

# ABA Handbook

Applied Behavior Analysis  
M.A. Track  
Human Services Psychology



# UMBC



## 2023-2025

### CONTACT INFORMATION

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This document is intended to help students understand aspects of the ABA Track, to provide examples of course sequences, and to highlight (through consideration of the Practicum and Intervention course syllabi) aspects of the experience that will be evaluated in determination of the student's grade in these courses and on the final capstone project.

If a student has any questions based on information presented, or not presented, in this handbook, the student should contact the Director of the ABA Master's Track for clarification, Dr. J. C. Borrero.

# Applied Behavior Analysis

## **Master of Arts Track: A degree in the Human Services Psychology program**

### **Program Description**

Behavior analysis is the science of the causes of behavior. In applied behavior analysis, this science is applied to significant challenges of human behavior, typically at the level of the individual rather than of the group. The scope of applied behavior analysis is wide-ranging, including work in intellectual and developmental disabilities, in behavioral medicine, in organizational settings, and in education, to mention just a few applications. Mastery of applied behavior analysis calls for competence in basic psychology, in the detailed knowledge base of behavior analysis, in measurement techniques for evaluating existing behavior and for designing assessment and treatment programs for individuals in organizations and in communities while adhering to high standards of ethical and professional behavior, and in the various skills essential to delivering services and maintaining their effectiveness.

### **Mission**

The mission of the M. A. track in Applied Behavior Analysis at UMBC is to prepare graduates to enter the workforce as well-trained clinicians who can work in a variety of applied contexts, by applying the principles of behavior to socially significant behavioral challenges. In addition, we seek to prepare graduates for doctoral training, should they choose. Training, in coursework and in practice, is designed to promote a culture of inclusive excellence.

### **Objectives**

The objectives of the M. A. track in Applied Behavior Analysis at UMBC are to provide coursework in basic- and applied- behavior analysis with an emphasis on essential aspects of Applied Behavior Analysis, and to provide practice experiences so that students may become proficient in the application of behavior principles. As part of the degree requirements, students complete a capstone project that is designed and conducted in collaboration with a designated committee chair and two other committee members. The student is expected to make a novel contribution to the research literature, or to replicate or extend the research literature.

### **Accreditation, Certification, and Licensure**

Applied behavior analysis includes accountability in its service delivery. The UMBC M. A. Track is responsive to the increasing call for such services and fills a gap in the availability of such programs in the mid-Atlantic region. The UMBC Psychology Department and its partners are ideally suited to develop and maintain such a program. The Association for Behavior Analysis International has verified the courses offered in this program toward the coursework requirements for eligibility to take the Board Certified Behavior Analyst examination. Applicants

will need to meet additional requirements before they can be deemed eligible to take the examination.

Anyone interested in a career in Applied Behavior Analysis should be aware of the two primary credentials that are often needed to do so. The first is Board Certified Behavior Analyst (BCBA), and the second is Licensed Behavior Analyst (LBA; sometimes called a Licensed Applied Behavior Analyst or LABA).

A Verified Course Sequence (VCS) is a set of courses that has been verified by the Association for Behavior Analysis International as meeting specific coursework requirements, content hours, and faculty standards. The UMBC course sequence has been verified for Behavior Analyst Certification Board examination applications.

The requirements for licensure vary from state-to-state. Requirements for each state can be found [here](#). In Maryland, the requirements can be found [here](#), and are as follows:

- A current certification by the Behavior Analyst Certification Board (BCBA or BCBA-D) or its successor organization; and
- A master's degree or higher from a behavior analysis educational program that is accredited by the Behavior Analyst Certification Board or its successor organization.

In addition to coursework, eligibility to sit for the BCBA exam requires fieldwork experience. Though the UMBC curriculum has fieldwork experience (practicum) requirements built in, the two semesters of practicum are insufficient to meet the fieldwork experience requirements, which can be found [here](#). To be clear, completion of the two practicum courses will not be sufficient to meet the fieldwork experience requirements.

## Academic Integrity

All students and faculty are expected to adhere to the following principles and guidelines regarding Academic Integrity.

### Statement of Values for Student Academic Integrity at UMBC

Academic integrity is an important value at UMBC. By enrolling in a course, each student assumes the responsibilities of an active participant in the scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Rigorous standards allow UMBC students, faculty, and administrators, as well as scholars and employers in the larger community, to trust that the work that students submit is the fruit of their own learning and academic effort.

The purposes of higher education are the learning students and faculty undertake, the knowledge and thinking skills developed, and the enhancement of personal qualities that enable students to be strong contributing members of society. In a competitive world, it is essential that all members of the UMBC community uphold a standard that places the integrity of each student's honestly earned achievements above higher grades or easier work dishonestly sought. All members of the UMBC community are expected to make a commitment to academic honesty in their own actions and with others. Academic misconduct could result in disciplinary action that may include suspension or dismissal. The following are examples of academic misconduct that are not tolerated at UMBC:

- **Cheating:** Knowingly using or attempting to use unauthorized material, information, or study aids in any academic exercise.
- **Fabrication:** Intentional and unauthorized falsification or invention of any information or citation in an academic exercise.
- **Facilitating Academic Dishonesty:** Intentionally or knowingly helping or attempting to help another commit an act of academic dishonesty.
- **Plagiarism:** Knowingly representing the words or ideas of another as one's own in any academic exercise, including works of art and computer-generated information/images.

Students should consult UMBC's Student Academic Conduct Policy for information on policy and procedures for upholding UMBC's high standards for academic integrity. Students who have questions or concerns are encouraged to talk with a member of the faculty or administration for assistance.

## Diversity

It is an expectation that ABA students will demonstrate respect for human diversity in all its manifestations, including age, disability, ethnicity, gender, gender identity, language, national origin, race, religion, culture, sexual orientation, and socioeconomic status.

## Professional Behavior and Expectations

Students are expected to handle all professional commitments in a responsible manner.

Professional commitments include, but are not limited to:

1. Fulfilling job responsibilities in a timely manner;
2. Providing quality and timely clinical or community services, reports, and administrative
3. documentation;
4. Attending and actively participating in all classes—which includes arriving on time, being fully prepared for class, completing assignments on time, and refraining from distracting or interfering activities during class (e.g., texting, web surfing or other non-class-related activities); and
5. Checking UMBC email regularly and responding to communication about professional responsibilities promptly as appropriate to one's duties/roles.

Professional development will be evaluated as part of students' biannual evaluations or more frequently if concerns are brought to the attention of the faculty.

## Stress Management

Graduate education is inherently stressful. This tends to diminish as students move beyond their first year of training, but it is a fact of life that our best efforts cannot fully eliminate. There are some things, however, that students can do that should help them in coping with this stress.

1. Don't try to face it alone. Evidence suggests that peer support can help buffer the effects of stress. Discovering that you are not alone in your experiences of uncertainty, fear, anger, and so forth, by sharing these with your fellow students, can go a long way toward mitigating their effects. Forming study groups, informal socializing, and discussing your concerns with your fellow students are important ways of gaining peer support and developing a sense of community in the program. We recommend them highly.
2. Turn to the faculty. Remember that the faculty is highly invested in your succeeding in the program. You wouldn't be in the program if the faculty did not believe that you could succeed. Make an effort to become acquainted with the faculty. They can be an important source of support—both informational and personal.
3. Know what to expect, and plan for it. There are two peak periods of stress for students in the program. The first is your first year, when you feel overwhelmed by the demands of the program and by the changes that have occurred in your life in entering the program, and the second is when you are preparing for and carrying out the capstone project. To feel anxious during these two periods is normal, although nonetheless uncomfortable. In the case of first-year stress, it can help to get to know some second-year students—they survived; find out how and recognize that they are not so different from you. Also, despite all the work you have, set aside some time for socializing and recreation; these are essential to your health.
4. Maintain some balance between your life as a student and the rest of your life. If you are married, have a family, or a significant other, make time for them. This is a period of strain for them, just as it is for you; they need your affection and attention to their needs

and concerns, just as you need theirs. Remember, your career is only one part of your life, and will mean little without the rest.

5. Check out rumors. Rumors are inevitable and can at times be sources of stress. The best way of dealing with them is by confronting them directly by discussing them with your advisor, or the ABA Director, to learn the facts. The facts are usually less ominous than the rumors that were cast by their shadow.



## ABA Track Requirements

Students complete course work in ethics, basic and applied analyses of behavior, research design and data evaluation, and practicum placement for hands-on experience with relevant behavioral procedures. Matters related to the ethical practice of behavior analysis are also addressed across several courses. In place of a master's thesis, students complete a capstone project using the skills acquired in the track.

The requirements total 36 credit hours consisting of the courses listed below. Consult the current UMBC Graduate School catalog for detailed departmental course listings as well as for tuition and fees.

Your primary point of contact will vary depending on your practicum placement. If you are placed at the Kennedy Krieger Institute's Neurobehavioral Units, your point of contact is Dr. Michelle Frank-Crawford, if you are the Kennedy Krieger Institute's Pediatric Feeding Disorders Program, your point of contact is Dr. Carrie Borrero, if you are the Shafer Center, your point of contact is Dr. John Borrero, and if you are at Verbal Beginnings, your point of contact is Dr. Mirela Cengher. The point of contact can assist students in making progress toward completing degree requirements, help the student to find a capstone project mentor, make students aware of deadlines, and is the first point of contact for challenges.

By the end of a student's first year, in collaboration with the point of contact and other faculty, the student will select a capstone *mentor*. The mentor's role is to assist in the development and implementation of the capstone project and will serve as the Chair of the student's capstone committee. As Chair, the mentor will be the primary point of contact for questions and concerns regarding the capstone project. The mentor must be one of the core ABA faculty (Drs. Carrie Borrero, John Borrero, Mirela Cengher, Michelle Frank-Crawford, and Matthew Novak). If the mentor is not one of the core ABA faculty, one of the core ABA faculty must serve as Co-Chair of the capstone committee. That Co-Chair will work with the mentor and student to ensure that the capstone meets the guidelines for the ABA track.

All students are required to complete the [Responsible Conduct of Research Training](#) by the first day of class. Upon completion, send the certificate to Kerrie Jenkins (kerriej1@umbc.edu), and copy John Borrero. Please consult with your practicum advisor if your practicum site also requires training in the conduct of research.

All students are expected to obtain grades of "B" or better in each of their graded first-year courses to move on to the second year. We use a "+/-" grading system (e.g., A+, A, A-). A grade of "B minus," therefore, falls below the grade requirement. Failing earn a minimum grade of "B" can result in dismissal from the ABA track. In the second year, students are required to maintain a "B" average in all graded courses.

**All students must complete the program within 4 years of admission. Failing to do so can result in dismissal from the ABA track, in the absence of particularly extenuating circumstances. This program is designed to be completed in 2 years.**

## **Program of Study<sup>1</sup>**

### ***Fall First Year***

PSYC 605: Learning and Cognition

PSYC 615: Methods in Applied Behavior Analysis: Design of Interventions

PSYC 693: Practicum in Applied Behavior Analysis I

### ***Spring First Year***

PSYC 616: Measurement in Applied Behavior Analysis: Observation and Assessment

PSYC 663: Ethics for Applied Behavior Analysts

PSYC 694: Practicum in Applied Behavior Analysis II

### ***Fall Second Year***

PSYC 662: Verbal Behavior

PSYC 617: Applied Behavior Analysis in Developmental Disabilities

PSYC 793: Capstone Sequence I

### ***Spring Second Year***

PSYC 669: Organizational Behavior Management

PSYC 655: Advanced Topics in Applied Behavior Analysis

PSYC 794: Capstone Sequence II

The BACB's exam schedule can be found at this [link](#).

Obtaining the BCBA credential will permit one to apply for licensure in the state of Maryland.

## **Course Waivers and Transfer of Credit**

Students entering the ABA track with coursework from another BACB or ABAI Verified Course Sequence may be eligible for waiver of particular courses or program requirements. Students who think that they may be eligible for course waivers should discuss this with the ABA Director and ultimately with the instructors of the courses to be waived during their first semester (if a full-time member of the Psychology Department). Agreements on waivers should be in writing (forms may be obtained from the ABA Director), one copy of which should be placed in the student's permanent file and a second given to the student. Ordinarily, waivers will be granted on the basis of satisfactory completion of comparable coursework done elsewhere. The judgment of comparability in most cases is made by the faculty of the courses involved (if the faculty member is a full-time member of the ABA track). In general, to be approved for a course waiver, the following conditions should be met:

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<sup>1</sup> Keep a copy of this document. These are the classes in which you will enroll for the duration of time in the program. If changes arise, you will be notified.

1. The student must provide a copy of the course syllabus.
2. The course content should be identical to the course offered at UMBC.
3. The course in question must have been taken within five years of entry into the ABA track.
4. The course must have been accepted for graduate credit at the school at which it was taken, and the student must have earned at least a grade of B in it.
5. Only credit earned in regularly scheduled, formal courses and seminars will be considered. Credits for independent readings, research, or practica are NOT applicable.

The department or program must agree that the specific credit is appropriate and acceptable in the student's program, and a grade of "B" or better must have been earned in such courses. A grade of "A" in transfer work will not balance a "C" in work taken in the program at UMBC. After discussing possible transfer of credit with the advisor and ABA Director, a request for transfer of credit should be completed shortly after matriculation on the Transfer of Credit form (available on The Graduate School Web site). This form must be approved by the student's advisor and the program director and then submitted to the administrative offices of The Graduate School. Official transcripts of the courses for which credit is requested must be attached to the form and sent to the administrative offices of The Graduate School.

**It is very uncommon for a course to be waived and potential applicants are encouraged to have this discussion prior to acceptance.**





### **Concerns, Complaints, Grievances**

When students have problems or complaints, they are strongly encouraged to discuss them with (a) their instructors or mentors if the problem or complaint is course- or capstone-related; (b) their faculty advisors, the Director, and/or the HSP Program Director if the problem involves personal or program concerns; and (c) their clinical supervisor(s) if the problem is practicum-related. We also have a student representative who may be able to assist you. Your student representative for year 1 is: [Drew Piersma \(dpiersm1@umbc.edu\)](mailto:dpiersm1@umbc.edu).

### **Termination Appeal Procedure**

In the event that the ABA faculty decides that a student's enrollment in the program should be terminated, the student is informed of this and is given an opportunity to discuss the decision with the faculty, before it is referred to the Graduate Committee of the Department, which reviews the decision and the basis for it. Although the Graduate Committee does not serve as a grievance committee, when a decision to terminate is referred to it, the student is informed of this and may submit an appeal or any information that the student believes relevant to the decision to the Graduate Committee. If the Graduate Committee concurs with the HSP faculty decision, this is reported to the full faculty of the Department who must ratify the decision. If the decision is ratified by the faculty, the student is informed of this, and the recommendation to terminate the student's enrollment is forwarded to the Dean of the Graduate School, whose decision is not appealable. However, should the student file a complaint with the Dean, claiming that the Department's decision was arbitrary and capricious; the Dean will evaluate the validity of this complaint before taking final action.

**On-site training at the Kennedy Krieger Institute, Verbal Beginnings, and the Shafer Center (4 courses; 12 credit hours)**

- Practicum (PSYC 693-694)
- Capstone Research and Evaluation (PSYC 793-794)\*

The practicum gives students hands-on experience with Applied Behavior Analysis evaluation and intervention. The capstone sequence serves as an opportunity in which students are expected to develop, write up, and carry through a full “study” from incoming evaluation through development of protocols to evaluation of outcomes. The capstone serves in the place of what might otherwise be a thesis; successful applications should focus on applied assessment or intervention innovations, or translational explorations with an emphasis on implications on application. Under some circumstances a literature review or survey are acceptable as a capstone project. Students interested in the literature review or survey options are advised to contact the Director of the ABA Track **before** initiating a project of this sort to determine whether it will be deemed consistent with programmatic expectations. A sample syllabus for the practicum sequence is provided in Appendix A. Appendix B provides a copy of the supervision form that is used to evaluate students during practica. Finally, Appendix C provides a sample syllabus for the Capstone sequence. The purpose of these appendices is to help illustrate the factors and/or expectations that make up the evaluation of the student's performance in practicum and intervention course sequences.

**ONSET OF EXPERIENCE:** Supervisees may not start accumulating experience hours until they have completed all the following:

- Started qualifying coursework (may begin accruing hours after attending first class meeting)
- Passed the Experience Standards Training Module
- Secured a qualified supervisor

**REQUIRED PRE-EXPERIENCE TRAINING:** Supervisees and supervisors must pass an online, competency- based training module on BACB experience standards prior to the onset of experience. The module is available via the BACB Gateway at [www.BACB.com](http://www.BACB.com). Additional supervisor qualifications include an 8-hour supervision training that must also be completed before providing any supervision. **Supervisors are responsible for ensuring their supervisees have completed the online module prior to providing supervision.**

### **Performance Evaluation for 693 and 694**

Each student needs to arrange 10 hours per week that can be devoted to practicum activities. During a 15-week semester, this will result in 150 hours of practicum experience, sufficient to earn 3 credit hours for that semester. Otherwise, students can arrange a different number of hours based on the formula that each credit hour is equivalent to 50 hours experience.

To earn a grade of Pass (P) for 693 and 694, a student must provide documentation (see Appendix B) that the required number of hours has been completed. A grade of Pass will be assigned given criterion performance during supervision. You will receive evaluations at the middle and end of each semester.

### Performance Evaluation for 793

The 793 and 794 sequence is designed to permit students to develop and execute a capstone project. Students will enroll in 793 in the fall of the second year and 794 in the spring of the second year.

To earn a grade of P for 793 the student must complete the following.

- Following discussions between the student and their advisor, the student receives approval from the advisor to write up the capstone proposal. The capstone proposal should include a brief introduction and rationale (1-3 pages), a *thorough* method section (3-5 pages), and an anticipated results section with an accompanying figure.
- Once the advisor reviews, edits, and approves the written capstone proposal, the student submits it to their committee members.
- After the members of the student's committee review, edit, and approve the written capstone proposal, the student completes the "Approval of Capstone Proposal" document. This document is Appendix D. This document must be submitted to Dr. J. C. Borrero and will be filed at UMBC. **An electronic copy of this document is preferred.**
- After the members of the student's committee review, edit, and approve the written capstone proposal, the student completes a UMBC IRB application. The UMBC IRB is **required**. In addition, approval *may* be necessary from other institution (e.g., Johns Hopkins University School of Medicine). Please consult with Drs. C. S. W. Borrero and Frank-Crawford to determine whether additional approval is required.
- After the advisor reviews, edits, and approves the IRB application, the student submits it to the UMBC IRB. The UMBC IRB process for applied behavior analysis projects is unique. Details can be found here (bookmark this page): <https://research.umbc.edu/human-subjects-use-research-masters-degree-in-human-services-psychology-applied-behavior-analysis/>

**If the steps outlined above are not completed in the first semester of the second year, the student will earn a grade of Incomplete. Students who receive an Incomplete will be required to register for PSYC 699 in the following semester (as Pass/Fail, for 1 credit) and each subsequent semester until PSYC 793 is passed. Earning a grade of Incomplete will delay registration for PSYC 794.**

After the steps outlined above have been completed, the Incomplete for 793 will be changed to "Pass" and the student may then register for PSYC 794 in the following semester. **The student is responsible for contacting Dr. J. C. Borrero immediately upon completion so that a grade change form can be completed.**

### Performance Evaluation for 794



To earn a grade of P for 794 the student must successfully defend the capstone project. If the student does not successfully defend the capstone project in the second semester of the second year, the student will receive a grade of “I” and must register for PSYC 699 (as Pass/Fail, for 1 credit) in the following semester and each subsequent semester until PSYC 794 is passed. The expectation is for the capstone to be completed by the second semester of the second year. The capstone defense must be completed in 4 years from matriculation.

After the student has successfully defended the capstone project the Incomplete will be changed to a Pass. **The student is responsible for contacting Dr. J. C. Borrero immediately upon completion so that a grade change form can be completed.**

## FACULTY

## UMBC—ABA Faculty Advisors (i.e., core ABA faculty)

**John C. Borrero** (2004, University of Florida). Experimental and applied behavior analysis, developmental disabilities, translational research, infant development. [Research Gate](#).

Email: [jborrero@umbc.edu](mailto:jborrero@umbc.edu)

Chen, E., Borrero, C. S. W., Frank-Crawford, M. A., & Borrero, J. C. Accumulated and distributed reinforcer arrangements in the treatment of pediatric food refusal. *Behavioral Interventions*. <https://onlinelibrary.wiley.com/doi/10.1002/bin.1899>

Borrero, J. C., Rosenblum, A. K., Castillo, M. I., Spann, M. W., & Borrero, C. S. W. (2022). Do children who exhibit food selectivity prefer to save the best (bite) for last? *Behavioral Interventions*, 37(2), 529-544. <https://doi.org/10.1002/bin.1845>

Castillo, M. I., Frank-Crawford, M. A., Liesfeld, J. E., Doan, T. M., Newcomb, E. T., Rooker, G. W., & Borrero, J. C. (2022). Do persons with intellectual and developmental disabilities prefer to save the best for last in an MSWO? A preliminary investigation. *Behavioral Interventions*. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/bin.1883>

Frank-Crawford, M. A., Borrero, J. C., Newcomb, E. T., Doan, T., Fisher, A. L., & Rooker, G. W. (2021). Accumulated and distributed response-reinforcer arrangements during the treatment of escape-maintained problem behavior. *Journal of Applied Behavior Analysis*, 54(4), 1566-1585. [doi.org/10.1002/jaba.870](https://doi.org/10.1002/jaba.870)

**Mirela Cengher** (2017, Graduate Center, City University of New York). Experimental and applied behavior analysis, verbal behavior, stimulus control, Autism Spectrum Disorder, translational research. [Research Gate](#).

E-mail: [cengher@umbc.edu](mailto:cengher@umbc.edu)

Cengher, M., Bowman, M., Shawler, L., & Ceribo-Singh, M. (2022). Motivating operations and mands for information: a systematic review. *Behavioral Interventions*, 37(3), 864-886. <https://doi.org/10.1002/bin.1893>

Shawler, L., Cengher, M., & Miguel, C. F. (2022). Establishing derived reinforcers via stimulus equivalence. *Journal of the Experimental Analysis of Behavior*, 117(2), 180-200, <https://doi.org/10.1002/jeab.739>

Cortez, M., da Silva, L., Cengher, M., Mazzoca, R., & Miguel, C. F. (2021). Teaching a small vocabulary to children using tact and listener instruction with a prompt delay. *Journal of Applied Behavior Analysis*, 55(1), 249-263, <https://doi.org/10.1002/jaba.885>.

Cengher, M. & Fienup, D. M. (2020). Pre-session attention affects the acquisition of tacts and intraverbals. *Journal of Applied Behavior Analysis*, 53(3), 1742-1767. <https://doi.org/10.1002/jaba.657>

Matthew D. Novak (2020, University of Kansas). Experimental and applied behavior analysis, translational research, performance management, staff training, incentives, contingency management, substance use

[ResearchGate](#), [Scholar](#)

email: [novak@umbc.edu](mailto:novak@umbc.edu)

Novak, M. D., Toegel, F., Rodewald, A. M., Arellano, M., Baranski, M., Barnett, N. P., Leoutsakos, J.-M., Fingerhood, M., & Silverman, K. (2023). Abstinence-contingent wage supplements for adults experiencing homelessness and alcohol use disorder: A randomized clinical trial. *Preventative Medicine*, 107655. <https://doi.org/knxp>

Novak, M. D., Holtyn, A. F., Toegel, F., Leoutsakos, J.-M., & Silverman, K. (2022). Financial incentives to promote drug abstinence and employment: Post-intervention outcomes. *Drug and Alcohol Dependence*, 232, 109322. <https://doi.org/hdbm>

Novak, M. D., Blackman, A. L., Erath, T. G., & DiGennaro Reed, F. D. (2020). Operant renewal of desirable behavior in a simulated workplace: A translational model. *Journal of the Experimental Analysis of Behavior*, 113(1), 172–186. <http://doi.org/10.1002/jeab.566>

Novak, M. D., DiGennaro Reed, F. D., Erath, T. G., Blackman, A. L., Ruby, S. A., & Pellegrino, A. J. (2019). Evidence-based performance management: Applying behavioral science to support practitioners. *Perspectives on Behavior Science*, 42(4), 955–972. <http://doi.org/df28>

## FACULTY

### UMBC Department of Psychology

**A. Charles Catania: Professor Emeritus** (1961, Harvard University) How basic behavioral processes work in learning and in language; applied behavior analysis; the role of delay-of-reinforcement gradients, including relevance to attention-deficit hyperactivity disorder (ADHD); development of correspondences between saying and doing; the origins of complex behavior, including verbal behavior. *Does not take students. Does not teach in our curriculum.*

## KENNEDY KRIEGER INSTITUTE

### DEPARTMENT OF BEHAVIORAL PSYCHOLOGY

#### ABA Faculty Advisors (i.e., core ABA faculty)

**Carrie S. W. Borrero** (2006, University of Florida). Dr. Borrero's research has focused on the naturally occurring caregiver-child interactions, and most recently, in the context of meals for individuals with pediatric feeding disorders.

Email: [borrero@kennedykrieger.org](mailto:borrero@kennedykrieger.org)

Chen, E., Borrero, C. S. W., Frank-Crawford, M. A., & Borrero, J. C. Accumulated and distributed reinforcer arrangements in the treatment of pediatric food refusal. *Behavioral Interventions*, 37(4), 1058-1079. <https://onlinelibrary.wiley.com/doi/10.1002/bin.1899>

Borrero, J. C., Rosenblum, A. K., Castillo, M. I., Spann, M. W., & Borrero, C. S. W. (2022). Do children who exhibit food selectivity prefer to save the best (bite) for last? *Behavioral Interventions*, 37(2), 529-544. <https://doi.org/10.1002/bin.1845>

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Woods J. N., & Borrero C. S. W. (2019). Extinction bursts in the treatment of pediatric food refusal. *Behavioral Interventions*, 34, 307-322. <https://doi.org/10.1002/bin.1672>

**Michelle Frank-Crawford** (2020, University of Maryland, Baltimore County). Assessment and treatment of severe problem behavior; preference behavior. [Research Gate](#).

Email: [crawfordm@kennedykrieger.org](mailto:crawfordm@kennedykrieger.org)

Frank-Crawford, M. A., Borrero, J. C., Newcomb, E. T., Doan, T., Fisher, A. L., & Rooker, G. W. (2021). Accumulated and distributed response-reinforcer arrangements during the treatment of escape-maintained problem behavior. *Journal of Applied Behavior Analysis*, 54(4), 1566-1585.

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Hagopian, L. P., & Frank-Crawford, M. A. (2018). Classification of self-injurious behaviour across the continuum of relative environmental-biological influence. *Journal of Intellectual Disability Research*, 62(12), 1108-1113.

Frank-Crawford, M. A., Castillo, M. I., & DeLeon, I. G. (2018). Does preference rank predict substitution for the reinforcer for problem behavior? A behavioral economic analysis. *Journal of Applied Behavior Analysis*, 51(2), 276-282.

## **AFFILIATED FACULTY**

### **KENNEDY KRIEGER INSTITUTE**

#### **DEPARTMENT OF BEHAVIORAL PSYCHOLOGY**

**Lynn Bowman.** Mrs. Bowman earned her master's degree in experimental psychology at Hollins University and completed an internship at the Harmarville Rehabilitation Center. Mrs. Bowman is the Director of direct care services on the [Neurobehavioral Unit](#) at the Kennedy Krieger Institute. She is also an assistant professor of psychiatry and behavioral sciences at the Johns Hopkins University School of Medicine.

**Email:** [bowmanl@kennedykrieger.org](mailto:bowmanl@kennedykrieger.org)

Bowman, L. G., Hardesty, S. L., Sigurdsson, S. O., McIvor, M., Orchowicz, P. M., Wagner, L. L., & Hagopian, L. P. (2019). Utilizing group-based contingencies to increase hand washing in a large human service setting. *Behavior Analysis in Practice*, 12, 600-611. <https://doi.org/10.1007/s40617-018-00328-z>

DeLeon, I. G., [Hagopian L. P.](#), Rodriguez-Catter V., [Bowman L. G.](#), Long E.S., Boelter E. W. (2008). Increasing wearing of prescription glasses in individuals with mental retardation. *Journal of Applied Behavior Analysis*, 41, 137-42. <https://doi.org/10.1901/jaba.2008.41-137>

Hagopian L. P., Bruzek J. L., Bowman L. G., & Jennett H. K. (2007). Assessment and treatment of problem behavior occasioned by interruption of free-operant behavior. *Journal of Applied Behavior Analysis* 40, 89-103. <https://doi.org/10.1901/jaba.2007.63-05>

DeLeon I. G., Toole L. M., Gutshall, K. A., & Bowman L. G. (2005). Individualized sampling parameters for behavioral observations: enhancing the predictive validity of competing stimulus assessments. *Research in Developmental Disabilities*, 26, 440-55. <https://doi.org/10.1016/j.ridd.2004.09.004>

**Michael F. Cataldo** (1974, University of Kansas). Dr. Cataldo's research has focused on the influence of basic operant training on problems of child health and development. He has shown that behavioral problems in persons with developmental disabilities are functionally related to the environmental consequences of the behaviors. Clinical application of this information has shown that by increasing certain socially adaptive responses (e.g., cooperation with instructions) intrusive and time-consuming treatment for aggressive behavior and self-injury can be avoided.

E-mail: [cataldo@kennedykrieger.org](mailto:cataldo@kennedykrieger.org)

Slifer, K. J., Koontz, K. L. & Cataldo, M.F. (2002). Operant-contingency-based preparation of children for functional magnetic resonance imaging. *Journal of Applied Behavior Analysis*, 35, 191-194. <https://doi.org/10.1901/jaba.2002.35-191>

McIlvane, W. J. & Cataldo, M. F. (1996). On the clinical relevance of animal models for the study of human mental retardation. *Mental Retardation and Developmental Disabilities Research Reviews*, 2, 188-196. [https://doi.org/10.1002/\(SICI\)1098-2779\(1996\)2:4%3C188::AID-MRDD2%3E3.0.CO;2-N](https://doi.org/10.1002/(SICI)1098-2779(1996)2:4%3C188::AID-MRDD2%3E3.0.CO;2-N)

Cataldo, M. F. & Brady, J. V. (1994). Deriving relations from the experimental analysis of behavior. *Journal of Applied Behavior Analysis*, 27, 763-770. <https://dx.doi.org/10.1901%2Fjaba.1994.27-763>

**Louis P. Hagopian** (1991, Virginia Polytechnic Institute and State University). The individuals served on the NBU frequently present rare behavior disorders that require innovative treatment approaches, so the NBUs faculty and staff must constantly design new assessment and treatment procedures to meet the varied needs of their patients. Dr. Hagopian's main research interests are in assessment and treatment of self-injurious behavior, severe behavior disorders, anxiety disorders, and the application of operant learning paradigms to examine clinical problems including autism and anxiety.

E-mail: [hagopian@kennedykrieger.org](mailto:hagopian@kennedykrieger.org)

Hagopian, L. P. (2020). The consecutive controlled case series: Design, data-analytics, and reporting methods supporting the study of generality. *Journal of Applied Behavior Analysis*, 53, 596-619. <https://doi.org/10.1002/jaba.691>

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**Patricia F. Kurtz** (1991, The Claremont Graduate School). Dr. Kurtz's primary research interest is the emergence of self-injurious behavior in infants and children. Current studies focus on identification of risk factors associated with the onset and persistence of self-injurious behavior in young children; provision of early behavioral treatment for self-injury; development of early intervention and prevention models for severe behavior disorders; and development of education and training programs for parents and professionals.

E-mail: [kurtz@kennedykrieger.org](mailto:kurtz@kennedykrieger.org)

Kurtz, P. F., & Chin, M. D. (2004). Assessment and treatment of ventilator tube disconnection exhibited by a toddler. *Journal of Developmental and Physical Disabilities*, 16, 151-161. <https://doi.org/10.1023/B:JODD.0000026612.33756.24>

Paclawskyj, D. R., Kurtz, P. F., & O'Connor, J. T. (2004). Functional assessment of problem behaviors in adults with mental retardation. *Behavior Modification*, 28, 649-667. <https://doi.org/10.1177/0145445503259834>

Kurtz, P. F., Chin, M. D., Huete, J. M., Tarbox, R. S. F., O'Connor, J. T., Paclawskyj, T. R. & Rush, K. S. (2003). Functional analysis and treatment of self-injurious behavior in young children: A summary of 30 cases. *Journal of Applied Behavior Analysis*, 36, 205-219. <https://doi.org/10.1901/jaba.2003.36-205>

## Appendix A – Example Syllabus for Practicum sequence

### PSYC 693 and 694: Practicum (Example: Kennedy Krieger Institute)

#### **Objective**

The practicum will give students direct experience with critical aspects of the assessment and treatment of behavior disorders.

#### **Time Commitment**

Each student needs to arrange 10 hours per week that can be devoted to practicum activities. During a 15-week semester, this will result in 150 hours of practicum experience, sufficient to earn 3 credits hours for that semester. Otherwise, students can arrange a different number of hours based on the formula that each credit hour is equivalent to 50 hours experience on the unit. Based on this schedule, students will be assigned to participate on clinical teams for cases being treated by the Behavioral Psychology department of the Kennedy Krieger Institute and participate in clinical supervision with one of the Behavioral Psychology faculty. Students interested in obtaining the Board Certified Behavior Analyst credential will need to document their supervision hours using the supervision form provided by the Behavior Analysis Certification Board. Regulations regarding supervision structure and requirements, as well as a copy of the supervision form, can be found in the following passages (adopted from the Behavior Analysis Certification Board)

#### **Supervised Experience:**

**Onset of Fieldwork.** Trainees may not start accumulating fieldwork hours until they have:

- Started [qualifying coursework](#) for BCBA certification (they may begin accruing hours after attending the first class meeting); and
- Secured a qualified supervisor (see Supervisor Qualifications above).

**Duration of Fieldwork.** The timeframe of the fieldwork may not exceed 5 continuous years (e.g., May 2020 to April 2025).

**Fieldwork Types.** There are two supervised fieldwork types: Supervised Fieldwork and Concentrated Supervised Fieldwork. Concentrated Supervised Fieldwork provides a pathway for individuals to complete their fieldwork in fewer hours and with more supervision than Supervised Fieldwork.

**Combination of Fieldwork Types.** Trainees may accrue hours in a single category or may combine the two types to meet the fieldwork requirement (i.e., within a supervisory period or across supervisory periods), with fieldwork hours for Concentrated Supervised Fieldwork having approximately 1 1/3 times the temporal value of Supervised Fieldwork. Trainees must meet all other supervision requirements independently for each fieldwork type. For example, the required percentage of supervision, number of observations, and number of contacts must be met independently for each fieldwork type.

**Accrual of Fieldwork.** No fewer than 20 hours but no more than 130 hours of fieldwork may be counted per month. Fieldwork hours include independent hours (supervisor not present) and supervised hours (supervisor present).

#### **Fieldwork Criteria**

The table below summarizes the criteria for each fieldwork type.



	Supervised Fieldwork	Concentrated Supervised Fieldwork
Fieldwork Hours Required to Qualify	2000	1500
Supervisory Period	1 calendar month	
Fieldwork Hours per Supervisory Period	min of 20 hrs. - max of 130 hrs. (?)	
Minimum Number of Supervisor-Trainee Contacts per Supervisory Period (contacts must be at least 15 minutes)	4 contacts	6 contacts
Observation of Trainee with Client per Supervisory Period	1 observation	1 observation
Supervised Hours per Supervisory Period*	5% of hours	10% of hours
Individual Supervision Hours per Supervisory Period	At least 50% of supervised hours must be individual (i.e., group supervision may not exceed 50%).	
Unrestricted Activities	At least 60% of supervised fieldwork must be spent engaged in unrestricted activities.	

\*The supervision percentage is calculated by dividing the supervised hours by the total fieldwork hours.

### **Onset of Experience:**

Students may not start accumulating experience until they have completed all of the following:

- Started qualifying coursework (may begin accruing hours after attending first class meeting)
- Passed the Experience Standards Training Module
- Secured a [qualified supervisor](#)

### **Appropriate Student Activities:**

The student's primary focus should be on learning new behavior analytic skills related to the BACB Fifth Edition Task List. Activities must adhere to the dimensions of applied behavior analysis identified by Baer, Wolf, and Risley (1968) in the article *Some Current Dimensions of Applied Behavior Analysis* published in the *Journal of Applied Behavior Analysis*. Students are encouraged to have experiences in multiple sites and with multiple supervisors. Appropriate experience activities include:

1. Conducting assessment activities related to the need for behavioral interventions,
2. Designing, implementing, and monitoring behavior analysis programs for clients,
3. Overseeing the implementation of behavior analysis programs by others,
4. Other activities normally performed by a behavior analyst that are directly related to behavior analysis such as attending planning meetings regarding the behavior analysis program, researching the literature related to the program, talking to individuals about the program; plus any additional activities related to oversight of behavioral programming such as behavior analyst supervision issues, or evaluation of behavior analysts' performance. The supervisor will determine if activities qualify.

Examples of activities that are not appropriate as experience activities include: attending meetings with little or no behavior analytic content, providing interventions that are not based in behavior analysis, doing non-behavior analytic administrative activities, or any other activities that are not directly related to behavior analysis.

### **Appropriate Clients:**

Clients may be any persons for whom behavior analysis services are appropriate. However, the student may not be related to the client or the client's primary caretaker. Students must work with multiple clients during the experience period.

### **Supervisor Qualifications:**

During the experience period, the supervisor must be:

1. A Board Certified Behavior Analyst in good standing, or
2. Approved University Experience: A faculty member who has been approved by the BACB as an instructor in the university's approved course sequence.

The supervisor may not be the student's relative, subordinate or employee during the experience period. The supervisor will not be considered an employee of the student if the only compensation received by the supervisor from the student consists of payment for supervision.

### **Contractual and Ethical Considerations:**

The supervisor and student should execute a contract prior to the onset of the experience that states the responsibilities of both parties, delineates the consequences should the parties not adhere to their responsibilities (including proper termination of the relationship), and includes an attestation that both parties will adhere to the [Ethics Code for Behavior Analysts](#).

### **Nature of Supervision:**

The supervisor must observe the student engaging in behavior analytic activities in the natural environment at least once every two weeks. The supervisor must provide specific feedback to students on their performance. During the initial half of the total experience hours, observation should concentrate on student-client interactions. This observation may be conducted via web-cameras, videotape, videoconferencing, or similar means in lieu of the supervisor being physically present. Supervision may be conducted in small groups of 10 or fewer participants for no more than half of the total supervised hours in each supervisory period. The remainder of the total supervision hours in each supervisory period must consist of direct one-to-one contact. Supervision hours may be counted toward the total number of experience hours required.

### **Documentation of Supervision:**

University supervisors are responsible for providing documentation for each supervisory period on a [feedback form](#) provided by the BACB. The feedback form will require documentation of number of hours of experience, number of supervised hours, feedback on the student's performance, the supervisor for each supervisory period, and signatures of the student and supervisor. The supervisor must review the completed feedback forms with the student each supervisory period. The university supervisor is responsible for retaining copies of the forms. Universities may apply for approval of a feedback form containing the core documentation. The BACB reserves the right to request this documentation at any time following an individual's application to take the certification exam. In addition, the university supervisor will be required to verify the student's supervision on the Experience Verification Form that is provided within the application for examination.

## Appendix B – Example Supervision Form

**BACB Fieldwork and Practicum Experience Supervision Form**

Supervisee: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_

Time Start: \_\_\_\_\_ End: \_\_\_\_\_

This supervision session addresses the period from \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

**Check appropriate characteristics of supervision session. (✓ if yes)**

Specific Client(s) Discussed	Client privacy protected	Group Supervision	Individual Supervision	Office Supervision	On-Site Supervision	Remote Supervision	Video Observation of supervisee	In Situ Observation of supervisee

Readings suggested by supervisor: \_\_\_\_\_

Readings discussed in supervision: \_\_\_\_\_

**Check BACB task list items discussed in this supervision session.**

- ☐ 1: Ethical Considerations  
☐ 2: Definition and Characteristics  
☐ 3: Principles, Processes, and Concepts  
☐ 4: Behavioral Assessment  
☐ 5: Experimental Evaluation of Interventions

- ☐ 6: Measurement of Behavior  
☐ 7: Displaying and Interpreting Behavioral Data  
☐ 8: Selecting Intervention Outcomes and Strategies  
☐ 9: Behavior Change Procedures  
☐ 10: Systems Support

### Check measures of professional integrity.

S – satisfactory    NI - needs improvement    U - unsatisfactory    N/A – not applicable

	S	NI	U	N/A
Arriving on time for supervision				
Maintains professional and courteous interactions with:				
Clients/Consumers				
Other Colleagues				
Other Service Providers				
Coworkers				
Maintains appropriate attire & demeanor				
Initiates professional self-improvement				
Accepts supervisory feedback appropriately				
Seeks supervision appropriately				
Timely submission of written reports				
Communicates effectively				
Written				
Oral				
Demonstrates appropriate sensitivity to non-behavioral providers				
Supervisee self-detects personal limitations				
Supervisee self-detects professional limitations				

**Overall evaluation of supervisee performance during this period (circle one):    S    NI    U**

Supervisee signature: \_\_\_\_\_ Supervisor signature: \_\_\_\_\_

Appendix C – Example Syllabus for Capstone Sequence  
**PSYC 793: Capstone in Applied Behavior Analysis I**  
**PSCY 794: Capstone in Applied Behavior Analysis II**

This field placement is designed to help students develop independent research skills relevant to applied behavior analysis. The student will apply behavioral principles and methods to a problem of social importance (e.g., clinical, educational, organizational) by carrying through all stages of a program with a client, from assessment and design through intervention and evaluation of outcome. After designing and implementing the capstone program, the student will describe the methods and outcomes in a presentation and in a written format appropriate to journals that publish research or clinical investigations in behavior analysis (e.g., *Journal of Applied Behavior Analysis*). All projects must be approved by the UMBC IRB and additional approval may be required.

### **Clinical/Educational Targets**

Students will select a target response or set of target responses in need of behavioral intervention. Potential subjects may be drawn from clinical, educational, and organizational settings. Target responses can be inappropriate behavior that needs to be decreased or adaptive behaviors that need to be developed and/or increased under the appropriate stimulus conditions. The target behavior should be socially significant and a part of the person's formal needs (for example, targets at the Kennedy Krieger Institute may be taken directly from the person's individual education plan). Some examples of intervention targets include:

- The individual's primary problem behavior(s). Typically, this will involve an intervention package to decrease a set of problem behaviors belonging to the same functional class. For example, a token economy may be used generally to increase appropriate behaviors and decrease problem behaviors throughout the day. Alternatively, functional communication plus extinction might be used throughout the day to treat behavior that is strictly maintained by access to adult attention.
- A secondary problem behavior – An individual may be admitted to a clinical setting for one target behavior or set of target behaviors, but also displays problem behaviors of slightly lesser concern to the caregivers. These secondary problem behaviors may be unrelated to the primary problem behavior but nevertheless should be to be addressed. Examples might include elopement, stereotypic hand mouthing, noncompliance during schoolwork, etc. The intervention may address the secondary target, while the patient's core treatment team addresses the primary goals of the admission.
- Acquisition/educational goals – An individual is taught a new skill or new set of skills that, although unrelated to the problem behavior, will improve that person's ability to function independently in the community.
- Clinically relevant research – the intervention may have more of a research emphasis, as long as the end outcome is clinically relevant (i.e., may not have immediate direct benefit for the person, but may later be useful in the improvement or refinement of a behavioral intervention).
- Organizational behavior - this will typically involve identifying a target of organizational importance in co-operation with management at the intervention site. Targets may be defined at the level of individuals or small groups and may involve the measurement of observable behavior and/or outcomes (permanent products) of behavior.

**Developing the Capstone:**

In the process of addressing these targets, the student is expected to:

- Conduct a search of the most current literature related to the target behavior. The literature review portion of the proposal needs to be reasonably comprehensive.
- Prepare a written proposal for assessing and treating the target behavior/outcomes. This proposal will be based on the current literature and will be prepared in conjunction with the capstone supervisor. It will include:
  1. A description of the target behavior.
  2. A description of how the target behavior will be measured.
  3. A description of plans for the behavioral assessment of the target behavior (drawing a rationale from the current literature)
  4. A description of the intervention approach (drawing a rationale from the current literature).
  5. A description of the experimental design that will be used to evaluate intervention effects.
  6. When applicable, a description of how the intervention will be generalized beyond the initial training conditions.
  7. A description of how parents, other caregivers, employees, or supervisors will be trained to implement the intervention procedures.
  8. A description of possible outcomes and their implications.
- A committee consisting of at least three individuals will review the proposal and work with the student to make required changes. This committee will consist of the student's intervention chair (and co-chair if necessary) as well as the other two members of the intervention committee.

**Implementing the Capstone**

Once the capstone is designed and approved by the committee, the student will implement the capstone and write a manuscript describing the results. Generally, the student will begin the capstone during the first semester for which they have taken Intervention credits and complete the written report during the second semester. During implementation of the capstone, the student will be expected to work not less than 10 hr per week (150 hr per semester) at the capstone site. Specific hours will be distributed in a manner conducive to the completion of the project and will be determined in conjunction with the supervisor at the intervention site.

While implementing the capstone, it may be necessary to change the direction of the study to accommodate clinical needs. These changes will also be made in conjunction with the supervising faculty.

Once the intervention has been completed, the student will write up the results in APA approved manuscript form, including introduction, method, result, and discussion sections. When the paper is complete, it will be distributed to the student's committee and the student will give a formal presentation of the paper.

**Course Evaluation**

A pass/fail grade will be given to the student at the completion of the requirements for each semester for which the student registers for intervention credit.

PSYC 793: The minimum requirement for a passing grade in PSYC 793 is a completed proposal, revised in accordance with review by and approved by the student's advisor at UMBC and by the faculty person overseeing the project. Please refer to the Performance Evaluation section of the handbook for complete requirements.

PSYC 794: Evaluation will be based on the paper, presentation, and more general evaluations given to the student by the committee members. A successful change in subject behavior is not a requisite for a passing grade. If the student develops a reasonable project and implements it in a reasonable fashion, but the behavior of the subject fails to change in a significant way, a passing grade can still be earned. In such cases, the student should offer plausible hypotheses

for the failure of the intervention and how this failure might be circumvented in future applications. Thus, the minimum requirements for a passing grade are (1) a completed project, (2) a completed presentation, (3) an approved final document incorporating any revisions recommended by the student's committee.

### Important Paperwork

1. Graduate School paperwork: Certification of Completion for Non-Thesis Masters, available at UMBC graduate school website: You should complete as much of this [form](#) as you can (type), and only leave blank the space for signatures (check website for other deadlines). **This form must be submitted to Kerrie Jenkins by the last day of the semester.** Your capstone Chair and ABA Director sign this form after you have successfully completed your capstone.
2. Psychology Department paperwork: Certification of Completion of Applied Behavior Analysis Intervention Sequence needs to be turned in to the Psychology Department at UMBC **by the beginning of finals week (check your academic calendar)**. This is contingent on satisfactory presentation of your capstone and revisions to your report. All members of your capstone committee must sign this form.
3. **A printed (or electronic) copy of your final revised manuscript must be provided to all committee members. Also, for archival purposes, an electronic copy of your final document must be provided to the UMBC Department of Psychology (Kerrie Jenkins and J. C. Borrero).**

### Timeline

1. Capstone topics should be generated during the last month of PSYC 693 and not later than the first month of PSYC 794. If it is feasible for you to get started early on your capstone, we encourage you to do so, especially so that you can include appropriate participants as they become available. You need to start with an idea: a topic area, a research question, a target behavior you want to tackle, etc. You then have to see whether your idea is workable, in practical terms, at your capstone site. After you have an idea, discuss it with your faculty advisor to discuss its feasibility. If it is feasible, you find the appropriate participants, and you are working with a clinical population, you should approach the appropriate on-site supervisor to see whether you can be permitted to include the patient/client in your project. Again, at minimum, a complete capstone proposal write-up approved by your advisor and committee as well as submitted for UMBC IRB review is required to receive credit for PSYC 793. As detailed above, your proposal must include a literature search on the topic of your intervention (NCR, schedule thinning, response blocking, FCT, staff training, etc.) in APA format. This proposal must be approved by your intervention committee **no later than two weeks before the end of the semester**. Note: If you are not a KKI employee, there may be some constraints on the intervention options that are available to you, and you should consult the Director about your options early during your first year so that those constraints can be anticipated and dealt with. **If you are interested in pursuing a capstone at a site other than your practicum placement, it is also essential that you consult us early. Alternate sites must be able to provide appropriate BCBA supervision and the ABA faculty must also be able to confirm that such sites have adequate resources and facilities to support acceptable interventions.** Contact Dr. J. C. Borrero and your site supervisor if you plan to complete the intervention at a site other than your practicum.
2. Begin data collection, graphing, and writing immediately following approval of your Proposal. New data should be shown to the on-site supervisor and chair (and co-chair) promptly as it becomes available, and preferably on a daily basis.
3. Identify Committee Members as soon as possible. **Your committee should consist of at least three members, one of which must be Drs. J. C. Borrero, Cengher, or Novak.** One member will be the chair and should be your mentor. If the mentor is not a core ABA faculty member, then a co-chair (one of the core ABA faculty) is required. Do this as soon as you can during your capstone course work. Schedules book up fast.

4. The chair (and co-chair) of your capstone needs to review and edit drafts of your write-up.
5. Complete and submit a UMBC IRB application. Additionally, IRB approval may be required at other institutions (e.g., the Johns Hopkins University School of Medicine).
6. **Schedule your presentation date with at least one month left in the semester.** This will give you plenty of time to adjust for scheduling mix-ups, illness, and/or technical difficulties. No exceptions will be made regarding this date unless approved by all members of the committee. It is the responsibility of the student to make these arrangements.
7. Finalize your write-up and submit it to committee members at least two weeks prior to your presentation. The write-up will almost certainly take you longer than you think so make deadlines for yourself.
8. Present the Intervention. The presentation should be no more than 15-20 minutes. Bring your paperwork (as outlined above) to your intervention presentation.
9. Make any additional revisions to your write-up (these **MUST** be completed by the end of finals week).
10. Turn in your paperwork (A above) to **Kerrie Jenkins** on or before the deadline. If it is not done by this date, you will not graduate that semester.
11. Turn in your paperwork (B above) to the **Kerrie Jenkins** at the UMBC Psychology department on or before the last day of finals - don't forget to keep copies for yourself.
12. Turn in departmental archival copies of the intervention final write-up, along with the original proposal to Dr. J. C. Borrero. You should also provide final copies to your committee members/advisor.



**Appendix D.**

The “Approval of Capstone Proposal” document is an “in house” form. It must be on file with our Program Management Specialist (**Kerrie Jenkins**). Ideally, this form should be finalized in the second semester of your first year. By this time, you will have completed a working Capstone Prospectus. When all signatures have been obtained, you must send this document to **Kerrie Jenkins** ([kerriej1@umbc.edu](mailto:kerriej1@umbc.edu)) and the ABA Track Director ([jborrero@umbc.edu](mailto:jborrero@umbc.edu)). Original signatures are *not* required on this document.

**APPROVAL OF CAPSTONE PROPOSAL  
APPLIED BEHAVIOR ANALYSIS TRACK Department  
of Psychology University of Maryland, Baltimore  
County**



<b>Date</b>	
<b>Name of M. A. Candidate</b>	
<b>Title of Proposal</b>	

**Capstone Committee:**

_____	_____
Chair, Print	Chair, Sign
_____	_____
Committee Member, Print	Committee Member, Sign
_____	_____
Committee Member, Print	Committee Member, Sign
_____	_____
Committee Member, Print	Committee Member, Sign

**Appendix E.**

Appendix F must also be completed following a successful capstone defense. Appendix E is a UMBC Graduate School document and this document requires *original signatures*. Place an “X” in the boxes for “Course Work” (Completed) and “Capstone Project” (Completed). **Do not mark any other boxes.** The form may be found at [here](#). **This form must be submitted by the last day of the semester. We ask that you not wait until the last day of the semester. This form cannot be submitted until the Capstone Defense has been successfully completed.** The student is responsible for identifying the commencement date in each semester. All this information is available via myUMBC. Despite the format of Appendix E (see below), the student must ensure that this document is a single page. For all UMBC Graduate School forms, visit the link above and print off a “clean,” color copy.



## CERTIFICATION OF COMPLETION OF MASTER'S DEGREE REQUIREMENTS

Name: <i>(last, first, M.I.)</i>	Campus ID:
Type of Masters Degree: <div style="border: 1px solid black; padding: 2px;">Select</div>	Graduation Term and Year: <div style="border: 1px solid black; padding: 2px;">Select</div> 20
Graduate Program:	

This student has met all requirements of the Graduate School and the program for the degree, including *(please check all that apply)*:

### Completed

- ☐ Course Work
- ☐ Thesis Defense
- ☐ Capstone Project
- ☐ Seminars and/or Research Papers
- ☐ Written Comprehensive Examination
- ☐ Portfolio
- ☐ Oral Comprehensive Examination
- ☐ Language Requirements

☐ **Student has not completed degree requirements:  
Please withdraw current diploma application.**

<b>APPROVAL SIGNATURES</b> Please type and sign		
Advisor:	Signature:	Date:
Graduate Program Director:	Signature:	Date:

*\*This form is due the last day of the term for which the student has applied to graduate.*

1034 - 008

## Appendix G.

Appendix G is a UMBC Graduate School application for graduation. The form may be found at the following <https://gradschool.umbc.edu/graduation/apply/>. **This must be submitted by the 10<sup>th</sup> day of the semester in which the student plans to defend.** All this information is available via myUMBC. For all UMBC Graduate School forms, visit the link above.

**You must apply to graduate. This applies to fall, spring, and summer.**

# Apply to Graduate

**Graduate Students will apply for Graduation online through myUMBC.** In addition to the online application, a supplemental application, required to order your diploma, will be sent to you via your UMBC email account.

## Application Season

You may apply to graduate for the indicated term between the date window. The required supplemental application is due by the indicated date, and will be emailed to you after your formally apply for graduation.



Apply Now

### August Graduation

Apply to Graduate: April 1 – June 15

Supplemental Application Due: June 30

### December Graduation

Apply to Graduate: July 1 – September 15

Supplemental Application Due: September 30

### May Graduation

Apply to Graduate: December 1 – February 15

Supplemental Application Due: March 1

**The application process is not complete until the supplemental application is submitted by the above deadlines.**

## Appendix G. BACB Experience Standards

(Provided as a supplemental document)