

**BOARD OF GOVERNORS
STATE UNIVERSITY SYSTEM OF FLORIDA
NEW DOCTORAL DEGREE PROPOSAL STAFF ANALYSIS**

Program: Ph.D. in Rehabilitation Sciences **CIP Code:** 51.2314
Institution: University of South Florida **Proposed Implementation Date:** Fall 2014
Staffed By: A. Beaven **Initial Review Date:** March 2014 **Last Update:** May 2014

Projected program costs:

	Total	% & \$ Current Reallocated	% & \$ New Recurring	% & \$ New Non- Recurring	% & \$ C&G	Auxiliary Funds	Cost per FTE	SUS 12-13 Average Cost per FTE
Year 1	\$245,000	100% \$245,000	0% \$0	0% \$0	0% \$0	\$0	\$65,333	\$9,220.16 51 CIP
Year 5	\$390,000	82.1% \$320,000	0% \$0	0% \$0	17.9% \$70,000	\$0	\$24,912	

Projected FTE and Headcount are:

	Student Headcount	Student FTE
First Year	4	3.75
Second Year	9	7.31
Third Year	15	10.03
Fourth Year	18	11.90
Fifth Year	20	12.85

On March 29, 2007, the Florida Board of Governors approved Board Regulation 8.011, which sets forth criteria for implementation and authorization of new doctorates by the Board of Governors, as well as criteria for implementation and authorization of Bachelor's, Master's and Specialist degrees by Boards of Trustees. The following staff analysis is an assessment of how well the university meets Board Accountability and Readiness criteria for implementation of this degree program.

Proposal Page Numbers:

INTRODUCTION		ACCOUNTABILITY		READINESS				
Program Description	BOG Goals	Overall	Budget	Mission and Strength	Program Quality	Curriculum	Faculty	Resources
2	3	4	7	10	12	13	22	23

A. Program Description:

The University of South Florida (USF) is proposing to offer a PhD in Rehabilitation Sciences with three applied concentration areas: chronic disease, veteran’s health/reintegration, and neuromusculoskeletal disability. The program will be offered at USF’s main campus.

The proposed PhD in Rehabilitation Sciences at the USF School of Physical Therapy and Rehabilitation Sciences (SPTRS) will be a research doctoral program with an interdisciplinary focus. Rehabilitation Science as a field draws from multiple disciplines spanning the physiological, health, and social sciences and relates to understanding and restoring human function and performance. The proposed program aims to prepare students for faculty roles, capable of teaching and conducting research in a variety of rehabilitation-related programs such as Physical Therapy, Occupational Therapy, Speech Therapy, Audiology, and Rehabilitation Counseling.

The program will recruit from a population of students with a master’s or first-professional doctoral degree in a rehabilitation-related discipline. According to the proposal, the curriculum has been designed to advance the education of these professionals through a rehabilitation sciences core, a research core, and a choice of three concentrations. Core courses and electives will draw from a variety of USF Health’s course offerings. In addition to coursework, the program will include requirements to pass qualifying and written comprehensive examinations and to successfully defend a written dissertation proposal. The degree will culminate in the successful defense of a dissertation and the submission of at least one full text scientific manuscript to a refereed journal.

The USF proposal emphasizes the need for terminally degreed faculty researchers to contribute to the development of rehabilitation practice, research, and education in an emerging 21st century health care environment. The program’s goal, as stated in the proposal, is to “create a new generation of faculty with a broad perspective of enablement that can be linked to the economic development and betterment of the health and welfare of the citizens of our state and society” (p. 2).

The proposed doctoral program would be the second such program to be offered in the state of Florida. The University of Florida currently offers a PhD in Rehabilitation

Sciences. In more discipline-specific related fields, Florida State University offers a PhD in Vocational Rehabilitation Counseling and Nova Southeastern University offers a PhD in Occupational Therapy and a PhD in Physical Therapy.

B. System-Level Analysis and Evaluation in accordance with BOG Regulation 8.011:

The proposal suggests many State University System (SUS) 2012-2025 Strategic Plan Goals would be supported by its implementation. These goals are:

- increase the number of degrees awarded in STEM and other Areas of Strategic Emphasis,
- increase research and commercialization activity,
- strengthen the quality and reputation of scholarship, research, and innovation,
- strengthen the quality and recognition of commitment to community and business engagement,
- increase levels of community and business engagement, and
- increase community and business workforce, including indirect contributions through the USF-Tampa Veteran's Reintegration Strategy.

Greater detail of how the program aligns with the Strategic Plan Goals is included below and is primarily excerpted from the proposal.

Teaching and Learning

The program aims to educate the next generation of faculty scholars and researchers to populate graduate and professional educational programs. By training the future health care workforce, the program will increase the number of degrees awarded in areas of strategic emphasis both directly and indirectly.

Scholarship, Research and Innovation

The program will convert university research in rehabilitation sciences into the commercialization or improvement of products, such as mobility aids, prosthetics and therapeutic robotics, which serves to strengthen the University's reputation for quality.

Community and Business Engagement

The program proposes to engage students with the USF-Tampa Veteran's Reintegration Strategy and other established business connections for their research.

Need Analysis

The proposal notes two trends that are creating an increased need for faculty, thereby justifying the PhD in Rehabilitation Sciences program. The first is projected

vacancies that will be created by retiring faculty. As an example, the proposal notes that more than 40% of physical therapy faculty are over the age of 55 and similar trends are evident in occupational therapy and speech therapy/audiology programs. The second trend is expected growth in the rehabilitation-related workforce and greater need for faculty as discipline-specific programs are developed or expand.

Successful students of the PhD in Rehabilitation Sciences program will be qualified to teach in a variety of programs, including undergraduate and graduate entry-level professional and research degree programs in Physical Therapy, Occupational Therapy, Audiology, Rehabilitation Counseling, Art and Music Therapy, Prosthetics and Orthotics, Speech-Language Pathology, and Athletic Training. As the proposal suggests, these programs are increasingly requiring faculty to hold a research doctorate in addition to the entry-level professional degree to meet accreditation standards, an assertion supported by the external consultant.

According to a 2013 position paper by the Commission on Accreditation in Physical Therapy Education (CAPTE), the Doctor of Physical Therapy (DPT) as an entry-level professional degree does not by itself qualify an individual for a faculty role. The paper strongly emphasizes the need for faculty to exhibit “evidence of other appropriate qualifications” and goes on to give guidance about scholarship required of faculty. And while the paper does not explicitly state that faculty must hold a PhD for program accreditation, the critical inquiry and scholarship skills it outlines can be gained through a research doctoral program such as USF’s. CAPTE recognizes the following capabilities as key for physical therapy faculty:

- analyzing and applying research findings to physical therapy practice and education;
- evaluating the efficacy and effectiveness of both new and established practice and technologies; and
- participating in planning, conducting and disseminating clinical, basic, or applied research.

The program’s external evaluator also notes this shift toward the need for faculty to hold a PhD, in part because many of the rehabilitation disciplines are increasing the educational requirements for the entry-level professional degree.

The national projected growth to 2022 for the rehabilitation workforce by the Bureau of Labor Statics is 36% for physical therapists, 29% for occupational therapists, 19% for speech-language pathologists, 34% for audiologists, 36% for orthotists and prosthetists, and 21% for athletic trainers. Parallel growth trends are expected for the state of Florida. Meeting this workforce need will likely require the expansion of academic programs, as suggested in the proposal. A 2013 analysis conducted by Board of Governors staff identified a gap for physical therapists and concluded approximately 100 additional DPT graduates per year will be needed to meet the projected workforce demand in Florida.

Additionally, the projection for postsecondary health specialties teachers in Florida, due to growth and replacement, is 430 open positions annually. Faculty openings in the rehabilitation sciences will be a subset of these teachers. The proposal and external reviewer each note greater than 300 openings in core rehabilitation disciplines nationally at the time of their writing. However, a search at HigherEdjobs.com in May 2014 yielded three advertised faculty positions in Florida requiring the PhD and roughly 85 positions nationally.

Table A. Number of Research Doctoral Degrees Granted, by Year					
Institution	CIP	CIP Title	2009-10	2010-11	2011-12
University of Florida	51.2314	Rehabilitation Science	8	8	6
Florida State University	51.2310	Vocational Rehabilitation Counseling	2	0	1
Nova Southeastern University	51.2306	Occupational Therapy	2	4	3
	51.2308	Physical Therapy	7	8	6

Data Sources: www.flbog.edu as of 5/9/2014; National Center for Education Statistics. (2014). Integrated Postsecondary Education Data System (IPEDS). Completions file.

As mentioned previously, another PhD program in Rehabilitation Sciences and three discipline-specific PhD programs exist in the state. These programs are also potential sources to meet the need for faculty. However, the number of degrees granted by these programs in the past few years is relatively small, as illustrated in Table A.

In addition to faculty employment, the proposal suggests graduates of the program would be qualified for leadership roles in industry or government. Specifically, the proposal notes “graduates may also fill governmental or social agency administrative positions involved in leading the implementation of the Affordable Care Act or serve industry as innovation/product development consultants” (p.8).

Demand Analysis

Tables B and C below highlight System enrollment in baccalaureate, master’s and professional degree rehabilitation programs. The master’s and professional degree students from these programs are potential applicants for the PhD in Rehabilitation Sciences program. However, given the typical career trajectory of graduates in these disciplines, with three to five years of clinical practice before consideration of an academic career, the figures in the table may not fully capture how many students will be immediately interested or qualified. There is also some concern that individuals entering the rehabilitation fields at an entry wage of approximately \$25.00 per hour and

median wage of \$35.00 per hour will not be motivated to leave their positions to pursue the PhD and a faculty career. Perhaps due to this fact, the program planners have assumed that a proportion of the students will attend part-time. This is reflected in the proposal's FTE projections (for example, only 14.06 FTE for a headcount of 20 in the fifth year).

The proposal also notes that roughly two to four (7-10%) of the program graduates at the University of Miami go on to pursue the PhD degree annually.

Table B. Number of Graduate Students Enrolled, by CIP Code (2013 data)									
CIP	CIP Title	FAMU	FGCU	FIU	FSU	UCF	UF	UNF	USF T
51.2301	Art Therapy/Therapist	-	-	-	M: 30	-	-	-	-
51.2305	Music Therapy/Therapist	-	-	-	M: 55	-	-	-	-
51.2306	Occupational Therapy/Therapist	M: 63	M: 60	M: 168	-	-	M: 113	-	-
51.2308	Physical Therapy/Therapist	M & P: 117	M & P: 76	P: 163	-	P: 115	P: 178	P: 88	M & P: 332
51.2310	Vocational	-	-	-	M &	-	-	-	M:

Additionally, correspondence with USF produced a brief email survey of USF Health DPT students. Four of 32 students (roughly 10%) expressed interest in pursuing USF's proposed program. By drawing from an international applicant pool and seeking students from the full spectrum of rehabilitation disciplines, USF expects to enroll four students in the first year and have a total of 20 enrolled by the fifth year.

	Rehabilitation Counseling/Counselor				R: 3				127
51.2314	Rehabilitation Science	-	-	-	-	-	R: 33	-	-

M=master's program, P= professional doctoral program, R= research doctoral program

Summary

A growing demand for faculty in the rehabilitation disciplines provides support for the University of South Florida's PhD in Rehabilitation Sciences. An aging population will increase demand for rehabilitation services at the same time that current faculty in rehabilitation programs are retiring. These pressures are confounded by new accreditation standards for faculty as the educational requirements for entry-level professional programs increase. As a result, the number of faculty openings requiring the terminal research degree is expected to grow.

The proposal states that shortages of faculty in the rehabilitation sciences "frequently pose a barrier to new program initiation and achieving or maintaining programmatic accreditation or expanding enrollments at existing institutions" (p. 2). Faculty prepared by the PhD program will help address this bottleneck and build institutional capacity in a variety of rehabilitation disciplines. The indirect contribution of the program to the workforce could be substantial, as these faculty members will be preparing future graduates for the high-paying and critical need health professions.

Table C. Number of Undergraduate Students Enrolled, by CIP Code (2013 data)									
CIP	CIP Title	FAMU	FGCU	FIU	FSU	UCF	UF	UNF	USF T
51.2305	Music Therapy/Therapist	-	-	-	119	-	-	-	-

Data Source: www.flbog.edu as of 4/7/2014

According to the proposal, students of the program will gain research and scholarship skills delivered through a unique, interdisciplinary curriculum and in concentration areas suited to current health demands. The external consultant notes the high quality of the curriculum, talented faculty available for mentorship, and opportunities for external funding with this proposed program.

C. Assessment of the University Review Process in accordance with BOG Regulation 8.011:

Due to the system of stair step accountability set in place by the Board of Governors in Regulation 8.011, it is now incumbent upon University Board of Trustees to verify that all doctoral programs coming before the Board of Governors have met the requirements of the regulation. The following is an assessment of the university review process to ensure that all criteria set forth have been considered by the university prior to submission to the Board of Governors office.

ACCOUNTABILITY

Check 'yes' or 'no' box, and make comments beneath criterion as appropriate.

1. Overall - *The proposal is in the correct format, includes all necessary signatures, and contains complete and accurate tables for enrollment projections, faculty effort, and the proposed budget.*

YES NO

The proposal has been approved by the university board of trustees and includes all required signatures.

The University of South Florida Board of Trustees approved the program on December 5, 2013.

The university has provided a proposal written in the standard SUS format which addresses new academic program approval criteria outlined in BOG Regulation 8.011.

The university has used the standard SUS format in accordance with the Board's Regulation 8.011.

The university has provided data that supports the need for an additional program in the State University System as well as letters of support or concern from the provosts of other state universities with substantially similar programs.

One doctoral program in Rehabilitation Sciences is currently offered in the State University System. The Provost of the University of Florida, which offers a PhD in Rehabilitation Sciences, has provided a letter of support. He notes the high demand for faculty justifies an additional program.

The university has provided complete and accurate projected enrollment, faculty effort, and budget tables that are in alignment with each other.

The university provides adequate information on enrollment (Table 1-B), budget (Table 2 & 3) and faculty effort (Table 4). A \$5,000 library expenses was added to Table 2 to address a concern highlighted within the proposal, but was mistakenly not included on the proposal's cover page in Year 1 Total Cost. The Year 1 Total Cost in Table 2, in the amount of \$245,000, is correct and is noted as a correction on the cover

page.

- The university has included a statement in the proposal signed by the equity officer as to how this proposal will meet the goals of the university's equity accountability plan.**

The program plan for achieving diversity has been reviewed and signed by the USF Equity Officer on April 23, 2013.

- The program does not substantially duplicate programs at FAMU or FIU or, if it does, evidence was provided that consultations have occurred with the affected university on the impact of the new program on existing programs.**

The proposed program does not duplicate any program offered at FAMU or FIU.

2. Budget - The proposal presents a complete and realistic budget for the program consistent with university and BOG policy, and shows that any redirection of funding will not have an unjustified negative impact on other needed programs.

YES NO

- The University Board of Trustees has approved the most recent budget for this proposal.**

Minor corrections have been made to the budget since the original submission. As noted previously, a \$5,000 library expense was added to the reallocated E&G funds for both Year 1 and Year 5 in the budget (Table 2 and cover page). The FTE figures were slightly adjusted for each of the first 5 years of implementation, although the headcount projections remained the same (Table 1 and cover page). As a result, the E&G Cost per FTE was reduced by \$873 for Year 1 and increased by \$2,508 for Year 5 compared to the budget in the original proposal.

- The university has reviewed the budget for the program to ensure that it is complete and reasonable, and the budget appears in alignment with expenditures by similar programs at other SUS institutions.**

A review of the budget by Dr. Stephen Klasko, SVP for USF Health, was included as a letter in the Appendix of the proposal. He notes the program has an adequate financial plan, including sufficient resources for reallocation of the School's existing E&G funds and for pursuit of grants to help support students. The tuition rate for the PhD in Rehabilitation Sciences will be the same as that currently established for USF Tampa campus' graduate credit hour.

According to Table 2, in the first year of operation, \$165,000 of the \$245,000 total cost will be used for 11 faculty positions (nine existing, two new hires) and one staff position. In addition, Table 2 includes funds for graduate assistantships and fellowships for the program's doctoral students. Specifically, E&G Funds of \$70,000 in year one and \$70,000 in year five, plus another \$70,000 in year 5 from Contracts and Grants, are expected to support two to four graduate assistantships.

A comparison to expenditures at University of Florida's PhD in Rehabilitation Science was not included in the proposal. The University of South Florida is projecting that the cost per FTE will be \$65,333 in the first year of operation and \$24,912 by the fifth year of operation. The E&G cost per FTE of this program remains higher than average even in year five with a head count of 20 students. However, it should be noted that cost of programs in the 51 CIP are highly variable, much more so than any other discipline area.

The high cost per FTE is partially attributable to the relatively small projected enrollment of the program and the expectation that some students will be part-time. This low enrollment means that a higher proportion of resources are directed to each student compared to a larger program. However, the overall cost of this smaller program (\$245,000 in year one, \$390,000 in year five) is not excessive compared to other programs in the 51 CIP (Health).

- In the event that resources within the institution are redirected to support the new program, the university has identified this redirection and determined that it will not have a negative impact on undergraduate education, or the university has provided a reasonable explanation for any impact of this redirection.**

The university notes that while there will be a reallocation of current and future faculty effort, they expect the impact to existing undergraduate and graduate programs to be only positive or neutral. As a positive impact, undergraduates in related programs (rehabilitation counseling, public health, mental health, nursing, exercise science, engineering, biomedical sciences and gerontology, for example) may have increased opportunities for research and develop an interest in continuing to graduate studies at USF. At the graduate level, the PhD program's concentrations will be built from existing courses. The proposal includes letters of concurrence from faculty members of other programs, allowing for enrollment of the Rehabilitation Sciences students in courses and thereby contributing to the interdisciplinary curriculum.

READINESS

Check 'yes' or 'no' box, and make comments beneath criterion as appropriate.

3. Program Quality – *The proposal provides evidence that the university planning activities*

have been sufficient and responses to any recommendations to program reviews or accreditation activities in the discipline pertinent to the proposed program have been addressed.

YES NO

The university has followed a collaborative planning process for the proposed program in accordance with policies and procedures adopted by the University Board of Trustees.

An external consultant has reviewed the proposal and supports the department's capability of successfully implementing this new program.

Dr. Carl Mattacola, Professor and Director of the Rehabilitation Sciences Doctoral Program, University of Kentucky, submitted an external evaluation report on July 8, 2013. His report considered the need and demand for the program, provided faculty and curriculum recommendations, and fully supported the program's implementation.

He states, "Dr. William S. Quillen and faculty in the SPTRS should be commended on developing a comprehensive plan with a well-constructed inter-professional curriculum. The research foci are cutting edge and unique when compared to many other rehabilitation sciences doctoral programs."

The university has found the level of progress that the department has made in implementing the recommendations from program reviews or accreditation activities in the discipline pertinent to the proposed program to be satisfactory.

According to the proposal, USF's School of Physical Therapy and Rehabilitation Sciences (SPTRS) has successfully maintained accreditation for the entry-level degree in Physical Therapy since 2001 (MSPT 2001-2006, DPT 2008-present). The SPTRS received commendations on its 2008 reaccreditation of the DPT program. Recommendations from accreditation or reviews of other related entry-level master's and first-professional doctoral programs were not discussed, despite the possibility of these programs contributing graduates to the PhD in Rehabilitation Sciences. Since there is currently no specialized accreditor for the PhD in Rehabilitation Sciences, the SPTRS will plan for the program to undergo a Program Review within seven years of its initiation (in accordance with BOG Regulation 8.015).

The university has analyzed the feasibility of providing all or a portion of the proposed program through distance learning.

The PhD in Rehabilitation Sciences will be offered through a combination of traditional classroom delivery on the Tampa campus as well as online for some courses. The proposal suggests the unique, interdisciplinary concentrations of the program

require face-to-face interactions at USF's Tampa campus.

- If necessary, the university has made allowances for licensure and legislative approval to be obtained in a timely manner.**

4. Curriculum - The proposal provides evidence that the university has evaluated the proposed curriculum and found that it describes an appropriate and sequenced course of study, and that the university has evaluated the appropriateness of specialized accreditation for the program.

YES NO

- The university has reviewed the curriculum and found that the course of study presented is appropriate to meet specific learning outcomes and industry driven competencies discussed in the proposal.**

The curriculum has been designed to be interdisciplinary in nature, drawing from courses across the health-related disciplines that are relevant to rehabilitation sciences. The curriculum includes 66 credit hours (15 credits – rehabilitation sciences core; 15 credits – research methodology core; 15 credits – one of three concentrations; 9 credits – electives; 12 credits – dissertation). The foundational, core requirements and unique concentrations will prepare students as faculty within a variety of university programs or as researchers and leaders in industry or government roles.

- The university anticipates seeking accreditation for the proposed doctoral program, or provides a reasonable explanation as to why accreditation is not being sought.**

As stated in the proposal and as verified by Board staff, there are no program-specific accrediting agencies for the Rehabilitation Sciences doctoral program. Related disciplines, such as physical therapy, occupational therapy and rehabilitation counseling, are accredited at various program levels. The proposal states the PhD in Rehabilitation Sciences program will seek accreditation if it becomes available in the future.

5. Faculty – The proposal provides evidence that the university is prepared to ensure a critical mass of faculty will be available to initiate the program based on estimated enrollments, and that faculty in the aggregate have the necessary experience and research activity to sustain a doctoral program.

YES NO

- The university has reviewed the evidence provided and found that there is a critical mass of faculty available to initiate the program based on estimated enrollments.**

A portion of faculty effort for nine current faculty members will be reallocated to the PhD in Rehabilitation Sciences program in the first year. In addition, two new hires are anticipated by fall term of 2014 for participation in year one. By year five of the program, 14 faculty members (ten current, four new hires) will participate, each contributing 5-25% effort to the PhD program.

- The university has reviewed the evidence provided and found that the faculty in aggregate has the necessary experience and research activity to sustain the program.**

The proposal shows in Table 4 that 10 of the current professors hold a research doctorate, with eight holding a PhD, one holding an EdD and another holding a DSc. All but one are licensed physical therapists (PT or DPT, professional degrees), and the other is a licensed chiropractor (DC, professional degree). Two faculty members hold tenure-earning positions, four hold tenure, and four new faculty members are expected to be hired, on tenure-earning tracks, by year five of the program.

- The university has reviewed the evidence provided and found the academic unit(s) associated with this new degree to be productive in teaching, research, and service.**

The proposal highlights the experience of the SPTRS faculty with its Doctorate in Physical Therapy program, including enrollments, degrees granted, and high professional exam pass rates. In addition, the proposal includes evidence of external research funding (currently \$1.29M), scholarship (15 refereed publications and book contributions this past year), and service in professional organizations.

- If appropriate, the university has committed to hiring additional faculty in later years, based on estimated enrollments.**

Two new hires are anticipated prior to fall 2014 for participation in year one. Two additional new hires are anticipated by year five. Each position is proposed at the Assistant Professor rank.

6. Resources – The proposal provides evidence that the university has ensured the available library volumes and serials; classroom, teaching laboratory, research laboratory, office space, equipment, clinical and internship sites, fellowships, scholarships, and graduate assistantships will be sufficient to initiate the program, and that if applicable, funding has been secured to make more resources available as students proceed through the program..

YES NO

- The university has provided a signed statement from the Library Director**

verifying that the library volumes and serials available are sufficient to initiate the program.

A summary statement from the Library Director is included in the proposal and states the library resources are currently sufficient to implement the program. However, she indicates that current funding will not be adequate to sustain it and requires a 3-6% annual investment “to preserve sufficiency.” USF amended the budget to address this concern and has since identified an additional \$5,000 in reallocated E&G to apply towards annual library expenses. Table 2, Table 3, and the cover page have been updated with the additional \$5,000.

- The university has ensured that the physical space necessary for the proposed program, including classrooms, laboratories and office space, is sufficient to initiate the program.**

According to the proposal, instructional space is sufficient.

- The university has ensured that necessary equipment is available to initiate the program.**

According to the proposal, all the necessary equipment and specialized research facilities are available.

- The university has ensured that fellowships, scholarships, and graduate assistantships are sufficient to initiate the program.**

The proposal states the SPTRS intends to fund two graduate assistantships beginning in year one and to secure funding for an additional two assistantships through faculty grants or contracts by year five of the program. Projected enrollment for year five is 20 students. A recommendation from the proposal’s external consultant to create clinical fellowship opportunities was not incorporated into the proposal. While not an educational requirement for the program, the clinical doctoral fellowship is a mechanism for a tuition-free education for the student and increases partnerships with the clinical community.

- If applicable, the university has ensured that the department has arranged a suitable number of clinical and internship sites.**

N/A