = Discussion Board. Posts due on Monday at Midnight; Responses due by Friday at Midnight.
- Activities are due by Friday of the week posted by Midnight
- Quizzes and Final Exam are due on the date posted on the Google Calendar

#### **Assessment Rubric(s)**

Assessment #5 EDSE 621—Make Your Own Experiment Project

# This rubric will be used to assess the TK20 assignment and should not be used by students to evaluate progress.

Task List	1	2	3	
Items	Does Not Meet	Meets Expectations	Exceeds Expectations	
	Expectations			
Measureme	Given a scenario	Given a scenario	Given a scenario	
nt – Applied	describing a behavioral	describing a behavioral	describing a behavioral	
Research	need in an applied	need in an applied	need in an applied	
	setting, the candidate:	setting, the candidate:	setting, the candidate:	
	• Defines the behavior,	• Defines the behavior,	• Defines the behavior,	
	including any relevant	including any relevant	including any relevant	
	private events, in	private events, in	private events, in	
	behavior-analytic (non-	behavior-analytic (non-	behavior-analytic (non-	
	mentalistic) terms.	mentalistic) terms.	mentalistic) terms.	
	• Selects one measure for	• Selects one measure for	Selects two or more	
	the behavior of interest,	the behavior of interest,	measures for the	
	and does four or fewer	and does each of the	behavior of interest,	
	of the following for that	following for that	and does each of the	
	measure:	measure:	following for that	
	o Gives a clinically	o Gives a clinically	measure:	
	sound rationale for	sound rationale for	o Gives a clinically	
	the measure chosen	the measure chosen	sound rationale for	
	that addresses	that addresses	the measure chosen	
	dimensions of the	dimensions of the	that addresses	
	behavior and	behavior and	dimensions of	
	logistics of	logistics of	behavior and	
	observing and	observing and	logistics of	
	recording.	recording.	observing and	
	o Develops a	o Develops a	recording.	
	behavioral data	behavioral data	o Develops a	
	recording form.	recording form.	behavioral data	
	o Writes step by step	o Writes step by step	recording form.	
	instructions for	instructions for	o Writes step by step	
	collecting the data	collecting the data	instructions for	

Task List	1	2	3
Items	Does Not Meet	Meets Expectations	Exceeds Expectations
recins		Wicets Emperations	Execute Expectations
	Expectations  (including the schedule of observation and recording periods).  Prepares a graph potential behavioral data using either an equal interval graph, cumulative record, or a standard behavior chart.  Measures from which the student chooses are:  Count  Rate  Duration  Latency  IRT  Percentage  Trials to Criterion	(including the schedule of observation and recording periods).  O Prepares a graph potential behavioral data using either an equal interval graph, cumulative record, or a standard behavior chart.  O Measures from which the student chooses are:  Count Rate Duration Latency IRT Percentage Trials to Criterion	collecting the data (including the schedule of observation and recording periods).  Prepares a graph potential behavioral data using either an equal interval graph, cumulative record, or a standard behavior chart.  Measures from which the student chooses are: Count Rate Duration Latency IRT Percentage Trials to Criterion
Experiment al Design	Given a scenario describing a behavioral need in an applied setting, the candidate does four or fewer of the following:  Selects an experimental design that will answer the scenario's question, Gives a clinically sound rationale for that design selection, Writes step by step instructions for how that experimental design will be implemented,	Given a scenario describing a behavioral need in an applied setting, the candidate does each of the following:  Selects an experimental design that will answer the scenario's question, Gives a clinically sound rationale for that design selection, Writes step by step instructions for how that experimental design will be implemented,	Given a scenario describing a behavioral need in an applied setting, the candidate does each of the following:  Selects an experimental design that will answer the scenario's question, Gives a clinically sound rationale for that design selection, Writes step by step instructions for how that experimental design will be implemented,

Task List	1	2	3
Items	Does Not Meet	Meets Expectations	Exceeds Expectations
	Expectations	•	1
	including:	including:	including:
	<ul> <li>Decision Rules for</li> </ul>	o Decision Rules for	<ul> <li>Decision Rules for</li> </ul>
	introducing the	introducing the	introducing the
	intervention	intervention	intervention
	<ul> <li>Decision rules for</li> </ul>	<ul> <li>Decision rules for</li> </ul>	<ul> <li>Decision rules for</li> </ul>
	withdrawing the	withdrawing the	withdrawing the
	intervention (if there	intervention (if there	intervention (if there
	are withdrawals) or	are withdrawals) or	are withdrawals) or
	for introducing the	for introducing the	for introducing the
	intervention in	intervention in	intervention in
	another setting, for	another setting, for	another setting, for
	another therapist,	another therapist,	another therapist,
	with another	with another	with another
	participant, etc.;	participant, etc.;	participant, etc.;
	o Designs from which	o Designs from which	o Designs from which
	one may select	one may select	one may select
	include:	include:	include:
	<ul><li>Withdrawal</li></ul>	<ul><li>Withdrawal</li></ul>	<ul><li>Withdrawal</li></ul>
	Design	Design	Design
	(minimum	(minimum	(minimum
	ABAB)	ABAB)	ABAB)
	<ul> <li>Alternating</li> </ul>	■ Alternating	<ul> <li>Alternating</li> </ul>
	treatments	treatments	treatments
	design <ul><li>Changing</li></ul>	design <ul><li>Changing</li></ul>	design <ul><li>Changing</li></ul>
	criterion design	criterion design	criterion design
	<ul><li>Multiple</li></ul>	<ul><li>Multiple</li></ul>	<ul><li>Multiple</li></ul>
	baseline design	baseline design	baseline design
	<ul><li>Multiple probe</li></ul>	<ul><li>Multiple probe</li></ul>	<ul><li>Multiple probe</li></ul>
	design	design	design
	Pairwise	Pairwise	<ul><li>Pairwise</li></ul>
	comparison	comparison	comparison
	<ul> <li>Identifies at least two</li> </ul>	<ul> <li>Identifies at least two</li> </ul>	<ul> <li>Transforms the design</li> </ul>
	relevant threats to	relevant threats to	into either a parametric
	internal validity given	internal validity given	analysis or a component
	the scenario	the scenario	analysis to assess
	<ul><li>Writes step by step</li></ul>	<ul><li>Writes step by step</li></ul>	necessary levels of
	instructions for how	instructions for how	intervention or
	each of those threats to	each of those threats to	necessary intervention
	internal validity will be	internal validity will be	components:
	managed or minimized.	managed or minimized.	<ul> <li>Writes step by step</li> </ul>
			instructions for
			conducting the

Task List Items	1 Does Not Meet Expectations	2 Meets Expectations	3 Exceeds Expectations
			parametric analysis or component analysis O Provides decision rules for making condition changes in the context of parametric analysis or component analysis Identifies at least two relevant threats to internal validity given the scenario Writes step by step instructions for how each of those threats to internal validity will be managed or minimized.
Measureme nt – Basic	Given a scenario describing a basic	Given a scenario describing a basic	Given a scenario describing a basic
Research	research question, the candidate:	research question, the candidate:	research question, the candidate:
	<ul> <li>Defines the behavior, including any relevant private events, in behavior-analytic (nonmentalistic) terms.</li> <li>Selects one measure for the behavior of interest, and does four or fewer of the following for that measure:         <ul> <li>Gives a clinically sound rationale for the measure chosen.</li> <li>Develops a behavioral data recording form.</li> <li>Writes step by step instructions for</li> </ul> </li> </ul>	<ul> <li>Defines the behavior, including any relevant private events, in behavior-analytic (nonmentalistic) terms.</li> <li>Selects one measure for the behavior of interest, and does each of the following for that measure:         <ul> <li>Gives a clinically sound rationale for the measure chosen.</li> <li>Develops a behavioral data recording form.</li> <li>Writes step by step instructions for</li> </ul> </li> </ul>	<ul> <li>Defines the behavior, including any relevant private events, in behavior-analytic (nonmentalistic) terms.</li> <li>Selects two or more measures for the behavior of interest, and does each of the following for that measure:         <ul> <li>Gives a clinically sound rationale for the measure chosen.</li> <li>Develops a behavioral data recording form.</li> <li>Writes step by step</li> </ul> </li> </ul>

Task List	1	2	3
Items	Does Not Meet	Meets Expectations	Exceeds Expectations
recins		Wicets Empectations	Execute Expectations
	collecting the data.  Prepares a graph potential behavioral data using either an equal interval graph, cumulative record, or a standard behavior chart.  Measures from which the student chooses are:  Count Rate Duration Latency IRT Percentage Trials to Criterion	collecting the data.  Prepares a graph potential behavioral data using either an equal interval graph, cumulative record, or a standard behavior chart.  Measures from which the student chooses are:  Count Rate Duration Latency IRT Percentage Trials to Criterion	instructions for collecting the data.  Prepares a graph potential behavioral data using either an equal interval graph, cumulative record, or a standard behavior chart.  Measures from which the student chooses are:  Count Rate Duration Latency IRT Percentage Trials to Criterion
Experiment al Design	Given a scenario describing a behavioral need in an applied setting, the candidate does four or fewer of the following:  Selects an experimental design that will answer the scenario's question, Gives a clinically sound rationale for that design selection, Writes step by step instructions for how that experimental design will be implemented, including: Decision Rules for introducing the	Given a scenario describing a behavioral need in an applied setting, the candidate does each of the following:  Selects an experimental design that will answer the scenario's question, Gives a clinically sound rationale for that design selection, Writes step by step instructions for how that experimental design will be implemented, including: Decision Rules for introducing the	Given a scenario describing a behavioral need in an applied setting, the candidate does each of the following:  Selects an experimental design that will answer the scenario's question, Gives a clinically sound rationale for that design selection, Writes step by step instructions for how that experimental design will be implemented, including: Decision Rules for introducing the

Task List	1	2	3
Items	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
			<ul> <li>Provides decision rules for making condition changes in the context of parametric analysis or component analysis</li> <li>Identifies at least two relevant threats to internal validity given the scenario</li> <li>Writes step by step instructions for how each of those threats to internal validity will be managed or minimized.</li> </ul>