REHB 589
Seminar in Applied Behavior Analysis: Functional Analysis and Function-Based Treatment of Problem Behavior
Spring, 2014

Instructor: Joel E. Ringdahl, Ph. D.    Office: 335A Rehn Hall
Email: joelringdahl@siu.edu    Office Hrs: M & T 8-11 or by appointment

Credit Hours: 3
Location & Time: Thursday 9:00-12:00 NWA 132

Course Description

This course focuses on the history, development, implementation and variations of functional analysis as a methodology for assessing severe problem behavior. In addition, the course will cover the development and implementation of function-based treatments. Students will read relevant literature in these two areas (functional analysis and function-based treatment), provide questions and comments regarding the readings, and develop a research proposal related to functional analysis of problem behavior.

Course Objectives and Learning Objectives

Upon completion of the course, students will be able to:
• Understand the background related to the development of functional analysis of problem behavior.
• Understand the original functional analysis as described by Iwata and colleagues, and know how to implement the procedures.
• Discuss the differences in the functional analysis methodologies, procedures, and conditions that have emerged since the seminal article detailing its utility.
• Determine the context and settings in which different approaches to function-analysis are best utilized.
• Discuss the development of function-based treatments, given the outcomes of functional analyses.
• Understand different approaches to function-based treatments.

Assigned Readings

Week 2.
**Week 3.**


**Week 4.**


**Week 5.**


**Week 6.**


**Week 7.**


**Week 8.**


**Week 9.**


**Week 10.**


**Week 11.**


**Week 12.**


Berg et al. (in press)


**Week 13.**


**Class Format/Article Walk-through**

Classes will be seminar-style. That is, classes will mainly consist of in-depth discussions of the readings assigned for that day. Students should come to class having read the material. Students will be assigned as the lead person for any given article. When serving in that role, the
student’s responsibility is to compile the Questions/Comments sent to them by their class mates (see, Questions/Comments below) and use them when structuring the discussion of the relevant article. In addition, students serving as the lead person for an article should be prepared to “walk” their classmates through the reading assignment. That is, they should identify what the purpose of the study was, who the participants were (including relevant characteristics), be familiar with the experimental methods (design, procedures, data collection, etc.), and be able to describe the results and their implications. Each student will handle three articles in this manner during the course of the semester. Each article handled will be worth 10 points (30 points). Some lecture material may be presented, but lecture material will not be the main focus of classes. Out of consideration for each other, please turn cell phones off during each class.

**Essays**

There will be two essays, one at the end of the functional analysis portion, and one at the conclusion of the treatment portion. The essays will be open-note. These essays are intended to allow you to demonstrate the ability to integrate the material discussed in class, and not intended to be an “examination” of you understanding of the material. Essays will be worth 30 points each (60 total).

**Question/Comments**

Prior to the beginning of each week’s class, each student will send two questions and/or comments related to each of the assigned readings. The questions will be sent to the instructor and the lead student, if applicable, by Tuesday at midnight. These questions/comments are important. They will form the basis of the in-class discussion related to the topic. Students will earn 5 points for each week’s questions (65 total).

**Research Proposal and Presentation**

During the course of the semester, students will complete a research proposal (i.e., the proposed project does not need to be conducted) related to functional analysis of behavior. The research proposal should focus on extending the research related to the methodology, conditions, or utility of functional analyses of behavior. The proposal will consist of three sections:

1. An Introduction reviewing the literature and the hole the proposed research project will fill.
2. A Method section that outlines the target participant population, the experimental design and procedures, how IOA will be collected, and procedural fidelity details.
3. A combined Results and Discussion section. The results should be presented in a hypothetical manner. That is, what results would you expect to obtain if the project were, in fact, conducted.

The proposal should be written following most recent APA stylistic guidelines. There is not a specific page requirement, but students should take care to include enough relevant information to convey the rationale for the proposal (Introduction), how the study will be conducted (Method), and potential results and discussion.

Students will also prepare a presentation (10-15 minutes) to describe the project to the class. Presentations will be given on the last class of the semester. Papers will be due the same day. The project will be worth 100 points.

**Grading Scale (255 total points)**

A - 228-255
Students with Disabilities:

If you have a documented disability and need reasonable accommodations, please contact me during the first week of classes so that I can ensure that your needs are met in a timely manner. Students with disabilities should contact the University’s Disabled Student Resources and Services and the Office of Services for Students with Learning Disabilities at the beginning of the semester to inform them of the disability and obtain information about services that can facilitate learning. According to University policy: “Any student with a documented disability who needs to arrange reasonable accommodations must contact the professor and the appropriate Disability Services office at the beginning of the semester.”

Academic Dishonesty

Each student is responsible for making himself or herself aware of the policies and procedures in the Student Conduct Code (http://intranet.siu.edu/~docedit/other_policies/index.html) that pertain to Acts of Academic Dishonesty. These policies cover such acts as plagiarism, preparing work for another student, cheating by any method or means, falsifying or manufacturing data, furnishing false information to a university official relative to academic matters, and soliciting, aiding, concealing, or attempting conduct in violation of this code. The student is also responsible for making himself or herself aware of the sanctions which may be imposed for violation of this code. A student must consult with the instructor if he or she has questions pertaining to academic dishonesty prior to the submission of an assignment or test.

Emergency Procedures

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on campus, available on the BERT’s website at www.bert.siu.edu, Department of Public Safety's website www.dps.siu.edu (disaster drop down) and in the Emergency Response Guidelines pamphlet. Know how to respond to each type of emergency.

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency. The Building Emergency Response Team will provide assistance to your instructor in evacuating the building or sheltering within the facility.

The instructor is committed to equal opportunity in education for all students, including those with documented disabilities. It is the responsibility of students with documented disabilities to contact the instructor during the first week of class to discuss appropriate accommodations to ensure equity in grading, classroom experiences, and outside assignments. Documentation is to be provided and accommodations are to be arranged with Disability Support Services.
Other

1. If you need help improving your writing skills, SIUC offers free tutoring services to all students. Contact the Writing Center at 453-6863 for more information.

2. If you wish to drop this course for any reason, SIUC designates a final date by which you can do this. It is your responsibility to ensure that the drop process is officially completed.

A grade of Incomplete will be given only under the conditions specified in the Undergraduate Catalog. That is, a grade of incomplete can only be given if a student has completed more than HALF of the semester and is PASSING the course. An incomplete exists to help those students who would have passed the course had they been able to continue, but EXTREME circumstances exist such that the student cannot continue.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 16</td>
<td>Introduction</td>
<td>None</td>
</tr>
<tr>
<td>January 23</td>
<td>Historical Perspectives</td>
<td>Corte, Wolf, &amp; Locke (1971); Lovaas &amp; Simmons (1969); Johnson &amp; Baumeister (1978); Carr (1977)</td>
</tr>
<tr>
<td>January 30</td>
<td>Functional Analysis of Problem Behavior and its Utility</td>
<td>Iwata et al. (1982/1994); Iwata et al. (1994); Hagopian et al. (2013)</td>
</tr>
<tr>
<td>February 6</td>
<td>Brief Functional Analysis</td>
<td>Northup et al. (1991); Derby et al. (1992); Wacker et al. (1994); Cooper et al. (1990); Kahng et al. (1999)</td>
</tr>
<tr>
<td>February 13</td>
<td>Variations in FA methodology and conditions</td>
<td>Carr and Durand (1985; study 1); Iwata et al. (1994); Vollmer et al. (1995); Ringdahl et al. (2009)</td>
</tr>
<tr>
<td>February 20</td>
<td>Antecedent influences</td>
<td>Roscoe et al. (2008); Ringdahl et al. (2002); Ringdahl and Sellers (2000); Berg et al (2000); O’Reilly and Lacey (2000); O’Reilly (1997); Christensen et al. (2009); Hammond et al. (2013)</td>
</tr>
<tr>
<td>February 27</td>
<td>Consequence influences</td>
<td>Fisher et al. (1996); Golonka et al. (2000); Broussard &amp; Northup (1997); Fisher et al. (1996b); Kern et al. (1997); Fähnle et al. (2013)</td>
</tr>
<tr>
<td>March 6</td>
<td>Review and Recent Advances</td>
<td>Hanley et al. (2004); Bloom et al. (2011); LaRue et al. (2011); Beavers et al. (2013)</td>
</tr>
<tr>
<td>March 13</td>
<td>SPRING BREAK</td>
<td></td>
</tr>
<tr>
<td>March 20</td>
<td>Data Analysis ESSAY 1</td>
<td>Vollmer et al. (1993); Hagopian et al. (1997); Roane et al. (2013)</td>
</tr>
<tr>
<td>March 27</td>
<td>Treatment: Social positive reinforcement</td>
<td>Day et al. (1988); Vollmer et al. (1993) NCR; Vollmer et al. (1997) side effects; Carr and Durand (1985 study 2) FCT; Rooker et al. (2013)</td>
</tr>
<tr>
<td>April 3</td>
<td>Treatment: Social Negative reinforcement</td>
<td>Iwata et al. (1990); Vollmer et al. (1995); Reed et al. (2005); Zarcone et al. (1994); Piazza et al. (1996); Ringdahl et al. (2002)</td>
</tr>
<tr>
<td>April 10</td>
<td>Treatment: Automatic reinforcement</td>
<td>Berg et al. (in press); Ringdahl et al. (1997); Shore et al. (1997); Piazza et al. (2000); Ahearn et al. (2005)</td>
</tr>
<tr>
<td>April 17</td>
<td>Recent Advances</td>
<td>Nevin (1974); Wacker et al. (2011-JEAB); Mace et al. (2010–JEAB); Milo et al. (2010–JEAB)</td>
</tr>
<tr>
<td>April 24</td>
<td>ESSAY 2</td>
<td></td>
</tr>
<tr>
<td>May 1</td>
<td>PRESENTATIONS</td>
<td></td>
</tr>
<tr>
<td>May 8</td>
<td>Finals week</td>
<td></td>
</tr>
</tbody>
</table>