

BOARD OF HIGHER EDUCATION

REQUEST FOR COMMITTEE AND BOARD ACTION

COMMITTEE: Assessment and Accountability **NO.:** AAC 07-15

COMMITTEE DATE: February 7, 2007

BOARD DATE: February 15, 2007

MOVED: The Board of Higher Education hereby approves the application of **Westfield State College** to award the **Master of Arts in Applied Behavior Analysis**.

Upon graduating the first class for this program, Westfield State College shall submit to the Board a status report addressing its success in reaching program goals as stated in the application and in the areas of enrollment, curriculum, faculty resources and program effectiveness.

Authority: Massachusetts General Laws Chapter 15A, Section 9(b)

Contact: Aundrea Kelley, Associate Vice Chancellor for Academic Policy

BOARD OF HIGHER EDUCATION

Westfield State College

Master of Arts in Applied Behavior Analysis

INTENT AND MISSION

In December 2006, Westfield State College (WSC) submitted an expedited proposal to offer a Master of Arts in Applied Behavior Analysis. The new program reflects WSC's goal to "strengthen and expand graduate offerings." The proposed program objectives also align with the College's mission to prepare students to serve their communities, particularly through community-based learning. In addition to classroom education, students enrolled in the program will complete an intensive, four-semester practicum. The program will assist students to "use their knowledge and skills to improve the social and economic conditions in their communities." The proposed Master of Arts in Applied Behavior Analysis is also consistent with the mission of Westfield State College to provide affordable, quality education and enhance job opportunities.

The proposed graduate program is designed to prepare students to conduct descriptive and systematic behavioral assessments and to provide behavior analytic interpretations of the results. The program will also prepare students for post-Master-level graduate study. Students will learn to design and supervise behavior analytic interventions in a range of cases, including enhancing the skills and achievement of school children and improving the development of children and adults with various disabilities, among them autism. The program will provide the knowledge and skills needed to perform an appropriate evaluation of treatment; and upon completion of the program, graduates will be qualified to take the Board-Certified Behavior Analyst (BCBA) examination administered by the Behavior Analyst Certification Board (BACB). Graduates may also teach and supervise others (e.g., Board-Certified *Associate* Behavior Analysts).

Behavior analysts generally work as part of a team of professionals. They may work as consultants to agencies, such as child welfare organizations and residential treatment programs or be employed by centers for development, rehabilitation, and education, such as the May Institute. Job titles associated with this credential include Certified Behavior Analyst, Behavioral Consultant, and Functional Behavior Assessment Specialist.

The required Letter of Intent was circulated September 22, 2006. No comments in response were received. The Westfield State College Board of Trustees approved the proposed Master of Arts in Applied Behavior Analysis on January 12, 2007.

NEED AND DEMAND

The proposed academic program intends to offer graduate-level training in western Massachusetts to individuals who work, or aspire to work, with people with developmental disabilities. Its development began when administrators of the May Institute approached Westfield State College, voicing a need for graduate-level education in Behavior Analysis in western Massachusetts. The May Institute network of educational, behavioral, and rehabilitative programs includes the Center for Child Development, a school for children with autism and developmental disabilities in West

Springfield, opened in 2003 in direct response to the demand for such services in western Massachusetts. The May Institute, however, has continued to suffer workforce loss as a result of employees moving away from the region to enroll in graduate-level training. While academic programs in special education address the educational issues of students with disabilities, they do not meet the academic or practicum requirements of the Behavior Analyst Certification Board. The M.A. in Applied Behavior Analysis degree program will also serve individuals who are economically-challenged, in that Westfield State College will offer an affordable graduate level program.

Alumni from WSC's Education and Psychology Departments were surveyed pertaining to their interest in Applied Behavior Analysis (ABA) training. Of the 88 (29%) responses, 37 (42%) are considering graduate programs. Of these 37, 65% are definitely or possibly interested in a graduate program in ABA. Moreover, the May Institute is committed to providing a steady flow of students through their *Graduate Scholars Program*. The *Graduate Scholars Program* is designed for employees of the Institute who hold a baccalaureate degree and desire graduate-level education, particularly in ABA, and offers full tuition reimbursement, free housing, and full-time paid clinical work experience.

Westfield State College is offering PSYC 0646, *Principles of Applied Behavior Analysis*, on the current fall 2006 schedule. The course accommodates 21 students when full. As an indicator of student demand, the class filled by mid-August, and there is a growing waiting list for the same course to be offered January 2007.

The *Massachusetts Job Vacancy Survey* supplies hiring trends by industry and occupation. The number of job vacancies increased in both Professional Services (37.5%) and Educational Services (10.5%) between fourth quarter 2004 and fourth quarter 2005. A National Science and Health Briefing, reported in the *New York Times* (October 2004), indicated a 20-25% increase every year since the mid-1990s in the number of public school students who received special education services because of autism. This corresponds with statistics reported by the Autism Society of America (ASA), which places autism as the developmental disability with the greatest increase in incidence. The ASA estimates that the cost of lifelong care for an individual living with autism can be reduced by two-thirds with early diagnosis and intervention. More specifically, the Applied Behavior Analyst International Website posts available jobs throughout the United States. On September 25, 2006, there were 110 jobs posted, 94 of them (85%) seeking individuals educated in Applied Behavior Analysis. Twenty-six percent of jobs posted on this site are in the New England region.

Existing Programs. At present, four institutions of higher education in Massachusetts offer BACB-approved programs: Simmons College, Northeastern University, University of Massachusetts Boston, and University of Massachusetts Lowell. All of these institutions are located in the eastern part of the Commonwealth, and access by prospective students in western Massachusetts is not practical. The structure of the proposed program differs from the two at the University of Massachusetts in that the Westfield program includes a practicum.

ADMISSION AND ENROLLMENT

The College expects to enroll approximately 15 full-time and 10 part-time students for a total of 25 students during its first year of operation. In subsequent years (4-6), the total number of students is projected to remain steady at 63.

Minimum entrance requirements for the M,A. in Applied Behavior Analysis program include:

- An undergraduate degree from an accredited institution
- An undergraduate cumulative grade point average of 2.7 and a grade point average of 3.0 in prerequisite psychology courses
- A combined score of 950 on the verbal and quantitative sections of the Graduate Records Examination or a raw score of 45 on the Miller Analogies Test
- Successful completion of Introduction to Psychology, Theories of Personality, Developmental Psychology and Abnormal Psychology at the undergraduate level
- A written statement of purpose and intent to complete the Master of Arts in Applied Behavior Analysis

PROGRAM ENROLLMENT PROJECTION

	# of Students Year 1	# of Students Year 2	# of Students Year 3	# of Students Year 4*	# of Students Year 5	# of Students Year 6
New Full Time	15	15	15	15	15	15
Continuing Full Time		14	14	14	14	14
New Part Time	10	10	10	10	10	10
Continuing Part Time		8	16	24	24	24
Totals	25	47	55	63	63	63

CURRICULUM (Attachment A)

The proposed M.A. in Applied Behavior Analysis requires completion of 48 credit hours, comprising 12 required core and 4 elective courses with a minimum cumulative grade point average of 3.0. Students attending full time may complete the program in two years, while part-time students are expected to complete the program in approximately four years.

Currently, the College offers two 48-credit graduate programs in psychology (mental health counseling and school guidance counseling). The degree completion rate for students in these programs is 80%. It is projected that the degree completion rate of an M.A. in Applied Behavior Analysis will be greater due to the high level of student-faculty involvement and supervision within the program. Students will also have a clear understanding of the necessary course sequence and field experience requirements upon matriculation, contributing to lower attrition rates. It is expected that attrition will be slightly higher for part-time students than full-time students.

RESOURCES AND BUDGET (Attachment B)

Library. The Governor Joseph B. Ely Library's collections include approximately 2,500 books and media items cataloged for psychology and for special education, an area of interest for the Applied Behavioral Analysis program, including titles in the areas of behavior, behavior modification and behavior disorders in children. The Library maintains 72 journals in print in the fields of psychology and special education as well as 220 online holdings in psychology), behavior, and special education, and a collection of databases serving psychology and education, including PsychInfo, the Psychology and Behavioral Sciences Collection, ERIC, Education Journals, the Professional Development Collection (education), and the Mental Measurements Yearbook collection.

Faculty and Administration. The proposed program will be housed in the Department of Psychology and taught by full-time and part-time faculty from the Departments of Psychology and Education. The Department of Psychology includes nine full-time tenured faculty members, two full-time tenure-track members, and a temporary replacement position for a tenured member who is on administrative leave. In addition to these twelve full-time faculty members, a search is in process for a tenure-track member credentialed as a BCBA. The successful search will give the Department of Psychology its second full-time member with expertise in Applied Behavior Analysis. Three adjuncts have BCBA credentials, and all adjuncts who will instruct in the proposed program have earned a Ph.D. and have significant experience in the field. Several other members of the Department have credentials in the human service field (e.g., counseling, clinical psychology).

A Coordinator, recommended for appointment by the DGCE Psychology chair, will administer the program, provide leadership to the program's faculty and students, oversee the program's budget and expenditures, and serve as an active member of the departmental Graduate Committee. In addition, the Coordinator will administer student advisement, practicum and other program logistics, and interface with the Division of Graduate and Continuing Education and the public.

Advisory Board. To assure program currency, an external advisory board will be established during the first year of operation. Members of the Advisory Board will include a *minimum* of five individuals invited from agencies and organizations where Board Certified Behavior Analysts work or consult. Other members will be recruited from the pool of supervisors in practicum sites. At least two individuals on the Board must have the BCBA credential. The Program Coordinator will facilitate an annual meeting of the Advisory Board (approximately May of each year), where an annual report of the program, produced by the Program Coordinator, will be reviewed and recommendations given.

Field and Clinical Resources. The College has secured 24-32 field placement slots during the initial year of the program when enrollment is projected to total approximately 25 students. The College is also pursuing additional field sites for the program's second year.

Field Placement Site (2007-2008)	# of Students
The May Institute Center for Child Development 511 Main Street West Springfield, MA 01089	5
The May Institute Center for Adult Services 1111 Elm Street West Springfield, MA 01089	5
The May Institute Home and School Consultation 1111 Elm Street West Springfield, MA 01089	3
CREC River Street School Autism Program 601 River Street Windsor, CT 06095	1-5
Springfield Public Schools Special Education Department 195 State Street Springfield, MA 01102	1-5
Carson Center for Human Services 20 Broad Street Westfield, MA 01085	3+
Association for Community Living One Carando Drive Springfield, MA 01104	2+
East Longmeadow Public Schools 180 Maple Street East Longmeadow, MA 01028	1+
Baystate Medical Center Developmental Pediatrics 3300 Main Street Springfield, MA 01199	1+
Connecticut Center for Child Development 925 Bridge Port Avenue Milford, CT 06460	1+
ServiceNet 129 King Street Northampton, MA 01060	1+

Additional Field Placement Sites (2008-2009) in Progress	
Hampden-Wilbraham Student Services	
DMR (Franklin-Hampshire office)	
DMR (Central West Regional office)	
DMR Connecticut North Region Resources	
Department of Public Health	
Riverside Industries	

Fiscal. The College submitted a budget for the proposed program indicating that revenues will begin to exceed expenses starting in year two. A copy of the budget is attached as Appendix B.

PROGRAM EFFECTIVENESS

Westfield submitted goals and objectives for the proposed Master of Arts in Applied Behavior Analysis as follows:

Goal	Measurable Objective	Strategy for Achievement	Timetable
<p>1. Meet the demonstrated need in western Massachusetts for professionals trained in Applied Behavior Analysis.</p>	<p>Enroll 20 students per year in the full-time program.</p> <p>Graduate 90% of those enrolled full-time within two years of entering. Graduate 80% of those enrolled part-time within four years of entering.</p> <p>Expect that 50% of students will find employment in western Massachusetts.</p>	<p>Develop an applicant pool through marketing and outreach to agencies, alumni, and graduating seniors.</p> <p>Track program retention, completion rates.</p> <p>Work with a network of regional employers to assist students in finding job placement. Track job placements.</p>	<p>Fall 2006 – spring 2007</p> <p>Fall 2007-summer 2009</p> <p>Fall 2007-summer 2009</p>
<p>2. Make certain that knowledge and applied skills of the program meet the standards of the Behavior Analyst Certification Board.</p>	<p>Maintain a curriculum which addresses the content areas and specific tasks outlined on the BCBA Behavior Analyst Task List.</p>	<p>Periodically, review the standards of the Behavior Analyst Certification Board for currency and content change, adjusting course content accordingly.</p>	<p>Annually</p>
<p>3. Graduates will demonstrate relational skills necessary to the work of a Board-Certified Behavior Analyst (e.g., good observers, detail-oriented, compassionate, excellent written and communication skills).</p>	<p>Complete a dispositional assessment of each matriculated student in all fall and spring terms.</p>	<p>Program Coordinator will provide incoming students with a copy of the Dispositional Assessment policy (Appendix G).</p> <p>Program Coordinator will provide the disposition assessment instrument (Appendix G) to instructors and supervisors each term.</p>	<p>Each fall</p> <p>Each fall and spring term</p>
<p>4. Monitor program and faculty effectiveness.</p>	<p>Evaluate faculty as outlined in the <i>Agreement</i> between BHE and MTA/MSCA.</p> <p>Develop a self-study using the guidelines of the Association of Behavior Analysis.</p> <p>Seek accreditation through the Association of Behavior Analysis.</p>	<p>Faculty evaluations will be administrated through DGCE.</p> <p>A sub-committee of the Psychology Graduate Committee will prepare the self-study after the first graduating class. The self-study will be repeated every 5 years as part of the accreditation process.</p>	<p>Each term</p> <p>Fall 2009</p>

EXTERNAL REVIEW AND INSTITUTIONAL RESPONSE

The proposed program was reviewed by Dr. Dierdre Lee Fitzgeralds Ph.D., BCBA, Assistant Professor of Psychology, Applied Behavior Analysis, Eastern Connecticut State University, Willimantic, Connecticut, and Dr. Joseph N. Ricciardi, Psy.D., ABPP, BCBA, Staff Psychologist, Hampstead Hospital, Hampstead, New York. The team reviewed the proposal and conducted an on-campus visit that included interviews with institutional and program leaders at four of the facilities. They found that the need for the program had been thoroughly researched and the program goals and curriculum thoughtfully designed. The team was also satisfied with the quality of the faculty, facilities, equipment, and library resources. The reviewers, both of whom have significant experience as accreditation reviewers in the field, found that overall, Westfield's program development work to date to be consistent with national standards and traditions for education and training in applied behavior analysis and consistent with emerging trends within the field. In its concluding statement, the review team supported the proposed program and found that "it will be a contribution to the local community and the field of behavior analysis at large."

The external review report also made recommendations intended to encourage development of a culture of professionalism and demonstrated mastery of skills. These included recommendations for modifying the curriculum, strengthening the practicum experience and adding to library holdings. In its institutional response, the College outlined actions taken or in progress in accordance with each review report recommendation.

STAFF ANALYSIS AND RECOMMENDATION

Board staff thoroughly reviewed all documentation submitted by Westfield State College and external reviewers. Staff recommendation is for approval of the Master of Arts in Applied Behavior Analysis.

Upon graduating the first class for this program, WSC shall submit to the Board a status report addressing its success in reaching program goals as stated in the application and in the areas of enrollment, curriculum, faculty resources and program effectiveness.

ATTACHMENT A: CURRICULUM OUTLINE

Major Required (Core) Courses (Total Number of courses required = 12)		
Course Number	Course Title	Credit Hours
PSYC 0646	Principles of Applied Behavior Analysis	3
PSYC 0647	Autism and Developmental Disabilities	3
PSYC 0648	Behavior Analysis Applications: Ethics, Assessment and Intervention Decisions	3
PSYC 0649	Behavioral Interventions	3
PSYC 0651	Single Subject Research Methodology & Design	3
PSYC 0514*	History and Systems of Psychology	3
PSYC 0564*	Drugs and Behavior	3
PSYC 0630	Advanced Developmental Psychology	3
PSYC 0693	Practicum I: Applied Behavior Analysis	3
PSYC 0694	Practicum II: Applied Behavior Analysis	3
PSYC 0695	Practicum III: Applied Behavior Analysis	3
PSYC 0696	Practicum IV: Applied Behavior Analysis	3
	Subtotal Number of Core Credits Required	36
Elective Course Choices (Total courses required = 4)		
PSYC 0512	Physiological Psychology	3
PSYC 0554	Special Topics in Psychology	3
PSYC 0605**	Psychopathology: Diagnosis and Treatment of Children and Adolescents	3
PSYC 0621	Basic and Applied Research	3
EDUC 0570	Speech and Language Problems of the Special Needs Student	3
EDUC 0577	Learning Disabilities and Instructional Strategies	3
EDUC 0578	Classroom Management of Students with Special Behavioral/Emotional Needs	3
EDUC 0581	Early Intervention for Young Children with Special Needs	3
PSYC 0671	Thesis I: Applied Behavior Analysis	3
PSYC 0672	Thesis II: Applied Behavior Analysis	3
	Subtotal Number of Elective Credits Required	12
Curriculum Summary		
Total number of courses required for the degree	16	
Total credit hours required for degree	48	
Prerequisite, Concentration or Other Requirements:		

PSYC 0646 is prerequisite to the following courses: PSYC 0647, PSYC 0648, PSYC 0649, PSYC 0651.

Students complete PSYC 0693, PSYC 0694, PSYC 0695, PSYC 0696 in succession over 4 academic terms, excluding summer months.

Students electing the *Thesis Option* must complete PSYC 0671: Thesis I prior to PSYC 0672: Thesis II.

*PSYC 0514 and/or PSYC 0564 may be waived as requirements if the student has completed a comparable content course at the undergraduate level. Permission of the Program Advisor is necessary to waive a required course. Elective courses from the list above must be substituted for waived credits.

**PSYC 0615 *Psychopathology: Diagnosis and Treatment of Adults* may be substituted for PSYC 0605 with permission of the Program Advisor.

ATTACHMENT B: BUDGET

One Time/ Start Up Costs (\$)	Cost Categories	Annual Expenses (\$)			
		Year 1	Year 2	Year 3	Year 4
	Full-Time Faculty (Salary and Fringe)	14,562	29,843	30,738	31,660
	Part-Time/Adjunct Faculty (Salary and Fringe)	10,287	21,015	21,645	22,294
	Staff: Graduate Assistants .044% of staff salaries	8,980 31,460	17,960 32,404	17,960 33,376	17,960 34,377
	General Administrative Costs	18,676	19,236	19,813	20,407
1,500	Instructional Materials, Library Acquisitions	2,200	2,266	2,334	2,404
	Facilities/Space/Equipment	28,600	28,600	28,600	35,200
	Field and Clinical Resources: Supervision	11,250	27,750	33,750	39,750
1,000	Marketing	4,400	8,800	8,800	8,800
	Other (Specify)				
2,500	TOTALS	130,415	187,874	197,016	212,852

One-Time/Start- Up Support	Revenue Sources	Annual Income (\$)			
		Year 1	Year 2	Year 3	Year 4
	Grants				
	Tuition	44,625	79,815	90,015	100,215
	Fees	65,712	118,604	133,766	148,928
	Departmental				
	Reallocated Funds				
	Other (specify)				
	TOTALS	110,337	198,419	223,781	249,143