

**New Program Proposal
Master of Science in Exercise and Sport Science
University of South Carolina Upstate**

Summary

University of South Carolina (USC) Upstate requests approval to offer a program leading to the Master of Science in Exercise and Sport Science with concentrations in Psychosocial Kinesiology, Exercise Physiology, and Cardiac Rehabilitation to be implemented in August 2021. The proposed program is to be offered through blended distance instruction. The following chart outlines the stages of approval for the proposal. The Committee on Academic Affairs and Licensing (CAAL) voted to recommend approval of the proposal. The full program proposal and support documents are attached.

Stages of Consideration	Date	Comments
Program Proposal Received	10/20/20	Not Applicable
Staff comments to the Institution	10/27/20	Staff requested the proposal include additional information about: <ul style="list-style-type: none"> • Institutional approvals; • Student interest and prospective employer feedback; • Local and state-level employment projection data; • Detailed course prerequisites and implementation; • Similar programs, and faculty required for the proposed program; • Physical and facility resources; • The budget and narrative to reflect funding; and • Plans to evaluate and assess the proposed program objectives and student learning outcomes.
Revised Program Proposal Received	11/2/20	The revised proposal satisfactorily addressed the requested revisions.
ACAP Consideration	11/19/20	Representatives from University of South Carolina (USC) Upstate introduced the need for the Master of Science (M.S.) in Exercise and Sport Science with concentrations in Psychosocial Kinesiology, Exercise Physiology, and Cardiac Rehabilitation within the School of Education, Human Performance, and Health (SoEHPH). The proposed program will provide an opportunity for existing place-bound Exercise and Sport Science professionals in the Upstate region to further their education and expand career opportunities and employability through part-time or full-time graduate study. The proposed program will prepare students for careers or career advancement in multiple health-related specialties and professions and respond to needs identified by area partners and healthcare systems, including South Carolina's workforce development plan and regional partners in the Spartanburg Regional Healthcare System. The M.S. in Exercise and Sport Science will focus on applied research, health promotion, human performance, and cardiac rehabilitation.

Stages of Consideration	Date	Comments
		Members of the Advisory Committee on Academic Programs (ACAP) discussed the proposal. Staff comment included appreciation for the proposal. ACAP voted unanimously to recommend approval of the program proposal. Staff transmitted remaining questions for additional clarity.
Staff comments to the Institution	11/25/20	Staff requested the proposal be revised to: <ul style="list-style-type: none"> • Verify the Board of Trustees approval date; • Explain how the proposed outcomes relate to the information included in the <i>Evaluation and Assessment</i> table; • Identify the proposed program design partners and include any letters of support; • Outline any existing transfer and articulation agreements that may facilitate access to the proposed program; • Include prospective salary estimates; and • Incorporate responses to inquiries from CHE staff regarding details related to the list of similar programs.
Revised Program Proposal Received	12/17/20 12/18/20	The revised proposal satisfactorily addressed the requested revisions.
Staff comments to the Institution	2/4/21	CAAL requested USC Upstate representatives respond to inquiries about the following: <ul style="list-style-type: none"> • Assessment of need, including the outcome of M.S. programs at USC Upstate, feeder sources for students, estimate percentage of traditional vs. online attendance, impact of M.S. degrees on overall “cost to educate” and tuition for traditional bachelor’s students, additional letters of support, and market need; • Time to completion and an accelerated program option; • Methodology for curriculum development; and • Number of faculty needed for implementation.
Supplemental Documentation Received	2/8/21	USC Upstate representatives provide responses and supplemental documentation as requested by CAAL.
CAAL Consideration	2/12/21	By unanimous consent, the Committee on Academic Affairs and Licensing (CAAL) favorably commended to the Commission the consent agenda proposed programs, including the Master of Science in Exercise and Sport Science.

Review

During review the committee made inquiry about program development and need, curriculum development, faculty recruitment, general student recruitment, and online mode of delivery. Institutional representatives satisfactorily responded to committee inquiries.

Recommendation

The Committee on Academic Affairs and Licensing recommends the Commission approve the program leading to the Master of Science in Exercise and Sport Science with concentrations in Psychosocial Kinesiology, Exercise Physiology, and Cardiac Rehabilitation to be implemented in August 2021.

USC Upstate Student and Program Data

Graduate In-/Out-of-State Enrollment, Fall 2018	74 (53.24%) / 65 (46.76%)
Number of Approved Programs in 10 Yrs. (FY 2009-2018)	13
Number of Terminated Programs in 10 Yrs. (FY 2009-2018)	3

Industry related Occupational Wages and Projections in South Carolina, 2018 – 2028*

Occupational Field ¹	2019 Median Income ²	2018-2028 Estimated Employment ³	2018-2028 Projected Employment	Total 2018-2028 Employment Change	2018-2028 Annual Avg. Percent Change	Total Percent Change
Healthcare Practitioners and Technical ⁴	\$72,234	129,983	143,393	13,410	0.99%	10.32%

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. (2020). Occupational Employment and Wage Rates (OES) for All Major Groups in South Carolina in 2019 [Data file]. Retrieved from <https://jobs.scworks.org/vosnet/lmi/default.aspx?pu=1>.

³ SC Department of Employment & Workforce (DEW), Labor Market Information. (2020). Occupational Projections (Long-term) for Multiple Occupations in South Carolina in 2018-2028 [Data file]. Retrieved from <https://jobs.scworks.org/vosnet/lmi/default.aspx?pu=1>

⁴ Total median income for the following categories is adjusted to accommodate occupations with missing median income data.

* Data downloaded December 18, 2020; Most recent data available.

NEW PROGRAM PROPOSAL FORM

Name of Institution: USC Upstate

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

Master of Science in Exercise and Sport Science

Concentrations: Psychosocial Kinesiology

Exercise Physiology

Cardiac Rehabilitation

Program Designation:

Associate's Degree Master's Degree

Bachelor's Degree: 4 Year Specialist

Bachelor's Degree: 5 Year 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

No

Proposed Date of Implementation: August 2021

CIP Code: 26.0908

Delivery Site(s): University of South Carolina at Upstate

Delivery Mode:

Traditional/face-to-face

*select if less than 25% online

Distance Education

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):

Nur Tanyel

Professor, Department Chair of Human Performance and Health

(864) 503-5659, ntanyel@uscupstate.edu

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

School of Education,
Human Performance, and Health: 2/24/2020,
Graduate Committee: 3/25/2020
Academic Affairs Committee: 3/27/2020
Faculty Senate: 4/17/2020

Provost for Academic Affairs: 12/16/2020
Chancellor: 12/16/2020
President: 6/19/2020
Board of Trustees: 6/19/2020

Background Information

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

The University of South Carolina Upstate School of Education, Human Performance, and Health proposes a graduate Program in Exercise and Sport Science. The proposed degree will provide an avenue to individuals with career or professional interests in Exercise Science focused on applied research, health promotion, human performance, and cardiac rehabilitation.

The purpose of this new program is to prepare place-bound students for careers or career advancement in multiple health-related specialties and professions within the broad scope of Exercise Physiology, Cardiac Rehabilitation, and Psychosocial Kinesiology, and to respond to the need identified by area partners and healthcare systems. The proposed program is designed to meet the needs of Exercise and Sport Science professionals in the Upstate region who wish to further their education expand their career opportunities and employability through graduate study part-time or full-time. The proposed program's focus on applied research will prepare graduates for careers in health and wellness, enable them to support and contribute to applied research, and assure they will be effective and impactful members of trans-disciplinary teams.

The graduate program in Exercise and Sport Science is designed to align with the institutional mission and strategic plan by providing rigorous and career relevant education, as well as to support the institution's ability "to prepare our students to participate as responsible citizens in a diverse, global, and knowledge-based society, to pursue excellence in their chosen careers and to continue learning throughout life." The proposed Masters in Exercise and Sport Science program would provide an avenue for professionals in the region to grow their specialization, pursue and advance their professional knowledge, and develop appropriate applied research skills.

The MS in Exercise and Sports Science program will:

1. Prepare graduates able to demonstrate a comprehensive understanding of the interdisciplinary field of exercise and sport science.
2. Develop competent practitioners able to apply concepts and theories, as well as utilize research in the delivery of services to individuals and populations.
3. Prepare graduates to conduct and utilize high quality applied research in exercise and sports science to meet workforce needs.

The relationship between program outcomes (above) and student learning outcomes is detailed in the narrative accompanying the Evaluation and Assessment table (p. 18).

Assessment of Need

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

The School of Education, Human Performance, and Health (SoEHPH) and USC Upstate are focused on assisting place-bound populations pursuing graduate credentials, both in response to the State of South Carolina's workforce development plan and to serve our regional partners including Spartanburg Regional Healthcare System. USC Upstate and SoEHPH have designed this program to be appealing to part-time students and plan that approximately 40% of projected student enrollment will be students enrolled in a single course each semester, allowing us to plan to serve our working adult community.

As a regional public institution, USC Upstate and SoEHPH are proud to develop and offer graduate experiences and degrees that are practitioner-focused, exposing graduate students to research and developing their ability to apply research to their practice. This approach allows our students to learn to utilize research studies in their daily work, to function as high-quality members of trans-disciplinary

healthcare teams, and to supply valid and reliable data for physicians and researchers as a part of their work. The proposed graduate degree in Exercise Science does not include a thesis option, but instead, utilizes a culminating applied research project, likely linked to the student's current position if employed.

USC Upstate is targeting and catering to regionally based working and part-time students not currently served by existing excellent programs within the U of SC system (The Arnold School of Public Health), or through other programs in the state of South Carolina. USC Upstate and SoEHPH have constructed this program to facilitate graduate study for professionals within our regional healthcare system who have place-based limitations as working adults and can enroll in a graduate program on a part-time basis only. USC Upstate and SoEHPH view the potential student pool for this degree as non-competing and non-overlapping with the program offered at U of SC and the Arnold School of Public Health. Additionally, the demand or justification for this degree at USC Upstate documented in the proposal reflects demand within this pool of part-time working adults in the upstate region.

Upstate and SoEHPH are committed to working with our partners, developing course offerings around the scheduling needs of their staff, and assisting adults in the field hoping to advance their skills and positions but who may lack the rigorous or substantial academic background. The primary partner in the development of this program has been Spartanburg Regional Health Care System and Dr. Robert Brown. Dr. Brown has been working with our undergraduate students and faculty and identified the need for both continuing educational opportunities and additional professional training for our students (see attached letter of support).

The need for professionals in the field of Exercise Science extends into both the public and private sectors. Demand is expected to rise as hospitals, businesses, and health related organizations emphasize exercise and preventive care in response to regional community initiatives and population growth, business emphasis on wellness and employee health, and cardiovascular and pulmonary rehabilitation professional development identified by the regional healthcare system and increased. According to the U.S. Bureau of Labor Statistics (2019), the expected growth in this field is 10% within the next decade. The degree will assist professionals and aspiring students to act on that demand despite their need to live and work locally – a factor that prohibits enrollment in other programs in the state.

The Master in Exercise and Sport Science Program and the combination of concentrations that the USC Upstate School of Education, Human Performance, and Health proposes is offered by a few institutions in South Carolina, but importantly none are available in the Upstate region in a manner accessible to working adults attempting to pursue graduate education as part-time students. As the economic growth of the state continues to bring in a variety of businesses to the Upstate region, graduates of the proposed Exercise and Sport Science program will help meet the workforce development needs of both healthcare organizations and businesses in the region by allowing interested place-bound adults to pursue the degree full or part-time.

Transfer and Articulation

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

There are no special articulation agreements for the proposed program. The Program will follow the existing USC Upstate agreements.

The transfer and articulation of graduate credit is governed by the University of South Carolina Upstate Academic Catalog, as well as the rule and requirements of the University of South Carolina. Transfer and articulation requirements appear on [page 265 of the 2020-2021 catalog](#):

Graduate Transfer Credit. Transfer work from a regionally accredited institution applicable to a master's degree MUST BE WITHIN THE SIX YEARS PRIOR to USC Upstate degree completion. A maximum of twelve semester hours credit (nine if part of a master's degree at the other institution) may be considered, subject to these additional provisions: (a) the courses must be documented by an official transcript mailed to the admissions office by the awarding institution; (b) the transcript must clearly indicate that graduate

credit was awarded or specifically verified by the institution's registrar or graduate dean; (c) the courses must be judged appropriate by the student's advisor, approved by the appropriate graduate administrator, and listed on an approved program of study; (d) courses graded lower than B are not transferable; (e) USC Upstate provides no revalidation mechanism for courses completed at another institution.

Employment Opportunities

Occupation	State		National		Data Type and Source
	Expected Number of Jobs	Employment Projection	Expected Number of Jobs	Employment Projection	
Exercise Physiologist and Kinesiotherapy	250	300	15,800	17,300 (10% increase in the next decade)	U.S. Bureau of Labor of Statistics https://www.bls.gov/ooh/healthcare/exercise-physiologists.htm#tab-6
Healthcare Practitioners-- Cardiac Rehabilitation	980	1050	119,700	131,500 (10% increase in the next decade)	U.S. Bureau of Labor of Statistics https://www.bls.gov/ooh/community-and-social-service/rehabilitation-counselors.htm#tab-6

Data source: U.S. Bureau of Labor of Statistics and HealthcareAdministration.com

Supporting Evidence of Anticipated Employment Opportunities

Provide supporting evidence of anticipated employment opportunities for graduates.

According to U.S. Bureau of Labor of Statistics and Projections Central data, demand for Healthcare Practitioners including Cardiac Rehabilitation practitioners as well as Exercise Physiologist and Kinesiotherapy practitioners will increase 10% between the years 2018-2028. The statewide need for an educated workforce in this field is 20% higher than national projections. Furthermore, this prediction is higher than the average (7%) nationwide for other fields. These positions require specific qualifications, capacities, and skills that result from specific professional preparation, experiences, and coursework.

The U.S. Bureau of Labor employment prospects and available positions in the state imply strong workforce demand. Additionally, community partners including area health organizations and hospital systems indicated the need for this specialized workforce in the Upstate. According to the Indeed website (February, 2020), there are 112 Exercise and Sport Science full-time positions advertised in the Upstate and surrounding area. The employers include the Spartanburg Medical Center, Prisma Health, and Novant Health. Currently, over a hundred full-time positions are locally posted for employment in the Cardiac Rehabilitation field, including employers such as Encompass Health, Greenville Health System, and Halcyon Rehabilitation.

Employment Opportunities – Specific

Position	Median Salary	Work Environments	Position Description
Exercise Physiologist	\$49,170	Health Care Facilities, Regional Health Centers, State and Local Health Service Providers, Outpatient and Rehabilitation Facilities; Independent Contractor or Self-Employed	Performs stress tests or cardiopulmonary stress tests; Educates patients on risk factor management prior to Heart sense scan or in clinical area; Performs patient instructions as directed by physician; Assists nurses with triage. Nurse notes sent to physician for review; Responsible for prescription line; Performs exercise consults as needed
Recreational Therapist	\$48,220-\$50,000	Hospitals, Senior Care, Psychiatric and Mental Health Facilities, Correctional facilities, Physical Rehabilitation and Post-Surgical Centers	Provides recreation or creative arts therapy interventions for groups and individual patients. Individual assessments of assigned patient caseload and attending treatment team meetings. Group and individual recreation or creative therapy services. Recreation therapy treatment include a variety of treatment programs that promote functional abilities; promote the acquisition and application of leisure-related skills, knowledge, attitudes, and behaviors; and provide opportunities to utilize leisure interests for improvement of healthy, independent, and successful leisure lifestyle. Documentation, analysis, and report of patient contact in electronic medical record.
Exercise Specialist	\$47, 674-\$55,000	Health Care Facilities, Regional Health Centers, State and Local Health Service Providers, Outpatient and Rehabilitation Facilities	Functions in a variety of roles in the inpatient and outpatient settings and assists with daily inpatient rounds, client interview processes, implementation of walk studies, lifestyle modification goal setting and measurement and client scheduling. Leadership of individual and group, patient and significant other education and exercise sessions. Additional responsibilities include community events, health fairs, public speaking requests, development /implementation of wellness programming
Clinical Exercise Physiologist	\$81,623	Medical Centers and Health Care Systems	Lead patients in all disciplines of cardio-pulmonary rehabilitation in accordance with current cardiac and pulmonary policies and procedures with an emphasis on cardiac and pulmonary health as it relates to exercise. Formulate and modify exercise prescriptions for new cardio-pulmonary rehabilitation participants based on medical history and special needs.
Cardio Pulmonary Specialist	\$81,100	Hospitals, Regional Health Centers, Physical Therapy and Medical Practices, Post-Surgical and Rehabilitation Facilities	Assesses, plans, implements, documents, coordinates, and manages patient care according to department and hospital standards and giving consideration to age-specific accommodations. Communicates and collaborates with patients, physicians, family members and other health care disciplines in order to achieve excellence in patient care. Maintains clinical competency according to

Position	Median Salary	Work Environments	Position Description
			unit-specific standards. Evaluation and prescription of exercise programming and discharge. Lifestyle management education around cardiac and pulmonary risk factors.

Description of the Program

Explain how the enrollment projections were calculated.

Enrollment estimates are based on the Exercise and Sport Science undergraduate students' interest to further their education with a graduate degree with a particular focus in exercise physiology, cardiac rehabilitation, and psychosocial kinesiology (i.e., to be offered as concentrations in this graduate program). Additional enrollments are drawn from students graduating in other majors at USC Upstate, including nursing, education, biology, and chemistry. In addition to recent graduates, this program will attract professionals working in the hospital systems, including our partnership with Spartanburg Regional. Our estimated initial enrollment is 10 students. USC Upstate anticipates a 20% increase in enrollment in the first five years, and after the first five years projects maintaining the five-year enrollment figure, continuously supporting the enrollment of students to meet the professional development needs and scheduling limitations of regional businesses, organizations, and healthcare systems.

Projected Enrollment			
Year	Fall Headcount	Spring Headcount	Summer Headcount
2021-2022	10	12	
2022-2023	13	15	
2023-2024	16	19	
2024-2025	20	24	
2025-2026	24	30	

Additionally, because of the demographics of USC Upstate students and the appeal of this program to those currently working, the assumed allocation for all calculations is 40% of students attending will enroll for 3 credit hours per term, 35% will enroll for 6 credit hours per term and the remaining 25% will attend full-time (9 credit hours per term). No students will attend in summer.

Projected Enrollment by Credit Hour Carried				
Year	3 credit hours	6 credit hours	9 credit hours	Total
2021-2021	5	4	3	12
2021-2022	6	5	4	15
2022-2023	8	7	4	19
2023-2024	10	9	5	24
2024-2025	12	11	7	30

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

Yes

No

Curriculum

New Courses

List and provide course descriptions for new courses.

EXSC 700 Research Methods in Exercise Science

This course will serve as a forum for discussion on current trends and research in exercise and sport science, as well as a brainstorming unit for research study design.

EXSC 720 Epidemiology, Research & Practice

This course provides an in-depth analyses of the epidemiological study design, methods, and health outcomes in the field of physical activity. Students will engage critical thinking exercises and discussions on how epidemiological methods are used to study the relationships between physical activity and physical and mental health outcomes.

EXSC 730 Statistical Analysis in Health Application

Students will conduct, interpret, and present statistical analyses using computer software applied in Exercise and Sport Science. Students will applied descriptive statistics, correlations, regressions, t-tests, ANOVA tests, and non-parametric tests will be covered.

EXSC 740 Advanced Exercise Physiology

This course will focus on acute and chronic effects of exercise on the musculoskeletal, bioenergetics, and cardiorespiratory systems. Factors that affect exercise performance such as ergogenic aids, genetics, age, sex, and environmental conditions will also be discussed. Students will engage in classroom lectures, discussions of research, and conduct laboratory-based analysis of exercise physiology concepts.

EXSC 750 Advanced Sport Psychology

This course will focus on fundamental theories and principles essential to understanding the psychological and behavioral aspects of sport performance. The content includes the conceptual frameworks and the applied aspects of sport performance enhancement and mental skills, exercise behavior and motivation, sociological factors, and health and well-being. Students will engage in classroom lectures and discussions of research including future practitioners of coaching, teaching, sports medicine, counseling, sport management, and fitness instruction.

EXSC 755 Exercise and Brain Health

This course will examine the effects of exercise on the brain, mood, and cognition in normal functioning children and adults, as well as in special populations with dementia, ADHD, schizophrenia, depression, anxiety disorders, multiple sclerosis, and Parkinson's disease. The effects of exercise on cognitive and behavioral levels as well as the implications for public policies and therapies will be discussed.

EXSC 760 Lab Techniques in Exercise Science

Students will acquire and practice advanced laboratory techniques that measure various physiological and fitness parameters in the field of Exercise and Sport Science. Techniques will be learned for applications in clinical and research settings.

EXSC 765 Neuromuscular and Endocrine Physiology

The course will focus on the mechanisms that affect neuromuscular and endocrine function, particularly in response to acute and chronic physical activity. Biological regulation in healthy and unhealthy populations will be discussed. Students will engage in classroom lectures, discussions of research, and laboratory-based analysis of neuromuscular and endocrine physiology concepts.

EXSC 770 Advanced Cardiorespiratory Physiology

The course will encompass the principles and concepts of cardiorespiratory control and adaptations in response to exercise. Neural, endocrine, and intrinsic control of cardiac function, respiration, and

hemodynamics will be discussed. Students will engage in classroom discussions on cardiorespiratory physiology concepts and applied research.

EXSC 775 Cardiopulmonary Pathophysiology

The students will develop an understanding of cardiopulmonary physiology, ECG and pulmonary testing interpretation, and health-related applications. This course examines in detail the various parameters of the cardiopulmonary system, the implication of disease and structural abnormalities to these parameters, and the relationship of cardiopulmonary function to exercise adaptation. Emphasis will be placed on usage of the information in the clinical setting.

EXSC 780 Advanced Exercise Assessment and Prescription

This course will focus on the principles of exercise testing and prescription for general populations, special populations, and clinical populations. The class includes other aspects of fitness training such as behavior modification, metabolic equations, health history assessment, common medications, and emergency risk management.

EXSC 785 Clinical Chronic Disease Management & Preventative Medicine

This course is a comprehensive overview of the physical, physiological, and metabolic responses of the human body to exercise testing and training in healthy individuals and in those with metabolic, cardiovascular, and/or pulmonary disease. The focus will be on exercise as both treatment and prevention of disease, as well as managing healthy and clinical populations in a safe and professional setting. Current literature will be included to keep students up to date with novel treatments. An overview of environmental and legal considerations in the prescriptive process will also be discussed.

EXSC 798 Special Topics in Exercise Science

The students will conduct an independent pilot study of a local problem or a specialized subject area. Under the supervision of the instructor, the students will design the study's methodology and conduct data collection and analysis.

EXSC 800 Internship I

This course will provide practical experiences within several community-based clinical exercise settings. Students will be required to complete 135 hours within an approved clinical setting. Potential clinical settings include cardiac and pulmonary rehabilitation, cardiac testing, pulmonary testing, cancer rehabilitation, and pediatric exercise programming.

EXSC 801 Internship II

This course will provide practical experiences within several community-based clinical exercise settings. Students will be required to complete 270 hours within an approved clinical setting different from the Internship I placement. Potential clinical settings include cardiac and pulmonary rehabilitation, cardiac testing, pulmonary testing, cancer rehabilitation, and pediatric exercise programming.

EXSC 810 Research Project I

The students will conduct high-quality research experiment that will contribute to general knowledge in the Exercise and Sport Science field. The students will develop the research problem, complete a literature review, and design the research model.

EXSC 811 Research Project II

The students will complete their research study. With IRB approval students will conduct the data collection, and disseminate the results, complete the discussion.

Total Credit Hours Required: 33 credit hours

Curriculum by Year					
Course Name	Credit Hours	Course Name	Credit Hours	Course Name	Credit Hours
Year 1 Core Curriculum					
Fall		Spring		Summer	
Statistical Analysis in Health Application	3	Epidemiology, Research and Practice	3		
Advanced Exercise Physiology	3	Research Methods in Exercise Science	3		
		Special Topics in Exercise Science	3		
Total Semester Hours	6	Total Semester Hours	9	Total Semester Hours	
Year 2 Psychosocial Kinesiology Track					
Fall		Spring		Summer	
Advanced Sport Psychology	3	Exercise and Brain Health	3		
Lab Techniques in Exercise Science	3	Research Project II	6		
Research Project I	3				
Total Semester Hours	9	Total Semester Hours	9	Total Semester Hours	
Year 2 Exercise Physiology Track					
Fall		Spring		Summer	
Neuromuscular and Endocrine Physiology	3	Advanced Cardiorespiratory Physiology	3		
Lab Techniques in Exercise Science	3	Research Project II	6		
Research Project I	3				
Total Semester Hours	9	Total Semester Hours	9	Total Semester Hours	
Year 2 Cardiac Rehabilitation Track					
Fall		Spring		Summer	
Advanced Exercise Assessment and Prescription	3	Clinical Chronic Disease Management and Preventative Medicine	3		
Cardiopulmonary Pathophysiology	3	Internship II	6		
Internship I	3				
Total Semester Hours	9	Total Semester Hours	9	Total Semester Hours	

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.

Program Name and Designation	Total Credit Hours	Institution	Similarities	Differences
MS in Exercise Science	33	University of South Carolina Arnold School of Public Health	Provides students with scientific and research-based study and with curricular flexibility.	USC Upstate MS in Exercise and Sport Science focuses on serving working adult students in the region interested in pursuing an applied-research focused degree either part or full-time as well as students who require additional academic assistance.
MA in Sport Management	39	The Citadel	The MA in Sport Management is designed to provide needed skills, knowledge, and attitudes for the Sport Management industry. There are no similarities with this proposed Program.	USC Upstate will offer MS in Exercise and Sport Science. The concentration areas do not include Sports Management. Additionally, USC Upstate MS in Exercise and Sport Science focuses on serving area students pursuing an applied-research focused degree either part or full-time.
MS in Sports Management	30	Coastal Carolina University	The MS in Sports Management is designed to provide academic and practical applications of management principles to various segments of the sport industry. There are no similarities with this proposed Program.	USC Upstate will offer MS in Exercise and Sport Science. The concentration areas do not include Sports Management. Additionally, USC Upstate MS in Exercise and Sport Science focuses on serving area students pursuing an applied-research focused degree either part or full-time.

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.)
Assistant Professor	Cardiopulmonary Pathophysiology Research Project II Research Methods in Exercise Science Advanced Exercise Physiology Advanced Sport Psychology Exercise and Brain Health	Ph.D., Neurocognitive Kinesiology, University of Illinois at Urbana-Champaign	American Heart Association CPR and First Aid. National and International research experience in Neurocognitive Kinesiology.
Assistant Professor	Lab Techniques in Exercise Science Advanced Cardiorespiratory Physiology Advanced Exercise Assessment and Prescription Special Topics	Ph.D., Kinesiology with a concentration in Exercise Physiology, University of North Carolina Greensboro	Certified Strength and Conditioning Specialist (CSCS). American Heart Association first Responder (CPR/AED). Research in Exercise Physiology and Kinesiology.
Assistant Professor	Neuromuscular Endocrine Physiology Epidemiology Research and Practice Research Project I	Ph.D., Kinesiology emphasis in Exercise Physiology and Nutrition, Texas Woman's University.	Certified Strength and Conditioning Specialist. Aerobics and Fitness Association of America Personal Trainer Certificate. Research in Exercise Physiology.
Assistant Professor	Clinical Chronic Disease Management and Preventative Medicine Statistical Analysis in Health Application	Ph.D., Biomedical Engineering-Biomechanics University of Tehran	Postdoctoral researcher in Biomechanics laboratory, Georgia State University.
Exercise Science Internship Coordinator Instructor	Internship and Field Experiences	MS, Exercise Science The State University of New York.	Teaching and internship coordination experience in Exercise and Sport Science field. ACSM Health Fitness Certification

Total FTE needed to support the proposed program: Seven (7) FTE

Faculty: In addition to the USC Upstate School of Education, Human Performance, and Health current faculty, this Program's budget includes one additional full-time tenure-track faculty member and adjunct instructors to teach new courses.

Staff: The current staff will support this Program.

Administration: The current administration will support this Program.

Faculty, Staff, and Administrative Personnel

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

The Master of Science in Exercise and Sport Science Program will add eighteen new courses to the University's Academic Catalog. The additional faculty member with four existing tenure-track faculty members will carry the necessary teaching load, and the rest will be taught by the qualified adjunct faculty. The internship and clinical experiences will be coordinated by the Exercise Science Internship Coordinator.

Resources

Exercise and Sport Science Laboratory

The current Laboratory in the Department of Human Performance and Health is well-equipped to conduct a variety of teaching demonstrations and applied research studies. It has a variety of equipment available. For instance, the major hardware such as exercise equipment includes treadmills, Monark exercise bikes, and free weights serving as the high performance exercise ergometer. Other hardware including the metabolic cart (spirometry and indirect calorimetry measures of oxygen consumption) and bioelectric impedance analysis, provides physiology measurements. In addition, the Truscan EEG system provides resources for neurocognitive studies. The Lab provides fundamental resources needed for teaching demonstrations and applying and understanding research in the field.

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 USC Upstate Library provides access to excellent resources with over 240,943 volumes and 730 journal subscriptions. There are 22 public reference computers that allow access to the Internet and electronic resources, including the library's online catalog. Within the physical structure of the library, there is a general use computer lab that houses 36 workstations. The Library also subscribes to more than 250 electronic databases. Most of these databases are available to students via remote access using their University username and password procedures. In addition to the library's online catalog, there is electronic access to more than 250 databases, 489,000 electronic books, and more than 235,000 full-text electronic journals. These resources are available via remote access through a campus proxy server.

Additionally, the Library offers library instruction/information literacy sessions to classes upon the invitation of the instructor. This instruction includes information on using the library and its resources, as well as using information responsibly, and finding and evaluating electronic resources. Students are instructed in developing information strategies that will allow them to participate in lifelong learning.

The Library is open a total of 82.5 hours per week with on-site and via email reference available. Circulation, reserves, interlibrary loan and loan through Partnership Among South Carolina Academic Libraries (PASCAL) is available to faculty and students.

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.

USC Upstate Student Success Center

USC Upstate provides student academic support services via the Student Success Center. The Student Success Center provides Academic Support, Advising Services, Career Services and the Opportunity Network. These programs include services such as tutoring, supplemental instruction, transfer advising and mock interviews. Additional student services offered at USC Upstate include Financial Aid, Disability Services, and Counseling.

Below please find the mandatory statement included in all School of Education, Human Performance, and Health syllabi Academic and Non-Academic Support. This document is also available on all course Blackboard pages and is discussed with the students in class each semester.

Harassment, Sexual Violence, Bias, and Discrimination:

The University of South Carolina Upstate is committed to maintaining inclusive learning, living and working environments free from unlawful discrimination and harassment. In accordance with federal law, and University policies, any person who believes they have been subjected to unlawful discrimination on the basis of race, color, religion, national origin, disability, genetic information, gender or sex, sexual orientation, age, or veteran status; or receives information about or experiences such prohibited conduct to include sexual assault, sexual harassment, stalking or any other unwelcome sexual advance, should contact the EO/Title IX Coordinator, Alphonso Atkins Jr., Chief Diversity Officer and Special Assistant to the Chancellor for Equity and Inclusion. Mr. Atkins can be reached by phone at [\(864\) 503-5959](tel:864-503-5959) or at equity@uscupstate.edu and his office is located within the Office of the Chancellor in the Stockwell Administration Building, Room 225.

To report unlawful discriminatory conduct or for any additional questions about Title IX and harassment prevention you may also email sexualassault@uscupstate.edu.

Safety:

All students are encouraged to program 911 and the University Police phone number 864-503-7777 into their cell phones. In case of emergency, students should first dial 911. For non-emergencies, business and information, students should call University Police.

The SpartAlert Emergency Notification system is the official process for notifying the campus community of emergencies. All students are encouraged to register in the campusEAN, SpartAlert Emergency Notification System to receive communications during an emergency. The following link includes information on registering as well as safety and emergency procedures information: my.sc.edu/emergency. In the event of a fire alarm, students need to evacuate the building quickly using the nearest exit and proceed outdoors to the assembly area designated Emergency Evacuation Area away from the building.

If the class is notified of a shelter-in-place requirement for a tornado or other severe weather warning, students will move to the lowest level of this building away from windows and doors. Shelter areas are identifiable by green and white signs on the upper part of hallway walls. Occupants will remain in Severe Weather Shelter Areas until an "All Clear" is given by University Police. If the class is notified of a shelter-in-place or lock-down in a classroom, students will move away from windows and lock exterior classroom doors and close any window blinds. Occupants will remain in a shelter-in-place status until an "All-Clear" is given by University Police.

In the event of a lock-down, no one will be let into the building once the perimeter building doors have been locked. If notified of an active threat (shooter), Run (get out), Get Out (Run), Hide Out (find a safe place to stay) or Fight (with anything available) or Take Out (fight with anything available) principles will be practiced. The response will be dictated by the specific circumstances of the encounter.

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

The School of Education Human Performance, and Health is housed within the Health Education Complex on the USC Upstate campus. All full-time faculty members are provided individual offices equipped with computers with internet and phone with voicemail. Information technology and instructional technology support is provided to the faculty, staff, and students. The first five years of the current physical plant and resources are adequate to provide space for the classes offered.

Equipment Identify new instructional equipment needed for the proposed program.

For the first five years, there is no expected need for new equipment for this program.

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												
Category	1st		2nd		3rd		4th		5th		Grand Total	
	New	Total	New	Total	New	Total	New	Total	New	Total	New	Total
Tuition Funding	37,818	37,818	48,132	85,950	58,446	144,396	73,917	218,313	94,545	312,858	312,858	799,335
Program-Specific Fees												
Special State Appropriation												
Reallocation of Existing Funds												
Federal, Grant, or Other Funding												
Total	37,818	37,818	48,132	85,950	58,446	144,396	73,917	218,313	94,545	312,858	312,858	799,335
Estimated Costs Associated with Implementing the Program by Year												
Category	1st		2nd		3rd		4th		5th		Grand Total	
	New	Total	New	Total	New	Total	New	Total	New	Total	New	Total
Program Administration and Faculty/Staff Salaries	4,600	4,600	4,600	9,200	4,600	13,800	60,000	73,800	4,600	78,400	78,400	179,800
Facilities, Equipment, Supplies, and Materials	15,000	15,000	10,000	25,000	10,000	35,000	10,000	45,000	10,000	55,000	55,000	175,000
Library Resources												
Other (specify)	2,000	2,000	1,000	3,000	1,000	4,000	1,000	5,000	1,000	6,000	6,000	20,000
Total	21,600	21,600	15,600	37,200	15,600	52,800	71,000	123,800	15,600	139,400	139,400	374,800
Net Total (Sources of Financing Minus Estimated Costs)	16,218	16,218	32,532	48,750	42,846	91,596	2,917	94,513	78,945	173,458	173,458	424,535

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.**

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.

The source of financing for this program is student tuition generated. The tuition is calculated based on 2018-2019 academic calendars when the proposal was prepared: \$573.00 per credit hour. The total tuition is calculated with 40% of students enrolled for 3 credit hours, 35% of students enrolled for 6 credit hours and 25% of students enrolled for 9 credit hours of enrollment. A 20% increase in total enrollments is applied to the fall and spring semesters.

In addition to USC Upstate School of Education, Human Performance, and Health current faculty, administration, and staff, this program budget includes one additional full-time faculty and adjunct instructors to teach new courses and practicum experiences. In order to furnish an office space for the new faculty member, a one-time equipment item is addressed in the program budget. The Facilities, Equipment, Supplies and Materials line in the budget consists of technology for faculty and staff, teaching materials and software, exercise science equipment maintenance as well as office supplies. The items that are budgeted under Other include program administration costs, initial startup expenses, and compensation for marketing and recruitment.

The MS in Exercise and Sport Science program request for one faculty FTE is based upon the School of Education, Human Performance, and Health's analysis of program and students' need and also takes into account the level and type of student enrollment, the nature of the courses required by the program and the involvement of community experts as instructors and adjuncts.

Evaluation and Assessment

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.

Program Objectives	Student Learning Outcomes Aligned to Program Objectives	Methods of Assessment
<p>Program will:</p> <p>Prepare graduates able to demonstrate a comprehensive understanding of the interdisciplinary field of Exercise and Sport Science.</p>	<p>Students will:</p> <p>Demonstrate the strong foundation in exercise science necessary to effectively work in the exercise and sport science field/profession</p> <p>Apply knowledge and skills required to assess and impact human performance related characteristics of individuals from diverse populations.</p>	<p>Assessed in:</p> <p>EXSC 740 (All tracks): Students will be evaluated on creation and presentation of Individual Intervention Plan and Data Collection project focused on diverse individuals and conditions</p>
<p>Program will:</p> <p>Develop competent practitioners able to apply concepts and theories and utilize research in the delivery of services to individuals and populations.</p>	<p>Students will:</p> <p>Design and implement exercise programs for healthy individuals as well as those individuals with chronic diseases.</p> <p>Evaluate the behavioral and cultural factors that influence the adoption and maintenance of a physically active lifestyle.</p>	<p>Assessed in:</p> <p>EXSC 700 (All Tracks): Student common midterm and final exam problem sets in both courses demonstrating ability to use research and epidemiological data sets, and interpret data and findings relating individuals and populations</p>
<p>Program will:</p> <p>Prepare graduates to conduct and utilize high quality applied research in exercise and sports science to meet workforce need.</p>	<p>Students will:</p> <p>Apply knowledge of exercise and sport science in a real world setting by working with partner agencies.</p> <p>Develop and complete high-quality applied research in a focused area of applied study.</p>	<p>Assessed in:</p> <p>EXSC 800/801 and Internship I & II for the Cardiac Rehabilitation Track: Student individual intervention plan creation and delivery, reflective journal, and on-site observations of student performance by faculty and preceptor EXSC 810/811- for Exercise Physiology and Psychosocial Kinesiology Track: Research Project I & II. Students will complete and be evaluated on the conduct and presentation of an applied research project and the presentation of the project in a professional forum.</p>

The program plans to track employment using the academic unit's alumni and employment survey process and tools. Annual alumni surveys as well as preceptor / internship surveys will be sent with responses tracked and stored to allow for employment tracking. Additionally, the program will have an Advisory Board that will include partners from the region to ensure that employment data and tracking as well as survey feedback is shared and can inform program continuous improvement.

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

BOB BROWN MPH MBA FMFA FAACVPR

Director Outpatient Cardiology Spartanburg Medical Center

Date

12/4/2020

Dear Commission on Higher Education:

I am writing this letter in great support of the new course of study, Master of Science in Exercise and Sports Science with a concentration in Cardiac Rehabilitation by Dr. Tanyel.

Having worked in the Cardiac Rehab arena for almost 20 years I feel this is a very value-added concentration. The data has show CV disease is still the number one killer in the USA. We have not seen a market decrease in this number.

Cardiac Rehabilitation has been far underutilized in this country with the average enrollment of eligible patients less then 40% nationwide. The paradigm shifts we will see in the future will severely impact the enrolment into CR. We will need to have professionals that are able to meet the demands.

I urge your support in this degree. It is vitally important for the health of our society to have professionally trained individuals.

Sincerely,



Bob Brown MPH MBA FMFA FAACVPR

MEMORANDUM

TO: David L. Schecter, Ph.D., M.B.A., Provost and Senior Vice Chancellor for Academic Affairs
University of South Carolina Upstate

CC: Kimberly Y. Walker, Ph.D., Director, Office of Institutional Effectiveness and Compliance
University of South Carolina Upstate

FROM: Regine Rucker, Ph.D., Program Manager in Academic Affairs Commission on Higher Education

DATE: November 24, 2020

RE: Master of Science, Exercise and Sport Science with Concentrations in Psychosocial Kinesiology,
Exercise Physiology, and Cardiac Rehabilitation – New Program Proposal

Thank you for attending the Advisory Committee on Academic Programs (ACAP) meeting on November 19, 2020, and for the original and revised proposal submissions to date. In preparation for the upcoming Committee on Academic Affairs and Licensing (CAAL) meeting on February 11, 2021, we request that you revise the program proposal to address the additional information requested by ACAP members and the CHE staff identified below.

In addition, at the May 14th meeting, CAAL invited institutions seeking consideration of program proposals for new and modified programs to verify their determination of the programs' necessity and viability for the institution and its stakeholders given the pandemic impact. Institutions may update proposals or prepare addenda to provide documentation of related commentary provided during the June 2020 ACAP meeting. Otherwise, please disregard if documentation already has been provided. Please amend and return two versions of the revised program proposal (redline and clean) to me at rrucker@che.sc.gov no later than December 18, 2020. If you have any questions or require further information, feel free to contact me or Dr. John Lane (jlane@che.sc.gov)

M.S., Exercise and Sport Science with Concentrations in Psychosocial Kinesiology, Exercise Physiology, and Cardiac Rehabilitation

1. Cover (p. 1)

Please verify the approval date for the Board of Trustees or provide an explanation of the why the current date is an estimate.

The MS in EXSC has the full support of the University and BOT. The document has been updated to reflect the dates of approval.

2. Background Information (p. 2)

a. Student learning outcomes are included in the *Background Information* section. How do the outcomes relate to the information included in the *Evaluation and Assessment* table on p. 19?

Change and Addition: In response to this question, we clarified the 3 Program Objectives, moved the Program Objectives to p. 2 (Background Information), and repositioned the 6 Student Learning Outcomes to the table in "Evaluation and Assessment" (p. 18). Additionally, we expanded the details under the assessment measures, and clarified alignment between the 3 Program Goals and the 6 Student Learning Outcomes.

3. Assessment of Need (p. 2 – 3)

a. It may be advantageous to identify the partners stated to have "co-constructed" the proposed degree program and include those providing letters of support in the proposal upon receipt.

Addition: The primary partner in the development of this program has been Spartanburg Regional Health Care System and Dr. Robert Brown. Dr. Brown has been working with our undergraduate students and faculty and identified the need for both continuing educational opportunities for hospital staff, as well as regional need. He has provided an email indicating his support for the program as well as the need within the field (added as additional supporting document).

4. Transfer and Articulation (p. 3)

a. In the proposal response regarding transfer and articulation agreements, it states the program "will follow the existing USC Upstate agreements". Please provide more information on existing USC Upstate agreements.

Addition: We added the following narrative in the section labeled "Transfer and Articulation."

"The transfer and articulation of graduate credit is governed by the University of South Carolina Upstate Academic Catalog, as well as the rule and requirements of the University of South Carolina. Transfer and articulation requirements appear on [page 265 of the 2020-2021 catalog](#):

Graduate Transfer Credit. Transfer work from a regionally accredited institution applicable to a master's degree MUST BE WITHIN THE SIX YEARS PRIOR to USC Upstate degree completion. A maximum of twelve semester hours credit (nine if part of a master's degree at the other institution) may be considered, subject to these additional provisions: (a) the courses must be documented by an official transcript mailed to the admissions office by the awarding institution; (b) the transcript must clearly indicate that graduate credit was awarded or specifically verified by the institution's registrar or graduate dean; (c) the courses must be judged appropriate by

the student's advisor, approved by the appropriate graduate administrator, and listed on an approved program of study; (d) courses graded lower than B are not transferable; (e) USC Upstate provides no revalidation mechanism for courses completed at another institution.”

5. Employment Opportunities (p. 4)

a. It is recommended to include an estimate of prospective salary information in the table or narrative detailing the potential occupations related to the program.

Addition: We expanded the details in section labeled “Supporting Evidence of Anticipated Employment Opportunities.” The table now includes detailed narrative regarding the potential occupations related to the program, in a table titled “Employment Opportunities – Specific” (p. 5).

6. (Background Information) Overall

a. Please ensure responses to inquiries from CHE staff are incorporated into the proposal content, specifically the details related to similar programs.

Completed. See information above.

b. Please review proposal to address formatting issues and grammatical structure and errors.

Completed. The proposal has been reviewed for grammatical errors and formatting concerns.