REHB 503: Basic Behavior Analysis

Fall 2016 Course Syllabus and Calendar

Instructor Information
Instructor: Mark R. Dixon, PhD, BCBA-D
Email: mdixon@siu.edu
Office Location: 336A Rehn Hall
Office Hours: M 8am – 2pm
Course Time: M 5pm – 7:50pm

Teaching Assistant: Jordan Belisle, MS, BCBA
Email: jbelisle@siu.edu
Office Location: 334 Rehn Hall
Office Hours: M 8am – 2pm.
Course Location: WHAM 0302

Course Materials
Texts can be purchased at the Southern Illinois University Campus Bookstore located in the Student Center, at 710 Bookstore located on US 51, on Amazon, or directly from the publisher’s website.

2. Behavior Development Solutions’ BCBA Exam Prep program. This will be offered to you through BDS. Please ensure that your instructors have a correct email address as you will be contacted by BDS with ordering information. Extensions for this program can be purchased once the license is about to expire.
4. Additional readings will be accessible online through the library’s website at http://lib.siu.edu

Course Description and Objectives
The primary course objective is for you to understand and be capable of correctly identifying and applying basic behavior analytic principles to varying domains and populations. To attain this objective, you will be required to (1) read each of the assigned chapter(s) and research articles each week, (2) be able to discuss the points of each assigned chapter/article during class, (3) respond appropriately to questions provided on examinations based on the text and class discussion, (4) conduct and present basic behavioral research in the invertebrate behavior lab, and (5) complete BDS modules based on the materials covered in class.

Upon successful completion of this class, you will know how to:
- Describe the assumptions, characteristics, and goals of applied behavior analysis
- Apply behavior-analytic procedures derived from basic learning principles to solve problems of social importance or improve conditions for dependent, or at-risk populations
- Become a more competent consumer of behavioral research
- Appreciate the complexity of causes and consequences
- Develop an ethic of social responsibility and citizenship

General Course Format
The course is designed to provide a rigorous and in-depth evaluation of the basic principles of Applied Behavior Analysis, as well as to develop the skills necessary for success in graduate school. Each regular class period will begin with a 30-minute quiz on the materials for the previous class as identified in the course calendar as well as information discussed during the lecture, followed by a 10-minute break. The remainder of the class will include a lecture and discussion over the materials for that week (2-hours, 10-minutes) to prepare you for the following weeks quiz and the unit examinations. Participation will be tracked and graded during each regular class period. The course will additionally include: 2 Unit Examinations (i.e., midterm and final), 3 Invertebrate Laboratory Assignments, 1 Class Presentation, and BACB Preparatory Homework.
Course Grades

Your course grade will be calculated based on the number of points that you can earn on the Weekly Quizzes, Unit Examinations, Invertebrate Lab Assignments, Class Presentation, BACB Preparatory Homework, and Participation. The total number of possible points is 1000, and is broken down as follows:

- Weekly Quizzes (10 @ 20) 200 points
- Participation (10 @ 2) 20 points
- Invertebrate Lab Assignments (2 @ 75; 1 @ 150) 300 points
- Class Presentation (1 @ 80) 80 points
- BDS Homework Assignment (1 @ 100) 100 points
- Unit Examinations (2 @ 150) 300 points

Total: 1000 Points

Grades will be determined according to the following point distribution:

<table>
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<tr>
<th>Percent</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>Points</td>
<td>900</td>
<td>800</td>
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Note: A grade of an 80% or higher is considered passing for this course. A grade of a 79% or lower is not considered passing for this course.

Students with Disabilities

If you have a documented disability and need reasonable accommodations, please contact me during the first week of class so that I can ensure that your needs are met in a timely manner. Students with disabilities must contact the University’s Disability Support Services at the beginning of the semester to inform them of the disability and obtain information about services that can facilitate learning. Please stop by their office in Woody Hall B-150, or refer to the DSS website for further information: [http://disabilityservices.siuc.edu/](http://disabilityservices.siuc.edu/).

Emergency Procedures

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some 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](http://www.bert.siu.edu), Department of Public Safety’s website [www.dps.siu.edu](http://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 providing shelter within the facility.

Other Relevant Information

1. 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.

2. 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.

3. Re-grade requests: If you receive a grade that you believe to be incorrect for any reason, I will be glad to review the grade to allot additional points, under the following conditions:
   a. You have 1 week after the work has been returned to you to submit a re-grade request to me.
   b. Requests should include the original work, a written explanation of why you think the grade you received was inaccurate, and specific evidence from class materials to support your original response.
Course Items:

Weekly Quizzes (10 @ 20 pts. = 200 pts.)

There will be 11 weekly quizzes given during the semester, corresponding to the materials covered in class the previous week and information provided during the lecture (all indicated in the course calendar). Materials covered each week will include chapters from the course texts (Cooper et al., 2007; Dixon, 2014a, b) and scholarly peer-reviewed journal articles with an emphasis on basic behavioral processes, treatment for individuals with disabilities, treatment for individuals with addictions, and conceptual issues related to the course material. Occasionally, there will be information on an exam from an earlier week. Exams will consist of “definition” questions, “short-answer essay” questions, and “long-answer essay” questions. No make-up quizzes will be provided. If you are not going to be in class for any reason, you must notify Dr. Dixon or Jordan prior to the start of the class period so that you can take an alternative version of the quiz prior to the rest of the class. If there is an unexpected absence, we will need medical documentation in order for it to be excused unless otherwise discussed with Dr. Dixon. If we do not receive a message regarding your absence before class, then you will receive a 0 for that quiz. No exceptions. If you are late for the quiz, then you will have less time to complete the quiz. Your lowest quiz grade will be dropped in the final calculation.

Participation (10 @ 2 pts. = 20 pts.)

Discussion is emphasized in this class. Therefore, you are encouraged and expected to speak in class and your contributions will be graded. We will discuss questions that you have about the text and any related issues. If you participate by discussing information related to the material for that week, then you will receive a 2 for the class period, and if you do not participate or do not attend the class, then you will receive a 0 for the class period. If an absence is excused, then you will be provided an alternative assignment for participation.

Invertebrate Lab Assignments (2 @ 75 pts.; 1 @ 150 pts. = 300 pts.)

This semester, you will complete 3 research projects with Madagascar Hissing Cockroaches. The first 2 projects will be completed in groups consisting of four members, and the final project will be completed independently. For the first project, you and your group will complete a Preference Assessment with a cockroach provided to you by the Cockroach Lab at SIU. You will be provided the materials needed to complete the project as well as a detailed task analysis. As a group, you will report the results of your research in a JABA/JEAB formatted Brief Report. For the second project, you and your group will complete a Reinforcer Assessment with a cockroach provided to you by the Cockroach Lab at SIU. Again, you will be provided the materials needed to complete the project as well as a detailed task analysis. As a group, you will report the results of your research in a JABA/JEAB formatted Brief Report. For the final project, you will again collect data in groups consisting of four members, where materials and a detailed task analysis will be provided to you. You will report the results of the project, as well as the results from the prior 2 projects, in a three-study JABA/JEAB Full Report. The final project will be conducted independently. You will be expected to incorporate feedback from the prior reports in the final assignment. In addition, you will be provided feedback within 1-week of submitting your report, and you will have the opportunity to make corrections to the report in order to gain up-to an additional 25 points. The revised report will be due at the time of the final Unit Examination. No late assignments will be accepted.

Class Presentation (1 @ 80 pts. = 80 pts.)

Class presentations will be completed in groups consisting of four members, and will simulate a “board room meeting”, where you will be expected to defend the efficacy of your training procedures in teaching language skills to a human participant. You will teach 2 skills to the participant using the procedures described in the PEAK Direct Training module. The skills that you teach will be determined by you and your group. In addition, you will select the research design that you feel best demonstrates experimental control, and decide on the best way to display the data to convince the audience that your procedures caused the reported skill acquisition. Presentations will be 5-minutes in length, with an emphasis on the methods and results sections. You will also be expected to adequately field questions from the audience.
BDS Homework Assignment (1 @ 100 = 100 pts.)

The Behavior Development Solutions BCBA Exam Prep program allows students to access additional support materials and reinforces the topics being presented in class. You will be required to complete 50% of the BDS modules to receive full credit for the assignment. Any assignments that do not meet this criterion will receive 0 points. You will submit proof of the completion of the BDS homework assignments at the final Unit Examination. No late assignments will be accepted.

Unit Examinations (2 @ 150 = 300 pts.)

There will be 2 Unit Examinations given during the semester. The exams will cover all material presented prior to the examination, including readings and information discussed in class. An emphasis will be placed on basic behavioral processes and their application with clinically significant populations. Exams will consist of multiple choice questions (50 pts.), short answer essay questions (50 pts.), and a long answer essay question (50 pts.). No make-up examinations will be provided. If you are not going to be in class for any reason, you must notify Dr. Dixon or Jordan prior to the start of the class period so that you can take an alternative version of the exam prior to the rest of the class. If there is an unexpected absence, we will need medical documentation in order for it to be excused unless otherwise discussed with Dr. Dixon. If we do not receive a message regarding your absence before class, then you will receive a 0 for that exam. No exceptions. If you are late for the exam, then you will have less time to complete the exam, and if another student completes and submits the exam while you are absent, then you will not have the opportunity to complete the exam and you will receive a 0 for that exam.

Additional Considerations:

Cell Phones

Cell phones and other electronic devices not used for note taking must be turned off during all class periods. Students caught texting during class will be asked to leave. No exceptions.

Academic Dishonesty

You are responsible for making yourself aware of understanding the policies and procedures in the University Catalog that pertain to Academic Integrity. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. If there is a reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Judicial Affairs. Your will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with me if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

If I have evidence of any form of academic dishonesty, I will charge the student with violating the Academic Honesty Policy of the University in a report to the Office of Student Judicial Affairs. A student who is found responsible for an act of academic dishonesty will receive a failing grade in the course.

Cheating consists of, but is not limited to, looking at another student’s quiz/exam, using external aids (such as books, notes, conversation with others) when taking a test, or plagiarizing the work of another person and submitting it as your original work. No course books or materials should be within the student’s view during quizzes or exams. NOTE: Changing the size of characters and/or spacing between paragraphs to make your paper appear longer is WIDELY APPARENT to those grading them. Do NOT attempt to do so or your efforts will be publicly acknowledged.

If you are late for the exam, then you will have less time to complete the exam, and if another student completes and submits the exam while you are absent, then you will not have the opportunity to complete the exam and you will receive a 0 for that exam.
# Course Calendar:

*Note: * = material will be provided to you

## Unit 1: Behaviorism, Behavior, Reinforcement and Punishment

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Readings</th>
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| 8/22 | Receive course syllabus | Introduction to 503 and the Science of Behavior  
Receive BDS homework assignment information |  
Primary Text Readings:  
Cooper, Heron, & Heward Ch. 1-2
 |
|     | QUIZ 1 | Abbreviated History of ABA and the Science Behavior |
| 8/29 | Short Answer (2 @ 5pts. = 10pts.)  
Long Answer (1 @ 10pts. = 10pts.) |  
Primary Text Readings:  
Cooper, Heron, & Heward Ch. 3-4
 |
| 9/5  | No Class—Labor Day | No assigned readings |
| 9/12 | QUIZ 2 | Defining and Measuring Behavior, and Evaluating Behavior Change |
|      | Definitions (5 @ 1 pt. = 5pts.)  
Graphical Interpretation (1 @ 5 pts. = 5 pts.)  
Short Answer (2 @ 5 pts. = 10 pts.) |  
Primary Text Readings:  
Cooper, Heron, & Heward Ch. 5-10
 |
|      | Receive grades and feedback for last week’s quiz |  |
| 9/19 | QUIZ 3 | Operant Conditioning, Reinforcement, and Preference |
|      | Definitions (5 @ 1 pt. = 5 pts.)  
Short Answer (3 @ 5 pts. = 15 pts.) |  
Primary Text Readings:  
Cooper, Heron, & Heward Ch. 11-13
 |
|      | Receive invertebrate assignment 1 groups, instructions, and rubric |  |
|      | Receive grades and feedback for last week’s quiz |  |
| 9/26 | QUIZ 4 | Positive and Negative Punishment |
|      | Definitions (5 @ 1 pt. = 5 pts.)  
Short Answer (3 @ 5 pts. = 15 pts.) |  
Primary Text Readings:  
Cooper, Heron, & Heward Ch. 14-15
 |
|      | Receive grades and feedback for last week’s quiz |  |

Supplemental Readings:
- Baer, Wolf, & Risley (1968)
- Watson (1913)
- Baer, Wolf, & Risley (1987)
- Skinner (1950)
- Skinner (1953) *
- Skinner (1969) *
- Wolf (1978)
- Brossart, Parker, Olson, & Mahadevan (2006)
- Campbell (2004)
- Camhi, Tom, & Volman (1978)
- Dixon et al. (2016)
- Dixon, MacLin, & Daugherty (2006)
- Fuller (1949)
- Slocum & Vollmer (2015)
- Verriden & Roscoe (2016)
- Carroll, Joachim, St. Peter, & Robinson (2015)
Dozier, Iwata, & Worsdell (2011)  
Foxx, McMorrows, Bittle, & Bechtel (1986)  
Hanley, Piazza, Fisher, & Maglieri (2005)  
Peters & Thompson (2013)  
Heal & Hanley (2011)

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<td>UNIT EXAMINATION 1 (150 pts.)</td>
<td>All assigned readings to date</td>
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<td>Multiple Choice (50 @ 1pt. = 50 pts.)</td>
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<td>Short Answer (5 @ 10 pts. = 50 pts.)</td>
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<td>Long Answer (2 @ 25 pts. = 50 pts.)</td>
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<td>INVERTEBRATE ASSIGNMENT 1</td>
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<td>JABA/JEAB Brief Report (75pts.)</td>
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<td>10/17</td>
<td><strong>Unit 2: Motivating Operations and Stimulus Control</strong></td>
<td><strong>Motivating Operations and Stimulus Control</strong></td>
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<td><em>Receive invertebrate assignment 2 groups, instructions, and rubric</em></td>
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<td><em>Receive grades and feedback for Unit 1 Exam</em></td>
<td>Cooper, Heron, &amp; Heward Ch. 16-17</td>
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<td><em>Receive grades and feedback for Invertebrate Assignment 3</em></td>
<td><em>Supplemental Readings:</em></td>
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<td><em>Imitation, Shaping, and Chaining</em></td>
<td>Davis &amp; Heslop (2004)</td>
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<td><em>Receive grades and feedback for last week’s quiz</em></td>
<td>Dixon, Buono, &amp; Belisle (2016)</td>
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<td><strong>Quiz 5</strong></td>
<td><em>Receive grades and feedback for last week’s quiz</em></td>
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<td>Short Answer (3 @ 5 pts. = 15 pts.)</td>
<td>Cooper, Heron, &amp; Heward Ch. 18-20</td>
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<td><em>Supplemental Readings:</em></td>
<td>Athens, Vollmer, &amp; Pipkin (2007)</td>
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<td>Bancroft, Weiss, Libby, &amp; Ahearn (2011)</td>
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<td>Dallery, J., &amp; Glenn, I. M. (2005)</td>
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<td>Dixon, Belisle, Munoz, Stanley, &amp; Daar (2016)</td>
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<td>Huang &amp; Chiao (2013)</td>
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<td>Jerome, Frantino, &amp; Sturmey (2007)</td>
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<td>Ross &amp; Greer (2003)</td>
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<td>Slocum &amp; Tiger (2011)</td>
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<td>10/31</td>
<td><strong>Quiz 6</strong></td>
<td><strong>Differential Reinforcement and Antecedent Strategies</strong></td>
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<td>Short Answer (3 @ 5 pts. = 15 pts.)</td>
<td>Cooper, Heron, &amp; Heward Ch. 21-23</td>
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<td><em>Receive grades and feedback for last week’s quiz</em></td>
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<td>Bloom &amp; Lambert (2015)</td>
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<td></td>
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<td>Heinicke, Carr, &amp; LeBlanc (2012)</td>
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11/7 QUIZ 7
Definitions (5 @ 1 pt. = 5 pts.)
Short Answer (3 @ 5 pts. = 15 pts.)
Receive class presentation groups, instructions, and rubric
Receive grades and feedback for last week’s quiz
Receive grades and feedback for Invertebrate Assignment 2
Receive invertebrate assignment 3 groups, instructions, and rubric

11/14 QUIZ 8
Definitions (5 @ 1 pt. = 5 pts.)
Short Answer (3 @ 5 pts. = 15 pts.)
Receive grades and feedback for last week’s quiz

11/21 QUIZ 9
Definitions (5 @ 1 pt. = 5 pts.)
Short Answer (3 @ 5 pts. = 15 pts.)
Receive grades and feedback for last week’s quiz

11/28 QUIZ 10
Definitions (5 @ 1 pt. = 5 pts.)
Short Answer (3 @ 5 pts. = 15 pts.)
INVERTEBRATE ASSIGNMENT 3 DUE JABA/JEAB Full Report (150pts.)
Receive grades and feedback for last week’s quiz

Functional Behavior Assessment

Primary Text Readings:
Cooper, Heron, & Heward Ch. 24

Supplemental Readings:
Beavers, Iwata, & Lerman (2013)
Dixon & Johnson (2007)
Healy, Brett, & Leader (2013)
Iwata et al. (1982)
Najdowski et al. (2008)
Piazza et al. (2003)
Northup et al. (1991)
Zaja, Moore, Van Ingen, & Rojahn (2011)

Verbal Behavior

Primary Text Readings:
Cooper, Heron, & Heward Ch. 25
Dixon (2014a) Introduction

Supplemental Readings:
Dixon et al. (2015)
Dixon, Belisle, Whiting, & Rowsey (2014)
Dixon, Whiting, Rowsey, & Belisle (2014)
McKeel, Dixon, Daar, & Rowsey (2015)
McKeel, Rowsey, Belisle, & Dixon (2015)

Behavior Change Strategies and Generalization

Primary Text Readings:
Cooper, Heron, & Heward Ch. 26-28

Supplemental Readings:
Belisle & Dixon (2015)
Donaldson, DeLeon, Fisher, & Kahng (2014)
Jowett Hirst, Dozier, & Payne (2016)
Krentz, Miltenberger, & Valbuena (2016)
Lalli, Mace, Livezey, & Kates (1998)
Perkins & McLaughlin (2015)
Vargo & Ringdahl (2015)

Ethical Considerations and Limitations of “Traditional” ABA

Primary Text Readings:
Cooper, Heron, & Heward Ch. 29

Supplemental Readings:
Friman (2010)
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<td>CLASS PRESENTATIONS</td>
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<td>FINAL UNIT EXAM REVIEW</td>
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<td>Receive grades and feedback for Invertebrate Assignment 3</td>
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<td>12/12</td>
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**Materials References:**


Michael, J. (1975). Positive and negative reinforcement, a distinction that is no longer necessary; or a better way to talk about bad things. Behaviorism, 3, 33-44.


