BACS 521: Experimental Analysis of Behavior  
Spring 2016; 4 Credits  

Department of Health Professions Mission Statement  
Anchored in the pragmatic liberal arts tradition, the department of health professions educates students to become effective and innovative health and behavioral professionals who will satisfy the growing demand for their services.

COURSE INFORMATION

General
Class Time & Location: Thursdays 6:45-9:15 p.m. in Bush 202  
Instructor: Michele Williams, Ph.D., BCBA-D  
Office: 206D Warren Administration Building  
Phone: 407.646.2036  
E-mail: AMWilliams2@Rollins.edu  
Office Hours: Tuesdays/Thursdays 3:30-6:30 p.m. or by appointment

Course Description
Course covers basic behavioral research and operations, including such topics as: schedules of reinforcement, stimulus control, establishing operations, differential reinforcement, conditioned reinforcement, and theories of motivation.

Course Format
Most class meetings will be divided into three parts: 1) A brief quiz on the assigned readings; 2) Clarification of issues unclear from the reading; 3) Discussion driven by student-submitted discussion questions.

Required Text

Required Software
CyberRat [Macintosh or PC software]. http://cyberrat.net/

Required Primary Source Readings


Course Learning Objectives
Upon completion of the course, students should be able to:
1. Explain the philosophical assumptions of behavior analysis.
2. Distinguish between radical and methodological behaviorism.
3. Identify basic behavioral principles.
4. Distinguish, provide examples, and identify the components of respondent and operant conditioning.
5. Distinguish between contingency-shaped vs. rule-governed behavior.
6. Define and provide examples of positive & negative reinforcement & punishment.
7. Define and provide examples of shaping.
8. Explain how differential reinforcement is used to establish stimulus control (i.e., discrimination training procedures).
9. Identify and discuss how viewing language as a learned behavior involving a social interaction between speakers and listeners, with the verbal operants as the basic units, changes how clinicians and researchers approach and ameliorate human problems related to language.
10. Define, give examples of, and recognize examples and non-examples in published behavior analysis research of baseline logic (prediction, verification, and replication).
11. Critique published behavior analysis research in terms of its research questions, relation to previous research, independent variables, definition and measurement of the dependent variable(s), experimental design elements, special control techniques, graphic presentation of the data, and authors’ conclusions.

ASSIGNMENTS AND GRADING CRITERIA

Discussion Questions
Each class, you will be required to prepare two discussion questions over some aspect of the assigned readings. The questions should address substantive issues and should be designed to prompt discussion of the issues; questions should not be merely factual (but neither should they be unanswerable in principle). You are encouraged to address issues relevant to translational science, or how EAB research findings are relevant to the practice of ABA. It is important that you be prepared to take the floor when your questions are raised in class. Depending on the nature of the class discussion, you may not be required to address your own questions, but you certainly must be prepared to do so. The questions should be uploaded to Blackboard by noon on the day before they are due to be discussed in class. **15 sets of questions at 2 points per set = 30 points.**

Chapter Summaries
A 2-page summary of each assigned chapter in Sidman (1960) is due by the designated class and will be used to answer quiz questions. Summaries should be an overview of the relevant issues in the chapter. You should not change the margins to smaller than 1-inch or the font to smaller than 12-point to fit more information onto the pages. Rather, it will be up to you to determine the information that is most relevant to include. These summaries may be used to answer questions on the in-class quizzes. **13 summaries at 5 points each = 65 points.**

Quizzes
A 10-point quiz will be given at the beginning of most classes. The quizzes be able to be taken using your chapter summaries (see above) and your notes on the assigned articles. The quizzes will be timed and must be completed within 15 minutes. If you arrive late to class you will NOT
be given extra time to complete the quiz, so please be prompt. **14 quizzes at 10 points each = 140 points.**

**CyberRat**
In lieu of conducting research with live human or non-human animals (as is the customary practice in EAB research), you will work with simulated rats using *CyberRat*, which is described on the product website as “a fully interactive and responsive digital video presentation of a real laboratory animal.” Lab assignments will be based on Ray and Miraglia’s (2011) work and will be due via Blackboard prior to most class meetings. **9 lab assignments at 10 points each = 90 points.**

**Grading**
Discussion Questions: 30 points
Chapter Summaries: 65 points
Quizzes: 140 points
CyberRat Assignments: 90 points
**Total = 325 points**

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<thead>
<tr>
<th>Grade</th>
<th>Points Needed</th>
<th>Percentage</th>
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<tr>
<td>A</td>
<td>291 – 325 points</td>
<td>89.5% or higher</td>
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<td>B</td>
<td>258 – 290 points</td>
<td>79.5-89.4%</td>
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<td>C</td>
<td>226 – 257 points</td>
<td>69.5-79.4%</td>
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<td>F</td>
<td>225 points or fewer</td>
<td>69.4% or below</td>
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**COURSE SCHEDULE**

*Sidman (1960) is the basic textbook for EAB and K.A. Lattal (2013) serves as an outline for the additional readings in this course. If they are assigned in a particular week, read the Sidman chapter first and then the designated portion of Lattal before reading anything else.*

<table>
<thead>
<tr>
<th>Class</th>
<th>Topic</th>
<th>Readings</th>
<th>Activities</th>
<th>Objectives</th>
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<tbody>
<tr>
<td>1</td>
<td>1/14</td>
<td>The History of the Experimental Analysis of Behavior</td>
<td>Baum, 2002; Catania, 2002; Dinsmoor, 1987; Fantino, 2008; Nevin, 2008; Sidman (1960) Appendix</td>
<td>Discussion Questions (DQ) Set 1 due</td>
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<td>2</td>
<td>1/21</td>
<td>The Scientific Importance of Experimental Data</td>
<td>K. A. Lattal (2013) p. 32-35; Sidman (1960) Chapter 1; Skinner, 1956; Skinner, 1966b</td>
<td>Chapter 1 summary due; DQ Set 2 due; <em>Quiz 1; LAB #1</em></td>
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<td>3</td>
<td>1/28</td>
<td>Reliability &amp; Generality of Data; Phylogeny, Physiology, Ontology, &amp; Learning</td>
<td>Catania, 1973; Freeman &amp; Lattal, 1992; Gibson, 1967; K. A. Lattal (2013) p. 35-37 &amp; 39-40; Sidman (1960) Chapter 2</td>
<td>Chapter 2 summary due; DQ Set 3 due; <em>Quiz 2; LAB #2</em></td>
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<td>4/7</td>
<td>Selection of Baseline; Stimulus Control</td>
<td>Dinsmoor, 1995a; Dinsmoor, 1995b; K. A. Lattal (2013) p. 51-54; Sidman (1960) Chapter 11</td>
<td>Chapter 11 summary due; DQ Set 12 due; Quiz 11; LAB #6</td>
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<td>12</td>
<td>4/14</td>
<td>Control Techniques; Memory &amp; Concept Formation</td>
<td>Branch, 1977; Dougher et al., 2002; Herrnstein et al., 1976; Sidman (1960) Chapter 12</td>
<td>Chapter 12 summary due; DQ Set 13 due; Quiz 12; LAB #7</td>
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<td>13</td>
<td>4/14</td>
<td>Control Techniques; Novel</td>
<td>Page &amp; Neuringer, 1985; Sidman (1960) Chapter</td>
<td>Chapter 13 summary due;</td>
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<td>11</td>
<td>3/24</td>
<td>Steady States; Reinforcement Frameworks</td>
<td>Baum, 1989; K. A. Lattal (2013) p. 41-46; Peele et al., 1984; Sidman (1960) Chapter 7</td>
<td>Chapter 9 summary due; DQ Set 10 due; Quiz 9</td>
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<td>10</td>
<td>3/17</td>
<td>Steady States; Extinction</td>
<td>Lattal et al., 2013; Sidman (1960) Chapter 8</td>
<td>Chapter 8 summary due; DQ Set 9 due; Quiz 8; LAB #5</td>
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<td>9</td>
<td>3/10</td>
<td>Pilot Studies; Choice &amp; Matching</td>
<td>Fisher &amp; Mazur, 1997; McDowell, 1988; McDowell, 1989; Sidman (1960) Chapter 7</td>
<td>Chapter 7 summary due; DQ Set 8 due; Quiz 7</td>
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<td>7</td>
<td>2/18</td>
<td>Intrinsic vs. Imposed Variability; Positive Reinforcement</td>
<td>K. A. Lattal (2013) p. 37-39; Lattal &amp; Neef, 1996; Sidman (1960) Chapter 5; Zeiler, 1984</td>
<td>Chapter 5 summary due; DQ Set 6 due; Quiz 5</td>
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<td>6</td>
<td>2/11</td>
<td>Systematic Replication; Contingency &amp; Contiguity</td>
<td>Gleeson, 1991; Hammond, 1980; Lattal, 1995; Sidman (1960) Chapter 4</td>
<td>Chapter 4 summary due; DQ Set 5 due; Quiz 4; LAB #4</td>
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<td>5</td>
<td>2/4</td>
<td>Direct Replication; Selection; Respondent Conditioning</td>
<td>K. M. Lattal, 2013; Sidman (1960) Chapter 3</td>
<td>Chapter 3 summary due; DQ Set 4 due; Quiz 3; LAB #3</td>
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<td>4</td>
<td>2/1</td>
<td>Spring Break!!!!</td>
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EXPECTATIONS AND POLICIES

Credit Hour Statement
For Rollins Courses Meeting 150 Minutes Weekly for Four Credit Hours during 15-Week Semesters
This course is a four-credit-hour course that meets once per week. The value of four credit hours results from work expected of enrolled students both inside and outside the classroom. Rollins faculty require that students average at least three hours of outside work for every hour of scheduled class time. In this course, the additional outside-of-class expectations are: reading all assigned book chapters and journal articles; completing CyberRat assignments; studying for quizzes; preparing article discussion questions and chapter summaries; and writing a paper.

Attendance
Students are expected to attend each class and to arrive on time. A key factor in student success is class attendance, which can’t be easily replaced by copying someone else’s notes or my slides. If you must miss a class, you are responsible for finding a reliable student to take notes for you and to give you the details that you missed. Students are responsible for all material, including changes to the syllabus or objectives that are presented in class. Students are welcome to meet with the instructor during office hours or to set up an appointment outside of the established office hours to discuss the material.

Disability Statement
Rollins College is committed to equal access and does not discriminate unlawfully against persons with disabilities in its policies, procedures, programs or employment processes. The College recognizes its obligations under the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 to provide an environment that does not discriminate against persons with disabilities. If you are a person with a disability on this campus and anticipate needing any type of academic accommodations in order to participate in your classes, please make timely arrangements by disclosing this disability in writing to the Disability Services Office at (Box 2764) 1000 Holt Ave., Winter Park, FL, 37289 or email or call the Director of Disability Services, Grace Moskola at 407-975-6463, gmoskola@rollins.edu.

Academic Honor Code
Membership in the student body of Rollins College carries with it an obligation, and requires a commitment, to act with honor in all things. Because academic integrity is fundamental to the pursuit of knowledge and truth and is the heart of the academic life of Rollins College, it is the responsibility of all members of the College community to practice it and to report apparent violations. The following pledge is a binding commitment by the students of Rollins College:
The development of the virtues of Honor and Integrity are integral to a Rollins College education and to membership in the Rollins College community. Therefore, I, a student of Rollins College, pledge to show my commitment to these virtues by abstaining from any lying, cheating, or plagiarism in my academic endeavors and by behaving responsibly, respectfully and honorably in my social life and in my relationships with others.

This pledge is reinforced every time a student submits work for academic credit as his/her own. Students shall add to all papers, quizzes, tests, lab reports, etc., the following handwritten abbreviated pledge followed by their signature: “On my honor, I have not given, nor received, nor witnessed any unauthorized assistance on this work.” Material submitted electronically should contain the pledge; submission implies signing the pledge.

**Course and Instructor Evaluation**

At the end of each semester, students are asked to evaluate the course and instructor. These evaluations are extremely valuable in the teaching and learning process on our campus. Student evaluations help assess student perceptions of classroom learning and often lead to improved teaching. Your feedback is important and Rollins students are encouraged to be honest, fair, and reflective in the evaluation process. The online evaluative survey is anonymous. Students are never identified as the respondent. Instead, each student’s comments are assigned a random number. You will be asked to rate your course and instructor on a numerical scale and through narrative comments.

The online Course and Instructor Evaluation (CIE) process opens at 8:00 a.m. on the first scheduled date. It remains open for a period of 14 days (2 weeks) until 12:00 a.m. (midnight) on the final scheduled date. The evaluation period ends prior to the start of final examinations and faculty cannot access completed evaluations until 10 days after the end of final exams. Students will receive one email at the start of the CIE period, one after the 15th day, and a final reminder the day before the CIE period ends. Students who complete evaluations for all classes will be able to view grades 10 days before students who do not complete an evaluation form.