New Program Proposal
Doctor of Philosophy in Nursing Science
Medical University of South Carolina

Summary

Medical University of South Carolina requests approval to offer a program leading to the Doctor of Philosophy in Nursing Science to be implemented in August 2020. The proposed program is to be offered through online instruction. The following chart outlines the stages of approval for the proposal. The Advisory Committee on Academic Programs (ACAP) voted to recommend approval of the proposal. The full program proposal and support documents are attached.

Stages of Consideration	Date	Comments
Program Proposal Received	1/10/20	Not Applicable
Staff comments to the Institution	3/6/20	Staff requested the proposal be revised to: • Verify the delivery mode for the proposed program; • Describe how the proposed program relates to the institutional strategic plan; • Reflect student retention and matriculation in projected enrollment figures; • Include the course numbers for each course in the program; • Provide a curriculum map for the proposed program; • Specify the calculations associated with in-/out-of-state students highlighted in the *Budget Justification*; and • Denote the specific courses associated with the assessment methods for the program objectives.
Revised Program Proposal Received	3/12/20	The revised proposal satisfactorily addressed the requested revisions.
ACAP Consideration	6/9/20	Representatives from the Medical University of South Carolina (MUSC) introduced the need for the Doctor of Philosophy in Nursing Science program, and affirmed MUSC's determination of program need given pandemic conditions. The representatives stated the proposed program modifies the curriculum of an existing program to provide 3- and 4-year offerings. As a result, the aggregate changes to the existing program required consideration as a new program proposal. The program will prepare students for research careers in emerging areas of nursing science. The Doctor of Nursing Program in Nursing Practice with a concentration in Lifespan Palliative Care program was concurrently under review for program approval. With no remaining discussion, ACAP voted to unanimously recommend approval of the program proposal. Staff transmitted remaining questions for additional clarity.

Stages of Consideration	Date	Comments
Staff comments to the Institution	6/10/20	Staff requested the proposal be revised to: - Provide documentation that supports the termination of a previous delivery mode of the program; - Specify the time period for local/state supporting evidence for employment opportunities; - Include the course numbers for each course in the program; - Denote the specific courses associated with the assessment methods for the program objectives; and - List the faculty required for the proposed program without identifiers.
Revised Program Proposal Received	6/15/20	The revised proposal satisfactorily addressed the requested revisions.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing favorably commend to the Commission the program leading to the Doctor of Philosophy in Nursing Science to be implemented in August 2020.

Medical University of South Carolina Student and Program Data

Graduate In-/Out-of-State Enrollment, Fall 2018	1,764 (67.46%) / 851 (32.54%)
Number of Approved Programs in 10 Yrs. (FY 2010-2019)	17
Number of Terminated Programs in 10 Yrs. (FY 2010-2019)	9

Industry related Occupational Wages and Projections in South Carolina, 2016 – 2026*

Occupational Field[1]	2016 Median Income[2]	2016 Estimated Employment[3]	2026 Projected Employment	Total 2016-2026 Employment Change	2016-2026 Annual Avg. Percent Change	Total Percent Change
Healthcare Practitioners and Technical	$56,870	124,135	145,742	21,607	1.62%	17.41%
Life, Physical, and Social Science	$57,550	10,547	11,445	898	0.82%	8.51%

[1] "Occupational Field" represents the closest related occupation category that includes the occupations aligned with the program proposal.
[2] SC Department of Employment & Workforce (DEW), Labor Market Information. (2019). Occupational Employment and Wage Rates (OES) for All Major Groups in South Carolina in 2016 [Data file]. Retrieved from https://jobs.scworks.org/vosnet/lmi/default.aspx?pu=1
[3] SC Department of Employment & Workforce (DEW), Labor Market Information. (2019). Occupational Projections (Long-term) for Multiple Occupations in South Carolina in 2016-2026 [Data file]. Retrieved from https://jobs.scworks.org/vosnet/lmi/default.aspx?pu=1
* Data downloaded September 16, 2019; Most recent data available.

NEW PROGRAM PROPOSAL FORM

Name of Institution: Medical University of South Carolina

Name of Program (include degree designation and all concentrations, options, or tracks):

Doctor of Philosophy in Nursing Science

The application to the CHE was initially submitted as a Program Modification, as this degree currently exists at MUSC. It was initially approved in 2001 and modified in 2014 to be an accelerated program, eligible to be completed in three years. While the program remains accelerated, the current application includes the addition of courses and modification of others (and removal of some) that will allow graduates to meet current recommendations for specific research knowledge, skills, and behaviors expected of a researcher in nursing science. The sum of changes to be made are elimination of 10 credit hours; 24 credit hours added; and 15 credit hours modified. Because the addition of credits and the changes to existing courses (sum=49) aggregate to 50% or more of the program of study (per CHE Policy A.1.b), a new program proposal is submitted. The proposed PhD in Nursing Science will be a 68 credit hour program, able to be completed in 3 years (9 semesters) or 4 years (12 semesters) and will prepare graduates for research and teaching careers, including faculty positions in Schools of Nursing.

Program Designation:

- [ ] Associate's Degree
- [ ] Bachelor's Degree: 4 Year
- [ ] Bachelor's Degree: 5 Year
- [ ] Master's Degree
- [ ] Specialist
- [x] Doctoral Degree: Research/Scholarship (e.g., Ph.D. and DMA)
- [ ] Doctoral Degree: Professional Practice (e.g., Ed.D., D.N.P., J.D., Pharm.D., and M.D.)

Consider the program for supplemental Palmetto Fellows and LIFE Scholarship awards?
- [ ] Yes
- [x] No

Proposed Date of Implementation: August 17, 2020

CIP Code: 51.3808

Delivery Site(s): 85750 (MUSC, Distance Ed)

Delivery Mode:
- [ ] Traditional/face-to-face
  *select if less than 25% online
- [x] Distance Education
  - [x] 100% online
  - [ ] Blended/hybrid (50% or more online)
  - [ ] Blended/hybrid (25-49% online)
  - [ ] Other distance education (explain if selected)

Program Contact Information (name, title, telephone number, and email address):

Linda Weglicki, PhD, RN
Professor

Dean, College of Nursing
99 Jonathan Lucas St., MSC 160
Charleston, SC 29435

Institutional Approvals and Dates of Approval (include department through Provost/Chief Academic Officer, President, and Board of Trustees approval):

1. College of Nursing Faculty Assembly: November 18, 2019
2. Education Advisory Council: December 3, 2019
3. Provost's Council: January 9, 2020
4. Board of Trustees: February 13, 2020

Background Information

State the nature and purpose of the proposed program, including target audience, centrality to institutional mission, and relation to the strategic plan.

Centrality to Institutional Mission: Consistent with MUSC's mission of research and education, the College of Nursing's PhD program was originally developed and approved by the CHE on February 1, 2001. The program was modified in 2014 to a three year program based upon national recommendations from the Institute of Medicine (IOM, 2011), Commission, Robert Wood Johnson Foundation (RWJ, 2013), and the American Association of Colleges of Nursing (AACN) (Dunbar-Jacobs et al., 2010) designing a minimum of 45 credits from the original 62 credits plan of study. The national goal was to ensure fueling the pipeline of more and junior researchers in nursing.

Since that time faculty and students have met to review the current program and national recommendations and have proposed substantive changes to the curriculum to respond to these national recommendations, including modifications to some courses, elimination of others, and adding new courses. The totality of these changes lead CHE staff to advise a new program proposal. The proposed curriculum will provide the specific research knowledge, skills, and behaviors to develop excellent researchers in nursing science, which has evolved substantially since 2014, while maintaining the national recommendations for a three-year full-time program. To be student centered, the program will be offered as both a 3-year and a 4-year plan of study will be offered (AACN Vision for Nursing Education, 2019).

MUSC's current strategic plan, Imagine MUSC 2020, includes a goal to Advance New Knowledge and Scientific Discoveries and another goal to Foster Innovative Education and Learning. The PhD Nursing Science program and the curriculum renovation to ensure the program is responsive the shifting priorities of healthcare are aligned with both of these goals. MUSC's next strategic plan, currently in development, will focus on several goals, including integrating our research and clinical strengths to transform health care; helping shape healthcare policy; and optimizing students' educational value—all of which are supported by having a PhD Nursing Science program that produces the next generation of nursing research scientists and nursing educators who are well prepared to teach and to conduct health services research in the 21st century.

Target Audience: The MUSC CON expects the enrollment numbers to be similar to previous years. No major increases are expected. The CON expects to attract students who would like to graduate in a timely manner in order to enter the workforce earlier. In addition, student candidates in related health care disciplines will continue to be eligible to be considered for admission on an individual basis.

Assessment of Need

Provide an assessment of the need for the program for the institution, the state, the region, and beyond, if applicable.

The MUSC College of Nursing (CON) provides and refines programs of nursing education that support the University mission to "preserve and optimize human life in South Carolina in South Carolina." MUSC's vision (2019) is to "lead health innovation for the lives we touch." The CON already has incorporated online education but realized developing a seamless academic progression that incorporated the NPA Core Competencies for Doctoral Study (2007-2009) and the AACN's recommendations for programs in the white paper - *The Research-focused Doctoral Program in Nursing: Pathways to Excellence* (Dunbar-Jacobs, et al., 2010) was required.

The new courses [to be added] respond to the recommendation to integrate <u>emerging areas of nursing science into PhD programs, including trends in symptom science and self management; dissemination and implementation science; integration of technology into research; and patient and community engagement in research</u> (Henly et al. 2015). The proposed changes to the PhD program are 49 credits, which includes the removal of 10 credit hours, the addition of 24 credit hours, and the modification of 15 credit hours, from the curriculum last approved by the CHE. The program can be completed in 3 years (5 semesters of full-time coursework, 1 semester of comprehensive examination, and 3 semesters devoted to dissertation research). This new program proposal reflects a program

evolution to provide the core research skills and to meet all of the competencies specified by the AACN and the NPA, which are organizations responsive to the increasing challenges of nursing research.

The increase in semester hours (from 45 in 2014 to 68 in this current version) will not affect the per semester cost for student tuition, as full-time costs have remained the same for in-state and out-of-state students per semester for the last five years. The program is completed in 3 or 4 years per the student's choice, accommodating today's diverse population of learners (AACN Vision for Nursing Education, 2019). Both plans of study (3 year and 4 year) will add two semesters from the 2014 program. The last 4 semesters for both the 3-year and 4-year plans of study include the comprehensive exam and dissertation semesters and are part-time and cost less than the full-time tuition per semester.

Transfer and Articulation
Identify any special articulation agreements for the proposed program. Provide the articulation agreement or Memorandum of Agreement/Understanding.

The PhD in Nursing Science program will not require any special articulation agreements for the modification of the program.

Employment Opportunities

Occupation	State		National		Data Type and Source
	Expected Number of Jobs	Employment Projection	Expected Number of Jobs	Employment Projection	
Nursing Instructors and Teachers, Postsecondary	90 avg. annual openings	1,040 (26.8% growth between 2016-2026)	7,300 avg. annual openings	84,200 (24% growth between 2016-2026)	Bureau of Labor Statistics

Supporting Evidence of Anticipated Employment Opportunities
Provide supporting evidence of anticipated employment opportunities for graduates.

The projection for long-term growth of Nursing Instructors and Teachers, Postsecondary (which prefers nursing faculty with terminal doctoral degrees) produced by the United States Bureau of Labor Statistics indicates a clear need for additional graduate training capacity.

These values from the BLS are supported by recent publications of the American Association of Colleges of Nursing (https://www.aacnnursing.org/news-information/fact-sheets/nursing-faculty-shortage) and the National League for Nursing (http://www.nln.org/advocacy-public-policy/issues/faculty-shortage), which indicate a **compelling shortage of nursing faculty nationwide**. According to AACN's *2018-2019 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*, U.S. nursing schools **turned away 75,029 qualified applicants from baccalaureate and graduate nursing programs in 2018 due to an insufficient number of faculty and related concerns**.

The PhD Nursing Science program will prepare graduates to engage in nursing and health services research (and to work outside of academia), but the most marked employment prospects for graduates will be to fill faculty positions in nursing schools.

Description of the Program

Year	Fall Headcount		Spring Headcount		Summer Headcount	
	New	Total	New	Total	New	Total
2020	10	10	-	10	-	10
2021	15	25	-	25	-	25
2022	15	40	-	30	-	30
2023	15	45	-	30	-	30

Projected Enrollment (table title)

Explain how the enrollment projections were calculated.

The cohort for the first year of the new program will be 10, as the CON will be graduating out the PhD students enrolled in the current program and admitting into the new (significantly revised) program simultaneously. Admissions will return back to the goal of 15 students admitted per fall cohort in 2021. A cohort of at least 9 students is required for the program to be financially stable and break even on program costs.

There are 22 students currently enrolled in the PhD Nursing Science program. At the time of proposed implementation of the new curriculum in Fall 2020, 4 of these students will have graduated, and 6 will be in dissertation. The remaining students (12) will complete the curriculum without any lengthening of their plans of study or time in program. The last students in the current program are expected to graduate by Fall 2022 which reflects the progression timeline of their original plan of study.

Students enrolled in the new program in Fall 2020 will graduate in 9 semesters if they participate in the 3 year program or 12 semesters if they elect the 4 year program.

Besides the general institutional admission requirements, are there any separate or additional admission requirements for the proposed program? If yes, explain.

☒Yes
☐No

All of MUSC's academic programs have program-specific admissions requirements; there are no "general institutional admissions requirements" for MUSC (besides the requirement to submit a complete application). The admissions requirements will be consistent with the existing admissions requirements for the PhD Nursing Science program which are specified on the program's website:

https://nursing.musc.edu/academics/phd/phd-in-nursing-science-admission-requirements

Curriculum

New Courses
List and provide course descriptions for new courses.

The courses below are new or substantially modified from current curriculum of the program; courses listed in the curriculum not described below are not new. The MUSC Registrar will assign course numbers to courses after the academic program receives CHE approval.

NRPHD XXX: Philosophical and Theoretical Underpinnings of Nursing Science 3 SH
Course Description: The course provides students with a historical and contemporary assessment of the central philosophical and theoretical issues concerning the nature of science, the patterns of knowing and knowledge development, and philosophy of science in nursing. Philosophy of science is explored through critical analysis of competing philosophical worldviews/paradigms, the underlying epistemological and ontological assumptions, and implications of diverse approaches to knowledge development in nursing science. The course considers historical and contemporary conceptual and theoretical underpinnings of nursing and related sciences. Students are guided to contemplate the philosophic assumptions upon which specific theories are based and how the nature of the research problem and theory guides the choice of research method. Students are also guided in the process of the identification of key theoretical concepts and relationships for their own planned research.

NRPDH XXX: Foundations of Scholarship in Nursing Science 3 SH
Course Description: This course provides foundational skills and knowledge on which students will build throughout the program of study to become successful scholars in nursing science. Emphasis is placed on understanding the nursing science field and the role of the nurse scholar in the context of team science, particularly pertaining to endeavors toward addressing health disparities and health equities. Course activities will facilitate development of a formative research trajectory and skill building for scholarly pursuits.

NRPHD XXX: Design & Methods of Scientific Inquiry   3 SH
Course description: This introductory course supports development of students' foundational understanding of research design and methodology prior to enrollment in subsequent advanced scientific methods courses. The course provides students with a comprehensive introduction and overview of research concepts, study design, and methodological approaches, including quantitative, qualitative, and mixed methods. Course activities will facilitate a broad understanding of the fundamental concepts of research and design approaches.

NRPHD XXX: Mixed Methods Research 2 SH
Course description: This course provides an introduction to mixed methods research, integrating concepts and approaches in the design, implementation, dissemination, and evaluation of clinical and health related research. Course content focuses on pragmatic considerations and foundational issues of integrating mixed methods throughout the development and assessment of interventions, variations in definitions associated with multi-method and mixed methodological designs, and strategies for integrating mixed methods throughout various stages of the research process. Course activities will facilitate an understanding of mixed methodological design approaches and use in health research and provide opportunities for applying integration and analytical skills.

NRPHD XXX: Intervention Research 2 SH
Course description: This course provides students with an introduction to methodological, ethical and practical approaches to design, implement, evaluate, and disseminate evidence- and theory-based interventions. The importance of development of intervention protocols will be taught with reference to social determinants and cultural tailoring for diverse individuals/populations. Course activities will facilitate a better understanding of a selected intervention model specific to the student's focal area of research interest.

NRPHD XXX: Applied Study Design & Methods 3 SH
Course description: This course is designed to teach students to apply appropriate study design and associated methods to fit their research interest. Students are expected to begin this course with a defined dissertation research topic, a research question, a supporting literature review, and proposed methods. This course will explore the next steps of the research process, to further develop methods for conducting the research. This will include refining the research question, specific methods, study implementation, and human subject protections.

NRPHD XXX: Trends in Symptom Science & Self-Management of Chronic Conditions 1 SH
Course Description: This course provides students with an overview of contributions to the fields of symptom and self-management sciences through exploration of key concepts, theoretical underpinnings, and models of care related to the complexity of chronic conditions. Specific to their own areas of discovery students will explore targeted self-management intervention research and programs delivered in various settings, and outcomes on symptoms. Course

activities will facilitate an advanced understanding of lifespan and developmental considerations for students' specific populations.

NRPHD XXX: Trends in Patient & Community Engagement in Research 1 SH
Course Description: This course provides students with an overview of contributions to the fields of patient and community engagement in research through exploration of key concepts, theoretical underpinnings, models, and principles of engagement that promote collaboration throughout the research process. Specific to their own areas of discovery students will explore strategies of research and programs delivered in various settings to improve health outcomes. Course activities will facilitate a better understanding of patient and community engagement considerations for students' specific populations.

NRPHD XXX: Trends in Dissemination & Implementation Science 1 SH
Course Description: This course provides students with an overview of contributions to the fields of dissemination and implementation science through exploration of key concepts, theoretical underpinnings, and methods for translating research into practice and dissemination of best practices. Specific to their own areas of discovery students will explore evaluation frameworks and program evaluation delivered in various settings, reporting implementation and clinical outcomes. Course activities will facilitate a better understanding of specific research considerations for conducting studies which evaluate both implementation and clinical outcomes.

NRPHD XXX: Trends in Technology Science 1 SH
Course Description: This course provides students with an overview of contributions to the fields of technology science through exploration of key concepts, theoretical underpinnings, and application of various technologies to improve access to care, consumer adoption and satisfaction, and health-related outcomes. Specific to their own areas of discovery students will explore various technologies used to promote health care, theoretical models and frameworks for the application and evaluation of technologies, practical considerations in the use of technology with different populations, and health-care related outcomes. Course activities will facilitate a better understanding of technologies used to promote healthcare and processes for improving reach, adoption and sustained use of technologies by providers and patients.

NRPHD XXX: Comprehensive Exam 4 SH
Course Description: The comprehensive examination is a milestone in the PhD program, and is designed to validate the student's: (a) mastery of the content of the doctoral program curriculum and, (b) readiness to conduct independent research. The exam consists of a written component and an oral component. The written comprehensive exam covers the program content of the required courses. The oral comprehensive exam is an opportunity for the student to articulate, clarify, and amplify their written responses, and to apply their responses to real-world situations. The student must successfully complete the written exam in order to progress to the oral exam. This course is pass/fail. Procedures of the comprehensive exam are detailed in the Comprehensive Exam Policy section of the PhD Guidelines.

Modified courses

NRPHD XXX: Qualitative Research Methods 3 SH
(formerly NRPHD 740: Advanced Qualitative Research Methods)
Course Description: This course is designed as a survey of qualitative research methods in the development of nursing and health science. The course includes epistemology, philosophical assumptions, issues in the research planning process related to qualitative research methods, differentiation among types and purposes of qualitative study designs, and methods for data collection and analysis. The course attends to ethical issues unique to qualitative research.

NRPHD XXX: Analysis & Application of Theories, Frameworks, and Models 3 SH
(formerly NRPHD 730 Theoretical Foundations of Nursing Science)
Course description: This course draws upon an interdisciplinary body of scientific literature to explore and critically analyze theoretical conceptualizations and models of health and health behavior as a basis for nursing research.

Course activities facilitate exploration of the application of theory in the iterative process of scientific inquiry from knowledge generation through implementation. The course promotes identification of underlying concepts and theories that will serve as the basis of conducting research in a focused area, including relevant social determinants of health and health disparities and their relationship with health behaviors and health related outcomes. Students conduct a theoretically guided synthesis of the literature related to a selected phenomenon of interest to identify potential gaps in knowledge and directions for future research.

NRPHD XXX: Measurement and Instrumentation 3 SH
(Replaces NRPHD 742 Advanced Measurement Strategies for Vulnerable Populations course)
Course Description: This course provides in-depth study of the major techniques of quantitative measurement used in nursing research. Research techniques related to data collection by physiological instrumentation, observation, interview, and questionnaire are explored, as well as how they are adapted for use in different target populations. Reliability, validity and common types of error are also covered in depth. Students will evaluate measurement and instrumentation in published studies. Students will gain practical experience in measurement within their area of interest.

NRPHD XXX: Scholarly Synthesis of Scientific Literature 3 SH
(formerly NRPHD 744 Application of Theory to Research)
Course description: This course builds upon foundations constructed in the previous theory courses to further explore and develop the theoretical foundation of a research question and problem. Course activities facilitate students' identification and understanding of theoretical perspectives appropriately aligned with a specific research problem, resulting in a synthesis document that shapes their area of inquiry. Emphasis is placed on developing a theoretical approach that takes into consideration the social and cultural variations and needs of diverse populations. Successful completion of the course requires students to produce a publishable review manuscript that provides a synthesis of the research literature on the selected research topic.

NRPHD 801: Advanced Quantitative Research Methods 3 SH
Course description: Advanced study of quantitative methods, designs, and analyses in the study of nursing science. The goal is to facilitate the student's ability to integrate design and analysis into a proposed study that advances the health services knowledge.

NRPHD 990: Dissertation [Variable SH]
Course description The dissertation course provides students, who have passed the Comprehensive Exam and entered Candidacy, the structure to complete the dissertation research requirements. During the first semester of NRPHD 990, students refine and defend the Dissertation Research Proposal. The dissertation proposal is the first step of dissertation research and consists of: 1) an approved written document, and 2) a successful oral defense. Procedures of dissertation proposal development and defense are detailed in the PhD Guidelines. Upon successful completion of the oral dissertation proposal defense, the student may begin the dissertation research after obtaining Institutional Review Board (IRB) approval. During subsequent semesters of NRPHD 990, students conduct the dissertation study, develop the dissertation compendium, and finally defend the doctoral dissertation, while maintaining the rigor of their proposed research and acting responsibly in the conduct of research. Procedures for conduct of dissertation research, the dissertation compendium and the final defense are detailed in the PhD Guidelines. A total of fourteen (14) credit hours of NRPHD 990 are required. Credits above that amount may be required, at 3 credits per semester, until the dissertation work is completed.

Total Credit Hours Required: 68

Curriculum by Year					
Course Name	**Credit Hours**	**Course Name**	**Credit Hours**	**Course Name**	**Credit Hours**
Year 1					
Fall		**Spring**		**Summer**	
Philosophical and Theoretical Underpinnings of Nursing Science	3	Advanced Quantitative Research Methods	3	Analysis & Application of Theories, Frameworks, and Models	3
Foundations of Scholarship in Nursing Science	3	Qualitative Research Methods	3	Measurement & Instrumentation	3
Design & Methods of Scientific Inquiry	3	Advanced Health Policy & Advocacy	3	Trends in Dissemination & Implementation Science	1
Trends in Symptom Science & Self-Management of Chronic Conditions	1	Trends in Patient & Community Engagement in Research	1	Mixed Methods Research	2
Total Semester Hours	10	Total Semester Hours	10	Total Semester Hours	9
Year 2					
Fall		**Spring**		**Summer**	
Applied Statistical Methods for Nursing Research	3	Advanced Applied Statistical Methods for Nursing Research	3	Comprehensive Exam	4
Scholarly Synthesis of Scientific Literature	3	Applied Study Design & Methods	3		
Research Ethics	3	Mentored Research & Scholarship	3		
Intervention Research	2	Trends in Technology Science	1		
Total Semester Hours	11	Total Semester Hours	10	Total Semester Hours	4

Course Name	Credit Hours	Course Name	Credit Hours	Course Name	Credit Hours
Year 3					
Fall		Spring		Summer	
Dissertation (Proposal defense)	5	Dissertation	5	Dissertation	4
Total Semester Hours	5	Total Semester Hours	5	Total Semester Hours	4

A minimum of fourteen (14) credit hours of Dissertation work is required. Credits above 14 credit hours may be required, at 3 credits per semester, until the dissertation work is completed.

Similar Programs in South Carolina offered by Public and Independent Institutions
Identify the similar programs offered and describe the similarities and differences for each program.

In ten similar PhD in Nursing Science programs nationwide, the credit hour requirements range from 57 to 93 credits.

Program Name and Designation	Total Credit Hours	Institution	Similarities	Differences
Doctor of Philosophy in Nursing Science	75 post-BSN 57 post-MSN	University of South Carolina College of Nursing	Both PhD in Nursing Science degrees that can be completed in 3 years.	University of South Carolina CON provides an executive style weekend program with online learning activities. MUSC CON is an asynchronous online program with 4 targeted learning intensives to evaluate research competencies.

Faculty

Rank and Full- or Part-time	Courses Taught for the Program	Academic Degrees and Coursework Relevant to Courses Taught, Including Institution and Major	Other Qualifications and Relevant Professional Experience (e.g., licensures, certifications, years in industry, etc.)
See attached faculty list	Faculty are qualified to teach multiple courses; faculty to receive course assignments Summer 2020; all faculty engage in dissertation advising	See attached; all faculty have terminal degree (PhD) except one (who has expertise in Biostatistics) and conduct nursing science research	See attached; the majority of faculty also hold nursing licensure

Total FTE needed to support the proposed program:

Faculty: 16 faculty are currently involved in the program (all are full time faculty members, but none devote fulltime effort to teaching); an additional faculty member will be hired (see below), and another fulltime faculty will have a greater percentage of her effort protected for teaching in the program (thus 1 new faculty and addition of 0.5 FTE protected time for a current faculty member)
Staff: 1 Graduate Program Coordinator
Administration: 1 Program Director

Faculty, Staff, and Administrative Personnel
Discuss the Faculty, Staff, and Administrative Personnel needs of the program.

To meet the demands of the modified PhD in Nursing Science program, the CON will need 1.5 new FTE faculty for teaching, and workload will be monitored to determine if additional effort is needed as the program grows. The faculty member to be hired will have experience as a PhD researcher and experience in teaching will be critical. No additional staff or administrative personnel are needed.

Resources

Library and Learning Resources
Explain how current library/learning collections, databases, resources, and services specific to the discipline, including those provided by PASCAL, can support the proposed program. Identify additional library resources needed.

The MUSC library serves as a database and knowledge center, academic computing support unit, and electronic education center. Online resources include major biomedical databases and the existing resources the library offers are sufficient to continue to serve the PhD Nursing Science program.

Student Support Services
Explain how current academic support services will support the proposed program. Identify new services needed and provide any estimated costs associated with these services.

No new university student support services will be required to support the program; the existing university student support services will be used. Student support services include the Center for Academic Excellence and the Writing Center. Current MUSC students, both online and oncampus, report high satisfaction with the university support services that will be available to the students in this program

Physical Resources/Facilities
Identify the physical facilities needed to support the program and the institution's plan for meeting the requirements.

The Nursing Technology Center (NTC) provides optimal information technology equipment and resources to support the College's faculty, staff and students. The NTC also began developing videos to assist with ongoing College of Nursing training needs.

All didactic courses will be conducted online using MUSC's learning management system. Other online resources such as videoconferencing, Skype, Fuze, Wikis, course content capture systems, podcast, and vodcast (video on demand clips) will be used in many of the courses. These resources facilitate and assist students in an asynchronous learning environment to gain the necessary knowledge and skills required for the PhD degree. The CON currently utilizes all these programs so no new programs or software will be needed.

Equipment
Identify new instructional equipment needed for the proposed program.

No new instructional equipment is needed.

Impact on Existing Programs
Will the proposed program impact existing degree programs or services at the institution (e.g., course offerings or enrollment)? If yes, explain.

☐Yes

☒No

Financial Support

Sources of Financing for the Program by Year												
	1st		2nd		3rd		4th		5th		Grand Total	
Category	New	Total	New	Total	New	Total	New	Total	New	Total	New	Total
Tuition Funding	$279,684	$1,108,368	$570,555	$1,632,326	$872,950	$1,611,476	$1,010,228	$1,837,639	$1,030,432	$1,874,391	$3,763,849	$8,064,200
Program-Specific Fees	$16,800	$62,440	$34,272	$92,811	$52,436	$94,572	$60,616	$107,224	$61,829	$109,369	$225,953	$466,487
Special State Appropriation												
Reallocation of Existing Funds												
Federal, Grant, or Other Funding		$58,706		$58,706		$58,706		$58,706		$58,706		$293,530
Total	$296,484	$1,229,514	$604,827	$1,783,914	$925,386	$1,764,754	$1,070,844	$2,003,569	$1,092,261	$2,042,467	$3,989,802	$8,824,217
Estimated Costs Associated with Implementing the Program by Year												
	1st		2nd		3rd		4th		5th		Grand Total	
Category	New	Total	New	Total	New	Total	New	Total	New	Total	New	Total
Program Administration and Faculty/Staff Salaries	$251,680	$1,114,818	$256,714	$1,137,114	$261,848	$1,159,856	$267,085	$1,183,054	$272,427	$1,206,715	$1,309,753	$5,801,557
Facilities, Equipment, Supplies, and Materials	$4,250	$26,250	$9,175	$33,375	$5,143	$31,763	$5,657	$34,939	$6,222	$38,433	$30,447	$164,759
Library Resources												
Other (specify) A&S and SIF	$146,040	$532,500	$275,943	$749,681	$407,269	$773,262	$463,122	$852,145	$467,199	$860,761	$1,759,573	$3,768,349
Total	$401,970	$1,673,567	$541,832	$1,920,170	$674,260	$1,964,881	$735,863	$2,070,137	$745,848	$2,105,908	$3,099,773	$9,734,664
Net Total (Sources of Financing Minus Estimated Costs)	($105,486)	($444,053)	$62,996	($136,257)	$251,126	($200,127)	$334,980	($66,568)	$346,413	($63,442)	$890,029	($910,447)

Note: New costs - costs incurred solely as a result of implementing this program. Total costs - new costs; program's share of costs of existing resources used to support the program; and any other costs redirected to the program.

Medical University of South Carolina, PhD, Nursing Science, CAAL, 07/09/2020 – Page 16

Budget Justification
Provide an explanation for all costs and sources of financing identified in the Financial Support table. Include an analysis of cost-effectiveness and return on investment and address any impacts to tuition, other programs, services, facilities, and the institution overall.

Costs are 100% funded through the College of Nursing. Tuition Revenue listed above assumes the following: Tuition revenues are based on the FY20 MUSC tuition for full time enrollment including fees with rate increases of 2% per year for each year thereafter. Annual enrollment for the modification of the program beginning at 10 students, 70% in-state and 30% out of state, with $1,039,038 in new revenue being attributed to in-state students N=(3) and $2,950,764 in new revenue being attributed to out-of-state students (n=7).

The PhD Program will admit up to 10 additional students per year for the first year and 15 students per year thereafter.

Program Administration: 0.50 FTE of the Director of the PhD Program already exists and is currently funded by the College of Nursing (CON); therefore, this is not a new expense and is not included in the table above.

Faculty Salaries: The equivalent of 1.5 FTEs including of an Endowed Chair for the Phd program is included in the figures above as these positions will need to be hired to fulfill the additional responsibilities needed to extend the PhD Program. The FTE equivalents and Endowed Chair to be hired will complement expertise already available across the current CON PhD. The effort and figures in the table include fringe benefit costs.

Supplies and Materials: Computers will be purchased upon hire of the 1.5 FTE equivalents and the Endowed Chair. This cost is reflected in the figures in the table above.

Facilities: The College is assessed Administration & Support taxes as well as a Strategic Investment Fund allocation based on drivers associated with the increased enrollment and tuition revenue. The cost of facilities used by the faculty assigned to the program is covered in these assessments as represented in the "Other" cost line item as shown above.

Evaluation and Assessment

Program Objectives: Upon completion of the post-BSN or post-MSN to PhD in Nursing Science, graduates will:

Program Objectives	Student Learning Outcomes Aligned to Program Objectives	Methods of Assessment	Courses in which the Assessment occurs
Utilize philosophical, theoretical, and conceptual foundations to guide the generation of new knowledge in health care.	Distinguish among the ontological, epistemological, and methodological implications of various philosophical worldviews or paradigms related to the development of nursing knowledge and ways of knowing.	Written assignments and reflection, course specific oral exams, written exams, comprehensive exam, dissertation work	• Philosophical and Theoretical Underpinnings of Nursing Science • Analysis & Application of Theories, Frameworks, and Models • All trends courses • Comprehensive Exam • Dissertation
Develop expertise within an area of inquiry, identifying critical gaps in knowledge and reflecting a nursing and transdisciplinary perspective.	Formulate a research trajectory in a defined area of interest addressing health disparities and equity in diverse populations as applicable. Conduct a systematic search of the literature and build an evidence table. Synthesize empirical evidence from research publications in an area of interest addressing health disparities and equity in diverse populations as applicable. Apply principles of scientific writing throughout course activities, including critical appraisal of scientific publications. Articulate a clearly defined research problem and potential research questions related to the student's area of interest.	Systematically conducted review papers, critical appraisal of research literature, research question(s), aims page, course specific oral exams, comprehensive exam, dissertation work	• Foundations of Scholarship in Nursing Science • Design & Methods of Scientific Inquiry • Scholarly Synthesis of Scientific Literature • All methods courses • All trends courses • Comprehensive Exam • Dissertation
Conduct theory-guided research to test, generate, and extend knowledge that informs health care systems, health policy, and the evidence base for practice.	Defend the use of a research paradigm to guide the generation of new knowledge about a specific research problem. Defend appropriateness of a particular study design in addressing a research gap and its use within social and cultural variations in populations.	Develop study proposal to inform dissertation work, written assignments and reflections, systematically conducted review papers, comprehensive exam, dissertation work	• All methods courses • Scholarly Synthesis of Scientific Literature • Comprehensive Exam • Dissertation

	Describe fundamental principles of core and complex mixed methodological designs. Demonstrate a theoretically guided synthesis of existing research in the student's area of interest using a systematically conducted review approach.		
Demonstrate proactive leadership related to a selected area of scholarship.	Utilize organizational change theory to develop a policy and advocacy campaign designed to influence key policy issues in nursing to advocate for the nursing profession, social justice, equity, and ethical policies through active participation at the local, state, and national levels. Participate in leading the analysis, development, and implementation of health policy Generate resolutions to ethical dilemmas in research.	Health policy analysis, health policy paper, ethical and responsible conduct of research readings and written assignments including research proposal section and IRB submission, comprehensive exam, dissertation work, publication(s) submission	• Advanced Health Policy & Advocacy • Research Ethics • Scholarly Synthesis of Scientific Literature • Comprehensive Exam • Dissertation
Model values consistent with integrity in science and professional nursing.	Analyze the utilization of healthcare population data to demonstrate a need for health policy changes Participate in leading the analysis, development, and implementation of health policy. Analyze aspects of health disparities and health equities that necessitate special considerations in conducting research. Analyze ethical dilemmas that may contribute to disparities in human subjects research.	Statistics courses readings, exercises and assignments including use of SPSS and analysis of data, health policy paper, readings and written assignments on social determinants of health, ethical readings and written assignments, comprehensive exam, dissertation work	• Applied Statistical Methods for Nursing Research • Advanced Applied Statistical Methods for Nursing Research • Advanced Health Policy & Advocacy • Analysis & Application of Theories, Frameworks, and Models • Measurement & Instrumentation • Research Ethics • Comprehensive Exam • Dissertation

Explain how the proposed program, including all program objectives, will be evaluated, along with plans to track employment. Describe how assessment data will be used.

Each academic program at MUSC reports student learning outcomes and program outcomes annually to the Office of Institutional Effectiveness. Quantitative outcomes (e.g., percent of students that demonstrate they achieved each outcome) are tracked longitudinally, and every three years, faculty report how results were used to make changes to the program to improve outcomes. In addition to program specific outcomes, the university also tracks on time graduation rate; in the last 3 year, ≥ 80% of PhD Nursing students have graduated within 150% of program length.

Employment for graduates is tracked by an annual College of Nursing Alumni survey, the Bursar's Office/ESCI Loan servicer if the graduate received Nurse Faculty Loan Program (NFLP) funding, and the National Science Foundation Survey of Earned Doctorates Survey (SED).

Accreditation and Licensure/Certification

Will the institution seek program-specific accreditation (e.g., CAEP, ABET, NASM, etc.)? If yes, describe the institution's plans to seek accreditation, including the expected timeline.

☐Yes

☒No

Will the proposed program lead to licensure or certification? If yes, identify the licensure or certification.

☐Yes

☒No

Explain how the program will prepare students for this licensure or certification.

If the program is an Educator Preparation Program, does the proposed certification area require national recognition from a Specialized Professional Association (SPA)? If yes, describe the institution's plans to seek national recognition, including the expected timeline.

☐Yes

☒No

MUSC College of Nursing Full-time Faculty qualified and experienced to teach in the PhD Nursing Science academic program

1.   Julie Barroso, PhD, ANP, RN, FAAN
Qualitative methods, qualitative metasynthesis, mixed methods, all aspects of HIV infection, stigma reduction interventions for HIV-infected women, interventions to reduce HIV-related fatigue, the use of technology in symptom management.

2.   Jessica Chandler, PhD
Utilizing technology for primary and secondary prevention of various chronic diseases including obesity, prehypertension, hypertension, chronic kidney disease, and sarcoidosis.

3.   Tatiana M. Davidson, PhD
Mental health care disparities, racial/ethnic minority youth mental health, technology-based treatment delivery, cultural-modification of evidence-based treatments. posttraumatic stress disorder, depression.

4.   Mary Dooley, MS
Biostatistics, risk prediction modeling

5.   Teresa J. Kelechi, PhD, GCNS, CWCN, FAAN
Geriatrics, skin temperature self-monitoring, chronic venous disease, biometrics, cryotherapy, leg ulcer prevention, wound healing.

6.   Diana Layne, PhD, RN
Negative behaviors among healthcare professionals and consequences of these behaviors on patient safety culture and patient outcomes, healthcare quality, hospital acquired infections

7.   Cristina M. Lopez, PhD
Engagement in behavioral health services, trauma focused mental health treatment, ethnic minority family and youth risk prevention, health promotion/prevention in underserved populations, adolescent depression.

8.   Gayenell S, Magwood, PhD, RN, FAHA, FAAN, Alumnus CCRN
Health disparities, health literacy, quality of life, multiple risk factor reduction in people at risk for and/or with diabetes and cardiovascular disease, community-based participatory research methods, obesity.

9.   Sarah Miller, PhD, RN
Health disparities in asthma & COPD, perception of dyspnea, psychophysiology, complex neuropathologies & impaired airway defense, mechanisms, psychological comorbidities in chronic respiratory diseases, telehealth in asthma & COPD.

10. Martina Mueller, PhD, MS, RN
Data management and data quality control, bioinformatics, biostatistics, neural network methodology in predicting outcomes, development of applications for decision support in the care of premature infants using machine learning algorithms.

11. Lynne Nemeth, PhD, RN, FAAN
Qualitative methods, health services research, nursing workforce improvement, evaluation of health information technology, primary care quality and safety, implementation science, organizational change.

12. Susan Newman, PhD, RN, CRRN
Spinal cord injury rehabilitation, self-management of chronic conditions, peer navigation & peer mentoring, community participation, independent living, disability-related health disparities, community-engaged research, intervention development and testing.

13. Michelle Nichols, PhD, RN
Health promotion/disease prevention in underserved and vulnerable populations, health disparities among racial and ethnic minorities, community-based participatory research methods, global health, ethics (clinical and research), children, adolescents, and families, veteran and military health, chronic health conditions (obesity, diabetes, and metabolic syndrome).

14. Shannon M. Phillips, PhD, RN, Alumnus CCRN
Children with medical complexity, children and adolescents with sickle cell disease, health care utilization, access to care, rural disparities, community health, dissemination and implementation of evidence-based interventions for health promotion in children, adolescents, and families.

15. Suparna Qanungo, PhD
Global health and global communities with specific interest in low and middle income countries, cancer biology, biochemistry and pathophysiology of chronic diseases, interprofessional collaboration in research and practice, advancing nursing and community research through telehealth applications, literature review process, research data management, quality improvement in practice settings.

16. Kenneth J. Ruggiero, PhD
Technology applications in health care, health promotion and disease prevention, health and mental health disparities, children and families, traumatic stress, disaster response and recovery, self-management interventions, posttraumatic stress disorder, depression.

Office of the
Vice President for Academic Affairs
and Provost

Colcock Hall
179 Ashley Avenue
MSC 002
Charleston, SC 29425-0020
Tel 843 792 3031
Fax 843 792 5110

June 25, 2020

Re: New Program Proposal for PhD Nursing Science

I write to attest that in accordance with recommendation by CHE's CAAL, MUSC confirms that the new program proposal for PhD Nursing Science remains mission critical to MUSC and we believe a necessary and viable program, despite disruptions in higher education caused by COVID-19.

Sincerely,

Suzanne Thomas, PhD
Assistant Provost for Institutional Effectiveness
Medical University of South Carolina

843-792-1533
thomass@musc.edu
MSC 175, Charleston, SC 29425