

**SYLLABUS**  
**GEORGE MASON UNIVERSITY**  
**COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT**  
**APPLIED BEHAVIOR ANALYSIS CERTIFICATE PROGRAM**  
**EDSE 621 6A5 / PSYCH 621**  
**Empirical Bases of Applied Behavior Analysis**  
**Spring 2011**  
**Thursdays 4:30 pm – 8:30 pm**  
**Room 101, Kellar Annex II**

**PROFESSOR**

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<b>OFFICE HOURS</b>	To be posted on Blackboard during the first week of classes

**COURSE DESCRIPTION**

- A Prerequisites.** Prior completion of EDSE 619 / Psych 619, or concurrent registration in either of those courses.
- B 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.

**NATURE OF COURSE DELIVERY**

Lecture, discussion, written assignments, written assessments, and a synchronous online discussion.

**STUDENT OUTCOMES and PROFESSIONAL STANDARDS**

This course addresses the Council on Exceptional Children's Standard #8 (Assessment), which reads as follows:

Assessment is integral to the decision-making and teaching of special educators and special educators use multiple types of assessment information for a variety of educational decisions. Special educators use the results of assessments to help identify exceptional learning needs and to develop and implement individualized instructional programs, as well as to adjust instruction in response to ongoing learning progress. Special educators understand the legal policies and ethical principles of measurement and assessment related to referral, eligibility, program planning, instruction, and placement for individuals with ELN, including those from culturally and linguistically diverse backgrounds. Special educators understand measurement theory and practices for addressing issues of validity, reliability, norms, bias, and interpretation of assessment results. In addition, special educators understand the appropriate use and limitations of various types of assessments. Special educators collaborate with families and other colleagues to assure non-biased, meaningful assessments and decision-making. Special educators conduct formal and informal assessments of behavior, learning, achievement, and environments to design learning experiences that support the growth and development of individuals with ELN. Special educators use assessment information

to identify supports and adaptations required for individuals with ELN to access the general curriculum and to participate in school, system, and statewide assessment programs. Special educators regularly monitor the progress of individuals with ELN in general and special curricula. Special educators use appropriate technologies to support their assessments.

## REQUIRED TEXTS

Bailey, J.S., & Burch, M.B. (2005). *Ethics for behavior analysts*. Mahwah, NJ: Lawrence Erlbaum Associates. ISBN 0-8058-5118-6.

Cooper, J.O., Heron, T.E., & Heward, W.L. (2007). *Applied behavior analysis (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.

## ADDITIONAL TEXT MATERIAL

You will need a copy of the Behavior Analyst Certification Board's *Task List and Guidelines for Responsible Conduct*. Download both from the Board's website at [www.bacb.com](http://www.bacb.com).

## ARTICLES

The following article may be downloaded from the Journal of Applied Behavior Analysis website. There is a link to this website at External Links at this course's Blackboard page.

McGonigle, J.J., Rojahn, J., Dixon, J., & Strain, P.S. (1987). Multiple treatment interference in the alternating treatments design as a function of the intercomponent interval length. *Journal of Applied Behavior Analysis*, 20 (2), 171-178.

The following articles may be downloaded from E-Reserve at the GMU Library website. There is a link to this website at this course's Blackboard page under External Links. Once there, please choose E-Reserve, this course, and your instructor's name. You will need a password, and your instructor will furnish this to you as soon as it is available.

Sindelar, P.T., Rosenberg, M.S., & Wilson, R.J. (1985). An adapted alternating treatments design for instructional research. *Education and Treatment of Children*, 8 (1), 67-76.

Watson, J.E., Singh, N.N., & Winton, A.S. (1985). Comparing interventions using the alternating treatments design. *Behaviour Change*, 2 (1), 13-20.

## COURSE REQUIREMENTS, PERFORMANCE-BASED ASSESSMENT, AND EVALUATION CRITERIA

### Requirements and Performance-Based Assessment

**Blackboard Discussion Board Items.** For weeks indicated below, in conjunction with your readings from *Controversial therapies for developmental disabilities*, respond to the week's two Discussion Board items. To respond, first do the assigned reading, Next, go to the week's Discussion Board items on Blackboard. Read your instructor's question and your classmates' responses. Respond directly to the your instructor's question, or to

content posted by your classmates. Posts must be made prior to the start time for the assigned class session. You will earn 2 points for each post made on time. Late posts will earn 1 point.

**Class Discussion.** You are expected to participate in each class discussion. If you have questions, ask them. If you have a response to another student's question, offer it. If you have a comment, make it. You will only learn by behaving, and the more do in class, the more opportunities you'll have for your behavior to be shaped.

**Problem Sets.** You will complete these per instructions contained on each problem set, and submit them at the beginning of the sessions for which they are indicated as due in the schedule below. A total of 10 points is possible for each correctly completed Problem Set submitted on time; up to 9 points for those submitted late. ***Incorrect responses may be corrected and resubmitted once, for up to ½ credit for each corrected response.*** Corrected problem sets will be accepted up to the time of the final examination; none will be accepted afterward.

**SAFMEDS Demonstrations.** At the beginning of each class session, you will privately demonstrate fluency with the SAFMEDS terms assigned for that week by responding correctly to each card within the specified time limit. Ten points are earned for responding correctly to all cards within the specified time limit; nine points for responding correctly to each card in more than the specified amount of time.

**Final Examination – TASKSTREAM SIGNATURE ASSIGNMENT.** This test will consist of 50 items, and will be given as a pretest on the first night of class, and as a final exam on the last night of class. Credit toward your final score will only be given for your performance on this test on the last night of class. After scoring the pretest, your instructor will provide you with a breakdown of your scores per content area addressed by the test.

**All students will receive feedback on their final exam performance by e-mail the day after the final exam is taken – this will be your Signature Assignment document. Students will then submit the Signature Assignment document sent to them by e-mail to Taskstream on receipt of the document. No student's final grade will be submitted until the Signature Assignment document has been received by Taskstream and your instructor has received e-mail notification of this from Taskstream.**

Every student registered for any EDSE course as of the Fall 2007 semester is required to submit signature assignments to TaskStream (regardless of whether a course is an elective, a one-time course, or part of an undergraduate minor). TaskStream information is available at <http://gse.gmu.edu/programs/sped/>. Failure to submit the Signature Assignment to TaskStream will result in the course instructor reporting the course grade as Incomplete (IN). Unless this grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

**Project Methodology Proposal :** Part of the methodology chapter is to be completed. This MUST follow APA style, use a single subject research design, and include at least three subjects. Include the headings in the same order as listed below as the heading for your methods chapter. Two points are deducted for each missing heading, and additional points will be deducted for missing content.

- a. **Purpose (10 points):** Start this section by describing the purpose of your project and how you will evaluate it. This includes stating what your independent and dependent

variables are and the design that you will use to evaluate the effectiveness of your intervention.

- b. Description of subjects (10 points): This includes the number of subjects, how they were selected, their sex, age, race or ethnicity, grade (if in school), relevant test data, special skills, deficits, and problems.
- c. Setting (5 points): Location (and rationale for selection), times and/or schedules, and relevant physical aspects of the setting.
- d. Experimenter and other personnel involved in the study (5 points): Skills, education, training/experience, responsibilities, previous experience with subjects, extent of knowledge about purpose, procedures and design of study, instructions, contingencies governing their participation, sex, age, and ethnicity/race.
- e. Materials and apparatus (5 points): Name and source (manufacturer) of equipment, details of stimulus materials and how they were constructed and presented, description of validity and reliability of materials and/or test instruments.
- f. Definitions and measurement of behavior including training of observers and reliability (10 points): Definition of observed behaviors, justification of selected observational methods, how and by whom will data be collected in what context, how were observers trained and to what criterion, how reliability will be calculated.
- g. Functional assessment (10 points): Explain how the functional assessments were conducted and the results.
- h. Experimental design and rationale for selection (10 - points).
- i. Procedure (30 points): Provide precise description of treatment or independent variables; reinforcer identification, selection and use; stimulus control strategies; length of sessions; duration of phases of study and criteria for proceeding to another phase and/or client; and instructions to subjects and other personnel.

**Grading Scale**

<u>Assignment Type</u>	Possible <u>Points Each</u>	<u>Number</u>	Total Possible Points <u>for Assignment Type</u>
Discussion Board Items	2 / Item	18 Items	36 points
Problem Sets	10 / set	8 sets	80 points
SAFMEDS Demonstrations	10 / session	8 sessions	80 points
Methodology Proposal	95 points	1 project	95 points
Final Exam	75 points	1 exam	<u>75 points</u>
			366 points
A = 331 – 366 points    B = 295 – 330 points    C = 259 - 294 points    F < 259 points			

Schedule

In the table below, ABA refers to the Cooper, Heron, and Heward text (*Applied Behavior Analysis*), Ethics to the *Ethics for Behavior Analysts* text, and CT refers to the *Controversial Therapies* text.

Date	Topic / Objectives	Assignments Due / Activities
1.13.11 Week 1	Review Syllabus Pretest	
1.20.11 Week 2	Introduction to Single-subject design Measurement – Direct Measures of Behavior: count, cumulative count, duration, rate, latency, interresponse time, extensity, intensity	Read <u>CT</u> Ch 1 and 2; Respond to Discussion Board Items 1 and 2; Read <u>Ethics</u> Preface & Ch 1-3, 38-39, 65-67 Read <u>ABA</u> Ch 1, pp. 65 – 69, 73 – 80, 83 - 90 Do SAFMEDS list 1 – 15 correct in 30 sec
1.27.11 Week 3	Measurement – Indirect Measures of Behavior: accuracy, intensity, trials to criterion, percentage, percentage occurrence, percentage intervals occurrence, permanent products, and	Read <u>CT</u> Ch 3 and 4; Respond to Discussion Board Items 3 and 4 on Blackboard Read <u>ABA</u> pp. 81 – 82, 85 – 87, 90 – 100  Do SAFMEDS list 2 – 15 correct in 30 sec

	other estimates; Selecting appropriate measures; General data collection issues	<i>Problem Set 1 Due</i>
Date	Topic / Objectives	Assignments Due / Activities
2.3.11 Week 4	Data Management: Graphic data display and graph preparation; maintaining data tables; data summary; equal interval graphs; cumulative count graphs; standard celeration charts	Read <u>CI</u> Ch 5 and 6; Respond to Discussion Board Items 5 and 6 on Blackboard Read <u>ABA</u> Ch 6 Do SAFMEDS list 3 – 15 correct in 30 sec  <i>Problem Set 2 Due</i>
2.10.11 Week 5	General Issues in Measurement	Read <u>CI</u> Ch 7 and 8; Respond to Discussion Board items 7 and 8 on Blackboard Read <u>ABA</u> Ch 7 <u>Ethics</u> pp. 60-64, 68-69 Do SAFMEDS list 4 – 15 correct in 30 sec <i>Problem Set 3 Due</i>
2.17.11 Week 6	Withdrawal Designs (AB, ABA, ABAB, BAB, etc.); Component Analysis; Parametric Analysis	Read <u>CI</u> Ch 9 and 10; Respond to Discussion Board Items 9 and 10 on Blackboard; Read <u>ABA</u> pp. 177 – 186 Do SAFMEDS list 5 – 15 correct in 30 sec <i>Problem Set 4 Due</i>
2.24.11 Week 7	Alternating Treatments Designs	Read <u>CI</u> Ch 11 and 12; Respond to Discussion Board Items 11 and 12 on Blackboard Read <u>ABA</u> pp. 187 - 194; Watson et al. (1985), Sindelar et al. (1985), & McGonigle et al. (1987) Do SAFMEDS list 6 – 15 correct in 30 sec  <i>Problem Set 5 Due</i>
3.3.11 Week 8	Multiple Baseline Designs	Read <u>CI</u> Ch 13 and 14; Respond to Discussion Board Items 13 and 14 on Blackboard Read <u>ABA</u> Ch 9 Do SAFMEDS list 7 – 15 correct in 30 sec  <i>Problem Set 6 Due</i>
3.10.11 Week 9	General Issues in Measurement and Experimental Design	Read <u>CI</u> Ch 15 and 16; Respond to Discussion Board Items 15 and 16 on Blackboard Read <u>ABA</u> Ch 5, 10 Do SAFMEDS list 8 – 15 correct in 30 sec  <i>Problem Set 7 Due</i> <b>*Methodology Proposal Due</b>
3.17.11 Week 10	Review course objectives  Final Exam	Read <u>CI</u> Ch 17 and 18; Respond to Discussion Board Items 17 and 18 on Blackboard Read <u>Ethics</u> Chapters 10 & 12  <i>Problem Set 8 Due</i>

### Contacting Your Instructor

You may contact Dr. Cho by phone at 703.678.9497. You may also e-mail Dr. Cho at gcho2@gmu.edu.

## COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS

### *Student Expectations*

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- 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/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- 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.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

### *Campus Resources*

- 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/>].
- 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/>].

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