

COASTAL CAROLINA UNIVERSITY

**PROPOSAL TO THE
SOUTH CAROLINA COMMISSION ON HIGHER
EDUCATION
TO ESTABLISH A
BACHELOR OF SCIENCE DEGREE IN
EXERCISE AND SPORT SCIENCE**

MAY, 2007

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CLASSIFICATION

Name of the proposed program:	Bachelor of Science in Exercise and Sport Science
Academic unit involved:	Spadoni College of Education Department of Health, Physical Education, and Recreation
Designation of degree:	Bachelor of Science (4-year)
Proposed date of implementation:	Spring, 2008
CIP Code:	310505
Identification of program as New or Modification:	New

JUSTIFICATION

Overall Purposes and Objectives of the Program

The primary goal of the Exercise and Sport Science (EXSS) Program is to provide students with a well-rounded academic background in the human movement sciences. This background includes the acquisition of knowledge, skills, and abilities related to the scientific and foundational content and the application of knowledge and theory to practice. Graduates are expected to be effective advocates and leaders in the development, maintenance, and promotion of health-enhancing physical activity.

Program Goals

Goal 1: Prepare graduates well-trained to assess, design, and implement safe individual and group exercise and fitness programs for a variety of individuals who are apparently healthy and those with controlled disease.

Goal 2: Prepare graduates who are skilled in evaluating health behaviors and risk factors, conducting fitness assessments, writing appropriate exercise prescriptions, and motivating individuals to modify negative health habits and maintain positive lifestyle behaviors.

Goal 3: Prepare graduates with a strong academic foundation in the science and study of human movement, exercise, and physical activity. This foundation should serve all students well for career entry and/or for advanced academic study in the exercise and sport sciences.

Goal 4: Serve the community and region with research and service for the improvement of health and exercise problems indigenous to the region. This service should engage faculty, students, and community in the promotion of health-enhancing physical activity.

Program Objectives/Learning Outcomes

The program's foundation courses provide a scientific basis for human movement, while the EXSS major courses introduce the students to a multidisciplinary approach to the study of exercise and sport science. Toward the latter part of the curriculum, students may focus their study to prepare for direct entry into the health/fitness industry or graduate/advanced study in health or medical-related fields. Students will complete their undergraduate education with a full-

time internship experience and will sit for a nationally recognized certification exam. The objectives of the Coastal Carolina University Exercise and Sport Science Program include but are not limited to:

EXSS students will be able to:

1. Describe and discuss the roles of each of the major disciplines that comprise the field of exercise science such as exercise physiology, motor control/development, biomechanics, nutrition, and exercise/sport psychology.
2. Describe and apply anatomical, physiological, biomechanical, biochemical, behavioral, and psychological concepts related to physical activity, sport, and exercise.
3. Properly conduct health screenings and fitness assessment techniques for a variety of populations, and incorporate findings into the development of individualized exercise prescriptions.
4. Safely instruct and demonstrate exercise techniques for clients with varying levels of fitness and health status.
5. Plan and evaluate physical activity and exercise programs, assuring effective administration, quality control, and outcome assessment.
6. Manage emergency procedures, injury prevention, and legal risk in exercise settings.
7. Communicate various risk factors associated with the development of chronic diseases such as cardiovascular disease, cancer, and diabetes, as well as how to modify lifestyle-related behaviors to positively impact these risk factors.
8. Apply the skills of scientific inquiry and research in the field of exercise and sport science.
9. Apply knowledge, skills, and abilities, and dispositions to meet the goals and objectives of a specific agency or clinic in the community.
10. Act as a resource person and advocate for physical activity or exercise participation at it relates to overall health and well-being.

Need for the program

Student Need. The South Carolina Commission on Higher Education approved the B.S. in Health Promotion at CCU in 1998. Since its inception, the health promotion major has been one of the fastest growing majors at CCU. In 2000, an option within the health promotion major was developed titled “Sports Medicine.” Enrollment in the option has grown steadily to over 80 students. A “Fitness” Minor was added in 2004 which currently enrolls over 20 students.

This proposal seeks to meet student need by changing the status of the current sports medicine option within the health promotion major, to the major of exercise and sport science. Its revised and enhanced curriculum will better meet the needs of current and future students seeking careers and advanced study in the allied health care fields related the exercise/sport sciences and the fitness/wellness industry. The sports medicine option was originally intended to meet the needs of students preparing for careers in athletic training. In 2004, the athletic training discipline adopted new curriculum and program requirements for programs leading to athletic training licensure. A degree program leading to athletic training licensure is not offered at CCU, and the current sports medicine option does not lead to licensure in athletic training. Current students in the sports medicine option increasingly hold career or advanced study aspirations in allied health care fields such as exercise physiology, cardiac rehabilitation, physical therapy, occupational therapy, personal or group fitness/wellness, strength and conditioning, exercise technology, and the sport sciences (biomechanics, motor behavior, sport psychology/sociology). The curriculum that best prepares students for career entry and advanced study is a comprehensive and broad-based exercise science program, which currently is not available at CCU.

National and State Need. National data support the finding that Americans do not get enough health-enhancing physical activity. The well-documented obesity epidemic has yielded more than 60 million obese adults. Chronic disease increases have followed. For example, the relative risk of coronary heart disease associated with physical inactivity ranges from 1.5 to 2.4, an increase in risk comparable with that observed for high cholesterol, high blood pressure, and cigarette smoking. Treatment of chronic diseases accounts for 75 percent of what the U.S. spends on health care each year. Health officials are spending significant resources in hopes of helping people develop healthier lifestyles which, in turn, will cut health care costs (e.g. Healthy People 2010; Department of Health and Human Services). Several national initiatives underscore the drive to shift from a treatment-focused society to one that is prevention-based.

South Carolina and Horry County align with and often exceed national prevalence rates of chronic disease. As heart disease is the number one killer of South Carolinians, the need to reduce lifestyle related risk factors of heart disease is obvious. Statewide, 57% of residents are reported to be overweight, and 40% are reported to lead a sedentary lifestyle. For Horry County, rates are reported at 54% and 45%, respectively. Rates for high cholesterol (28% for both county and state), and smoking (36% Horry vs. 26% for the state) exceed that of most other states. These findings appear to translate into similar prevalence rates for certain chronic conditions. For example, Horry County has higher rates of hypertension, stroke, and deaths resulting from chronic obstructive pulmonary diseases and all cancer as compared to statewide rates. For stroke, heart disease, and diabetes, county prevalence rates are slightly lower than the statewide averages (Source: DHEC). Again, these prevalence rates are higher than most other states.

Horry County is a high-growth region with increasing demands on health care and disease prevention of its residents. In addition, the rapid population growth of the aging and retirees to the Grand Strand region has heightened the need for support structures in allied health care. From 1990 to 2000, Horry County saw an increase in overall population from 144,053 to 196,629, an increase of almost 27%. As part of this increase, the population of 50-59 year olds climbed from 14,265 to 25,010 (up 75%), 60-69 year olds went from 15,201 to 20,705 (up 36%), and those over 70 went from 10,680 to 19,399 (up 82%) (Source: US Census Bureau and South Carolina Budget and Control Board). Although data are not yet available from 2000 to 2007, it is well known that Horry County has become a popular retirement destination and is one of the fastest growing counties in the nation. This relatively sudden rise in population alone will have an inevitable impact on the county's need for more health-care professionals, especially in light of the increase in the older population.

The eventual impact of increasing population (young and old), along with prevalent lifestyle-related risk factors for chronic disease in Horry County, support the need for more graduates trained in the area of exercise science. In addition, creation of the new major will provide increased opportunities for community outreach and education, with the ultimate goal of improving lifestyle-related risk factors and prevalence of chronic disease.

Industry and Career Need. Opportunities for individuals graduating with degrees in exercise/sport science are numerous and growing. Common career tracks range from the research scientist to the exercise practitioner in fitness and/or clinical settings. Opportunities exist in universities, community health agencies, fitness clubs (profit and non-profit), worksites (business and industry), medical settings (hospitals, clinics and health maintenance organizations), hotels, country clubs, government institutions, and recreational programs. Sample job titles include exercise physiologist, strength and conditioning coach, exercise leader, fitness instructor, exercise specialist (cardiac rehabilitation), physical therapist, occupational therapist, fitness program director, personal trainer, exercise technologist, and professor of exercise or sport science. In

addition, other disciplines find it helpful to include exercise science coursework in their allied health programs, such as pre-medical or pre-therapy programs.

Within the last decade, the industry has become more involved with enhancing quality of life for diverse populations (deconditioned, disabled, older, or youth populations). Trends in corporate fitness/wellness programs have also expanded the job market. Almost all large companies have created corporate wellness programs for employees as a way to cut health care costs (recent data suggests that, for every \$1 spent on employee fitness/wellness, the company saves \$3 in health care costs). The growth and success of these programs have significantly enhanced the job market.

The exercise, fitness and wellness industry is one of the fastest growing in the United States. According to the US Department of Labor (2005), overall employment in fitness and wellness is expected to grow faster than average for all occupations through 2012, as an increasing number of people spend more time and money on personal fitness, physical activity, and wellness services and more businesses recognize the benefit of exercise-based wellness programs. The Department of Labor projects the employment category of *fitness trainers, instructors, and leaders* to increase by 62.1% by 2012, making this employment category one of the highest projected increases of categories requested.

The local region has attempted to respond to the rapid increases in population. For example, in the last five years, four new comprehensive health and fitness facilities have been built in the local community, including the Grand Strand YMCA and the North Myrtle Beach Aquatic and Fitness Center. Several other health and fitness agencies have significantly expanded their disease prevention efforts by enhancing their exercise-based services and facilities (e.g. Conway Medical Center). On the treatment side, Horry Georgetown Technical College recently introduced a new physical therapy assistant program and a broadly expanded nursing program to meet the immediate needs of local residents.

Centrality of the program to the mission of the institution

The proposed degree program is clearly aligned with the institutional mission of building on strong existing academic programs (health promotion) and with providing research, faculty development, and public service in areas indigenous to the region (i.e. active aging and retirement population; health status of South Carolinians).

The proposed program also aligns with the university's emphasis on preparing students for productive careers in important areas:

"...The University facilitates student participation in the community through internships, community service, and cooperative learning, as part of a comprehensive educational experience that renders students competitive for entry-level jobs or graduate and professional training leading to practical and productive careers in business, the public service, the professions, and education." (CCU, 1997)

As a professional program housed in the Spadoni College of Education, the proposed program is consistent with all other academic programs in the college. Program emphasis is on the systematic development of knowledge, skills, and abilities of the effective professional, and the careful placement and supervision in the full-semester capstone internship experience. In addition, all students will be required to complete a national exit exam, through the American

College of Sports Medicine (ACSM) designed to not only assess program effectiveness but also increase student and program competitiveness in the industry.

The University embraces its public service role in this region and state. The potential for civic engagement through this program is strong. For example, the newly developed Smith Exercise Science Lab in the Department of Health, Physical Education, and Recreation (HPER) recently initiated a “Community Fitness Testing Program,” providing state-of-the-art exercise testing and prescription services to a variety of populations. The laboratory has the potential to engage both students and faculty in exercise testing and prescription for a variety of medical, government, public, private, or community based agencies. Faculty and students have already partnered with various constituencies to conduct research and educational programs, including the Center for Aging and Active Retirement, Conway Medical Center, and CCU Campus Recreation.

Relationship of program to other related programs within the institution

The proposed program will replace the existing sports medicine option within the health promotion major. This option has already established linkages with other programs and departments, particularly in the College of Natural and Applied Sciences (e.g. Biology, Psychology). The program will require increased cross-disciplinary coursework in the sciences (e.g. biology, chemistry, physics) and psychology (e.g., psychology of aging, growth and development, exercise and aging) and encourage supporting coursework in disciplines such as communications and health promotion. The program will complement the existing pre-professional health programs offered in the Department of Biology. Students in the biology major have the option of emphasizing the pre-professional programs of medical, veterinary, dental, pharmacy, physician’s assistant, nursing, or physical therapy. It is expected the arrival of the new Exercise and Sport Science major (EXSS) will be attractive to students in these emphases areas, such as physical therapy. The Biology and Psychology Departments are supportive of the proposed program, and both programs envision increased collaboration and shared coursework among students and faculty in both majors. The proposed program will increase its collaboration with the College of Natural and Applied Sciences not only through shared coursework, but also through an enhanced connection with the Center for Active Aging and Retirement. Already, faculty members have begun to explore research and grant initiatives with the center.

The EXSS program will allow a specialized area of study and clear career path for students traditionally interested in the existing majors of physical education and health promotion. The specialization and accreditation needs of these existing programs do not allow optimal professional development of students interested in specific careers in the exercise sciences or fitness industry. Nonetheless, these two programs will continue to share foundational coursework with the proposed new major. The home department of each of the programs, HPER, will continue to emphasize collaboration among faculty through shared scholarship/research and community service initiatives.

Similarities and differences between the proposed program and those with like objectives offered at other institutions.

Three South Carolina public institutions currently offer a major in “kinesiology and exercise science.” USC-Columbia and Lander University offer a BS in Exercise Science, and USC-Aiken offers a BS in Exercise and Sport Science.

USC-Columbia also provides both masters and doctoral degrees in exercise science. The proposed program will better prepare the increasing numbers of undergraduate students seeking to enter this or other graduate programs in the exercise/sport sciences. Discussions with the department chair of exercise science at USC-Columbia have yielded a high level of support for an undergraduate program at CCU, as well as some productive feedback for the proposed program.

The proposed major is similar to other programs by requiring rigorous and cross-disciplinary coursework in the basic sciences (biology, chemistry, and physics). Another similarity is the requirement of an emphasis area within the major. For example, USC-Columbia provides four distinct emphasis areas from which a student must choose (health fitness, public health, motor control, and scientific foundations). USC-Aiken provides concentration areas in athletic training, fitness management, and basic sciences. Lander does not provide an emphasis, but rather 23 hours of electives. The proposed major requires 9-12 hours of selectives which require students to choose from a list of courses in one of two areas (fitness/applied or scientific/clinical). An emphasis area is an important element and strength of the program. The required selectives in the program best meet the needs and interests of students, as well as the constraints of a smaller and younger undergraduate program.

The proposed curriculum is aligned with the professional competencies necessary for the accreditation of educational programs through the Commission of Accreditation of Allied Health Education Programs (CAAHEP) and the Committee on Accreditation for the Exercise Sciences (COAES). These knowledge, skills, and abilities (KSAs) of the American College of Sports Medicine (ACSM) are integrated in the proposed coursework and experiences. In addition, the program will culminate in two required culminating experiences. A 9-12 credit hour supervised capstone internship is required of all students, as is the completion of a national credentialing exam (ACSM Health/Fitness Instructor). The emphasis on pre-professional preparation for career entry into the field, and the alignment of the program for future accreditation is somewhat unique and a strength of the program.

Finally, the proposed program is competitive with like institutions in regard to facilities and lab-based equipment normally housed in an exercise science program. The Smith Exercise Science Laboratory is a recently-developed state-of-the-art instructional, service, and research-capable facility that is available to serve the proposed program and faculty. A full-time lab coordinator was recently hired to manage the growing list of lab projects. Program faculty have already been productive in collaborative research and scholarly projects in the lab (<http://www.coastal.edu/hper/exercise/>).

ENROLLMENT

Admissions Criteria

Admissions criteria for the proposed program are consistent with the other pre-professional programs in the Spadoni College of Education (non-teacher education). This includes the majors of Health Promotion and Recreation and Sport Management.

For admission to the EXSS program:

- 1) Minimum 2.25 cumulative GPA in all undergraduate coursework at CCU
- 2) “C” or better in BIOL 121, 232, and 242 (and labs) and EXSS 202
- 3) “C” or better in all EXSS Major and EXSS Cognate required coursework
- 4) Advisor/Program Approval

For admission to EXSS internship:

- 1) “C” or better in all EXSS Major Requirements
- 2) Minimum 2.25 cumulative GPA at CCU
- 3) Advisor/Program Approval

Projected Student Enrollment

Several indicators suggest the enrollment for this major will be strong.

First, enrollment growth in the existing sports medicine option (within the health promotion major) has been steady, growing to over 80 students in 2006. The fitness minor, added in 2004, enrolls over 20 students. Anecdotal data suggest many of these students will seek the proposed exercise and sport science major when it becomes available. An informal survey of approximately 100 students enrolled in two upper level exercise physiology courses during 2006-2007 indicated that approximately 35% of the students have career goals of working in the exercise science (e.g. cardiac rehabilitation, physical therapy) or fitness (e.g. corporate fitness/wellness) industries. In addition, several students in the physical education and biology majors have indicated a desire for an exercise science major, were it available at CCU.

Second, the growth of the sport and fitness/wellness industries nationally has attracted more students to the study of the sport and exercise sciences. With approximately 86% of CCU freshmen having participated in organized extracurricular physical activities in high school, CCU students are very exercise oriented. Approximately 2000 potential students indicate interest in the complementary fields of exercise/sport science (i.e. Wellness Studies, Leisure and Fitness Studies, etc.) from CCU recruitment regions. Current student interest in the allied health care professions (e.g., physical therapy, cardiac rehabilitation) has also heightened the need for specialized study in the exercise sciences (CCU Enrollment Planning, 2006).

Third, the national trend toward promoting physical activity, preventing overweight and obesity related illness, and reducing health care costs is projected to continue with increased emphasis in a variety of populations and settings. This should maintain or increase the need for qualified professionals and a variety of career opportunities. With the above indicators, it is estimated that the exercise and sport science major will see steady enrollment growth over the next three-to-five years.

Based on the above indicators, the following are enrollment estimates:

PROJECTED TOTAL ENROLLMENTS FOR 2008-2013

YEAR	FALL		SPRING		SUMMER	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2008-2009	40	600	43	645	NA	NA
2009-2010	43	645	46	690	NA	NA
2010-2011	46	690	49	735	NA	NA
2011-2012	49	735	52	780	NA	NA
2012-2013	52	780	55	825	NA	NA

PROJECTED NEW ENROLLMENTS FOR 2008-2013

YEAR	FALL		SPRING		SUMMER	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2008-2009	10	150	6	90	NA	NA
2009-2010	11	158	6	90	NA	NA
2010-2011	11	165	8	120	NA	NA
2011-2012	11	172	8	120	NA	NA
2012-2013	12	180	8	120	NA	NA

Note 1: Fall semester increases in students based on CCU Budget Overview and Projections. 2006-2007, enrollment history and projections: 2008-09, 5.0%; 2009-10, 4.7%; 2010-11, 4.5%; 2011-12, 4.3%.

Note 2: Credit hours based on the 15 hours per semester.

Bachelor of Science in Exercise and Sport Science (EXSS)
 Department of Health, Physical Education, and Recreation
 Spadoni College of Education

Degree Requirements

I.	CORE CURRICULUM (34-38 Credits)	
II.	FRESHMAN GRADUATION REQUIREMENT - UNIVERSITY 110 (0-3 Credits)	
III.	EXSS FOUNDATION (24-36 Credits)	<u>Credits</u>
	<u>Science and Math (12-16 hrs)</u>	
	BIOL 121 Biological Science I	0-4
	BIOL 232 + Lab Human Anatomy and Physiology I	0-4
	BIOL 242 + Lab	4
	CHEM 101 Introductory Chemistry and Lab OR CHEM 111 General Chemistry and Lab OR PHYS 201 General Physics and Lab	0-4
	<u>Math (3-8 Hours)</u>	
	STAT 201 Elementary Statistics and Lab OR PSYC 225 Psychological Statistics and Lab	0-4
	MATH 131 OR MATH 132 OR MATH 135 OR MATH 160	0-4
	<u>Health and Behavior (9-12 hrs)</u>	
	EXSS 122 Lifetime Fitness and Physical Activity	0-3
	HPRO 121 Personal and Community Health	0-3
	HPRO 404 Nutrition or EXSS 413 Exercise and Sport Nutrition	3
	PSYC 101 or SOC 101	0-3
IV.	EXSS MAJOR REQUIREMENTS (45-50 Credits)	<u>Credits</u>
	EXSS 205 Introduction to Exercise and Sport Science	3
	EXSS 330 Injury Management	3
	EXSS 340 Sport and Exercise Behavior	3
	EXSS 350 Exercise Physiology and 350L Lab	4
	EXSS 360 Motor Behavior	4
	EXSS 385 Fitness Assessment and Exercise Prescription	3
	EXSS 400 Biomechanics and 400L Lab	4
	EXSS 410 Cardiopulmonary Rehabilitation	3
	EXSS 415 Personal Fitness Leadership	3
	EXSS 496 Internship in Exercise and Sport Science	9-12
	EXSS Selectives	6-8
	Choose 2 courses from list of approved courses aligning with student goals (Fitness/Applied or Science/Clinical)	
V.	ELECTIVES (0-17 Credits)	
	TOTAL CREDITS REQUIRED	120-127

New Course Descriptions

The following is a list of all new courses that are to be added to the catalog within 5 years:

New course offerings for Major Requirements

EXSS 205 Introduction to Exercise and Sport Science (3). Course provides an introduction and overview of the multidisciplinary field of exercise and sport science. The importance of specialized areas of study such as exercise physiology, biomechanics, exercise psychology, motor behavior, sport psychology, fitness management and nutrition for optimal health and physical performance will be highlighted. Course also provides an overview of the EXSS program as well as career perspectives within the field.

EXSS 410 Cardiopulmonary Rehabilitation (3) (Prereq: EXSS 350; EXSS 385). Course covers the underlying mechanisms of prevalent cardiopulmonary diseases such as coronary artery disease, peripheral vascular disease, asthma, and emphysema, as well as the impact these conditions have on overall health and fitness. The importance of physical activity in the prevention and treatment of these conditions are highlighted. Current medical and surgical techniques utilized to treat cardiopulmonary diseases are also discussed.

EXSS 415 Personal Fitness Leadership (3) (Prereq: EXSS 350; EXSS 385). Course builds on foundational content to develop the knowledge, skills and abilities related to prescribing exercise and demonstrating proper utilization of exercise equipment and techniques for enhancement of cardiovascular and musculoskeletal fitness. The course provides a focus on leadership and communication principles and administrative issues related to personal training and group fitness leadership. Certification opportunities also provided.

EXSS 495 Internship in Exercise and Sport Science (9-12) (Prereq: Admission to internship: 1) "C" or better in all EXSS Major Requirements; 2) 2.25 cumulative GPA or higher at Coastal Carolina University; 3) Completion of all required EXSS coursework (3 hours non-EXSS coursework allowed during internship); 4) Advisor/Program Approval. Students gain opportunities to apply and further develop their knowledge, skills, and abilities through full-time, supervised experiences (360-480 hours). Students will perform full-time internships in approved exercise or sport science-related facilities such as hospitals, fitness centers, sport science clinics/agencies, or physical therapy/rehabilitation clinics.

New course offerings to support EXSS Selectives:

EXSS 390 Strength and Conditioning (3) (Prereq: EXSS 350). Course provides an overview of concepts and techniques utilized to enhance muscle strength and endurance. Basic muscle function and anatomy is reviewed, as well as how muscle responds to training, detraining, and overtraining. Emphasis placed on the enhancement of sport performance and the bridging of theory to practice. Course also covers the risks associated with various forms of resistance training as well as how to reduce these risks. Certification opportunities provided.

EXSS 399 Independent Study in Exercise and Sport Science (1-3). (Prereq: EXSS 205 and approved written contract between student, instructor and department chair). A faculty-directed study or supervised learning experience in an approved EXSS topic or area.

EXSS 405 Exercise Testing and Prescription for Diverse Populations (3) (Prereq: EXSS 350; EXSS 385). Course covers exercise testing procedures and exercise prescription for a diverse range of populations including younger and older healthy males and females with acute conditions as well as individuals with chronic conditions such as cancer, human immunodeficiency virus, and osteoarthritis. An emphasis is placed on screening individuals for normal and abnormal responses to physical activity, specific indications and contraindications to exercise and methods for modifying exercise prescriptions based on individual needs.

EXSS 420 Exercise and Aging (3) (Prereq: EXSS 350). The physiological and structural changes that occur as a result of aging, and how these changes may impact one's ability to perform physical activity. The benefits of physical activity for older populations will also be examined, as well as psychosocial issues related to exercise for the elderly.

EXSS 499 Directed Undergraduate Research in Exercise and Sport Science (1-6) (Prereq: EXSS 205 and approved written contract between student, instructor and department chair). A faculty-supervised research project within exercise and sport science. Students develop skills and abilities of research through the completion of an approved project. Projects are developed with a faculty member and approved with a written contract and specific requirements.

New course offerings to be developed within 5 years, not included in this proposal

EXSS 395 Promoting Physical Activity

EXSS 450 Research Topics in Sport and Exercise Science

FACULTY

Table detailing rank and qualifications of each staff member who will be involved in the program

List Staff by Rank	Highest Degree Earned	Field of Study	Teaching in Field (Yes/No)
Associate Professor	Ph.D.	Exercise Science (exercise physiology)	Yes
Assistant Professor	Ph.D.	Exercise Science (biomechanics)	Fall 2008 Hire
Professor	Ed.D.	Exercise Science (motor behavior)	Yes
Instructor	M.S.	Fitness/Wellness	Yes
Laboratory Coordinator	M.S.	Exercise Science	Yes

Enumeration and discussion of the necessary qualifications of new faculty (and staff) that will be added in support of the proposed program

The Department of HPER currently contributes two tenure-track faculty members to the program. One is assigned 100%, and the second is assigned 50%. The university has committed to one new tenure-track hire (100% to the proposed program). These three tenure-track faculty will cover a total of 2.5 FTE teaching load. CCU is a teaching institution with an expected instructional load of 12 credit hours per semester. The program will continue to use one full-time instructor to serve the program (.5 FTE).

It is anticipated that, with the above faculty and staff, 90% of the coursework in the EXSS Major Requirements will be taught by full time tenure-track faculty. EXSS Selectives will be taught as faculty are available, blending of tenure track faculty, full-time instructors, and part time adjunct/clinical faculty. The required coursework in the EXSS Foundation (17 credits) will be taught using existing faculty in cross-disciplinary areas such as biology, chemistry, and health promotion. Based on enrollment projections for the next three to five years, no additional faculty will be needed to cover regular coursework. Future faculty additions will be determined by student demand, enrollment increases, and justified by increased tuition revenues. New faculty hires for the program will be expected to hold the terminal degree and have a record of effective teaching, scholarly potential, and service.

Institutional plan for faculty development as it relates to the proposed program

The University promotes professional development and growth through an ongoing process involving all faculty members. The Provost’s Office provides funding for travel, reassigned time, seed and development grants, and sabbaticals. In addition, the Center for Effective Teaching and Learning provides teaching and research mini-grants to enhance faculty productivity. These grants may be research oriented or based on the scholarship of teaching. Faculty members in HPER have an established record of receiving these internal grants. Several of these grants been received by faculty in the area of exercise science and fitness/wellness. Full support for faculty travel presenting work at professional conferences is also provided by the Spadoni College of Education. In addition, faculty members in the sciences are provided with start-up funding to seed a new faculty member’s research agenda.

Institution’s definition of full time equivalents (FTE)

Every 24 credit hours taught during the academic year is equivalent to one Full-Time Equivalent (FTE). Faculty members approved for scholarly reassigned time have a defined FTE as 21 credits taught during the academic year.

Table showing for at least the first five years the number (headcount) and the full-time equivalent (FTE) of faculty, administrators, and/or staff to be used in the program.

UNIT ADMINISTRATION/FACULTY/STAFF SUPPORT						
YEAR	NEW		EXISTING		TOTAL	
	Headcount	FTE	Headcount	FTE	Headcount	FTE
ADMINISTRATION						
2008-2009	0	0	2	.50	2	.50
2009-2010	0	.0	2	.50	2	.50
2010-2011	0	0	2	.50	2	.50
2011-2012	0	0	2	.50	2	.50
2012-2013	0	0	2	.50	2	.50
FACULTY						
2008-2009	0	0	3	2.0	3	1.5
2009-2010	1	1.0	3	2.0	4	3.0
2010-2011	0	0	4	3.0	4	3.0
2011-2012	0	0	4	3.0	4	3.0
2012-2013	0	0	4	3.0	4	3.0
STAFF						
2008-2009	0	0	1	.25	1	.25
2009-2010	0	0	1	.25	1	.25
2010-2011	0	0	1	.25	1	.25
2011-2012	0	0	1	.25	1	.25
2012-2013	0	0	1	.25	1	.25

PHYSICAL PLANT

Existing Physical Plant Adequacy

The program will not require additional physical plant space over the first five years. The proposed program has in place a state-of-the-art exercise science laboratory capable of conducting high level research, student learning experiences, and community service activities. The Smith Exercise Science Lab is a result of an external donation and matching institutional funds which supplied the space and equipment to house a laboratory facility that is competitive with like institutions.

Additional Physical Plant Requirements and Modifications in Foreseeable Future, and How Financed

The laboratory facility will continue to develop and acquire additional equipment to serve the program. The majority of modifications in the future can be financed by the revenue-generating community fitness testing program. This program allows the facility to be primarily self-supporting and will allow the maintenance and purchase of equipment. In addition, student lab fees will help contribute to equipment upgrades and maintenance.

EQUIPMENT

In the next 3-5 years, two major equipment purchases will be sought to support the program. The first item (\$45,000) will be purchased in 2007 from a combination of already-allocated funding, including new faculty start-up funds, internal seed and research grants, student lab fees, and college funding. The second item (\$50,000) will be purchased in 3-5 years, and will also be supported by grants, institutional start-up funds, lab fees, and college funds. It is anticipated any other large equipment purchases will be supported by grant funding and revenue from laboratory activities.

LIBRARY RESOURCES

Kimbel Library is a small academic library with holdings of over 200,000 items in all formats. The library subscribes in print to over 500 periodicals: magazines, newspapers, scholarly journals, and proceedings. Access to over 20,000 electronic, full-text periodical titles from a variety of sources is also available. The Library provides access to its holdings and to over 100 online citation, abstracting, full-text and reference resources via the World Wide Web at (<http://www.coastal.edu/library>). Library instruction sessions are available to all academic departments covering general library usage as well as project or course-specific sessions for upper-level research oriented courses.

Quantitative Comparison of Library Holdings Monographs

A quantitative comparison of Kimbel Library's holdings in the area of exercise and sport science was conducted using the 2000 edition of the Association of College and Research Libraries *Standards for College Libraries*. Three peer institutions were chosen based on FTE student enrollment (less than 10,000), type of institution (regional, state-supported liberal arts), and presence of a BS degree program in exercise and sport sciences. These are: University of South Carolina – Aiken, Salisbury University (Maryland), and the University of Maryland – Eastern Shore.

The library catalogs of the peer institutions were searched to ascertain the *approximate* number of cataloged titles within selected LC subject headings covering the proposed core and elective coursework in exercise and sports sciences outlined in the curriculum section of this report.

The statistics for *FTE student enrollment* for USC – Aiken were obtained from the S.C. Commission on Higher Education. Enrollment for Salisbury and UMES were obtained directly from those institutions. These figures indicate enrollment in exercise and sports sciences programs for fall semester 2005. The chart that follows indicates the comparison with the Peer Institution.

Quantitatively, the collection in Kimbel Library is slightly less than the comparison institutions when looking at titles owned. The ratio of titles per student is a better indicator of the adequacy of the collection in areas related to the exercise and sports sciences degree. The average titles per student enrolled in exercise and sports sciences programs of the 3 peer institutions is **9** titles per student. Using the projected student enrollment for the fifth year of Coastal's exercise and sports sciences degree program, our current holdings would yield **15** titles per (projected) student. These figures indicate that Coastal needs to actively build the collection in these areas to come more in line with its degree-granting peer.

Periodicals

The Library will work with Exercise and Sport Science faculty to evaluate the availability of academic journals to support this major. **Figure 2** contains selected print and electronic journals related to this degree program currently available to CCU faculty and students.

Peer Institution Comparison

Library of Congress Subject Heading (includes all subheadings) and LC Class.	CCU Titles	USC-A Titles	Salisbury Titles	UMES Titles
Kinesiology; Human Mechanics; Biomechanics; Exercise physiology (QP)	95	155	164	165
Exercise therapy (RM)	34	45	31	97
Exercise (R)	163	176	114	92
Sports Medicine (RC)	51	39	79	75
Physical Fitness (GV)	144	125	251	93
Physical fitness – testing (GV)	11	30	31	29
Physical education and training (GV)	168	225	371	250
Sports medicine (RC)	51	39	79	75
Sports injuries (RD)	16	52	62	47
Sports sciences (GV)	11	8	16	9
Sports – psychological aspects (GV, BF)	26	55	91	32
Physical therapy (RM)	18	21	63	400
Sports physical therapy (RC)	2	10	12	8
Recreational therapy (RM)	17	38	28	17
TOTAL titles held	785	1002	1343	1384
Fall 2005 enrollment (in EXSS programs) [CCU projected for 2012]	52	92	217	158
Titles per enrolled student	15	11	6	9

Periodical Holdings & Access

Kimbel Library subscribes to SPORTDiscus Full Text, providing access to 270 relevant periodical titles. ScienceDirect, Wiley Interscience and SpringerLink provide access to many relevant titles in this area plus numerous medical titles. The OpenURL server, Journal Finder, provides access to these titles via direct title searching as well as outbound links to the journals from all of our subscribed online citation databases.

Qualitative Analysis

In the subject areas listed in the above chart, Coastal owns 785 titles. The age of the titles examined is relatively old. Of the 785 titles identified, only 272 (34%) were published in the last 10 years. Kimbel Library's current collection in these subject areas is in support of current CCU undergraduate programs. The acquisition of more current materials will be needed to support a BS level program in exercise and sports science.

Quantitative estimate of acquisitions needed

As Kimbel Library currently exceeds the average titles per student of the identified peers, normal collection development over the first five years of the program will be sufficient to meet the needs of faculty and students. The age of the current collection indicates that several areas of the collection will need additions to provide access to current monographic materials.

When this degree program is approved, the Library will allocate funds from the materials budget for EXSS faculty to select and purchase additional materials annually.

CCU's major book vendor reports that the average cost of a book in the identified subject areas, by LC Class breakdown, is: **GV**, \$37.00; **R**, \$80.00; **QP**, \$121.00; **BF**, \$60.00. The average of these 4 areas is \$75.00 per monographic title. EXSS faculty may use these figures to project funds needed for future library acquisitions. The library projects to acquire additional titles during the first two years, after which normal departmental allotments should suffice to serve the program.

ACCREDITATION

Accreditation for the proposed program is available through the Commission on Accreditation of Allied Health Education Programs (CAAHEP). CAAHEP accredits programs upon the recommendation of the Committee on Accreditation for the Exercise Sciences (COAES). The accreditation standards and guidelines are the minimum standards of quality used in accrediting programs that prepare individuals to enter the Exercise Sciences profession. The accreditation standards constitute the minimum requirements to which an accredited program is held accountable. The proposed curriculum aligns with the knowledge, skills, and abilities (KSAs) published by the American College of Sports Medicine (ACSM). These competencies are used by the COAES for the purpose of accreditation. The proposed program will seek accreditation for Exercise Science educational programs after 5 years. Under the current standards and guidelines, accreditation may be reasonably expected.

Graduates of the proposed program will be required to complete a national credentialing exit exam that is aligned with the ACSM KSAs (ACSM's Health/fitness Instructor Exam). This will allow the program to assess its effectiveness and impact (prior to accreditation), and will allow the students to market minimum knowledge, skills and abilities to prospective employers. The program will strongly encourage students to seek additional external certifications related to their career goals (e.g., CSCS; ACE). These opportunities will be integrated within program coursework.

ESTIMATED COST

Estimated new expenditures and sources of funds for the first five years.

ESTIMATED COSTS BY YEAR

CATEGORY	2008-09	2009-10	2010-11	2011-12	2012-13	TOTALS
Program Admin.	0	0	0	0	0	0
Faculty Salaries	50,000	51,500	53,045	54,636	56,275	265,456
Graduate Assistants	0	0	0	0	0	0
Clerical/Support Personnel	0	0	0	0	0	0
Supplies and Materials	0	0	0	0	0	0
Library Resources	2,500	1,500	1,000	1,000	1,000	7,000
Equipment	2,000	50,000	0	0	0	52,000
Facilities	0	0	0	0	0	0
Other (identify)	0	0	0	0	0	0
TOTALS	55,500	105,000	56,545	58,136	59,775	324,456

SOURCES OF FINANCING BY YEAR

CATEGORY	2008-09	2009-10	2010-11	2011-12	2012-13	TOTALS
Estimated FTE Revenue Generated from the State	\$13,850	\$16,620	\$16,620	\$19,389	\$19,389	\$85,868
Tuition Funding (New students only)	\$66,690	\$80,028	\$80,028	\$93,366	\$93,366	\$413,478
Other State Funding						\$0
Reallocation of Existing Funds						\$0
Federal Funding						\$0
Other Funding						\$0
TOTALS	\$80,540	\$96,648	\$96,628	\$112,755	\$112,755	\$499,346

Notes:

Faculty Salaries: 1 position @ \$50,000 starting salary; 3% increase each year.

Equipment: 1 computer @ \$2,000; one-time lab equipment purchase @\$50,000.

Statement of whether or not “unique costs” or other special state appropriations will be required or requested

No unique cost or other special state appropriations will be required or requested.

INSTITUTIONAL APPROVAL

List all internal institutional bodies of which approval was required and the dates on which each such body approved the program.

Gibson Darden Chair, Health, Physical Education, and Recreation	Date
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Gilbert Hunt Dean, Spadoni College of Education	Date
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Louis Keiner Chair, Academic Affairs	Date
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David Evans Chair, Faculty Senate	Date
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David DeCenzo Provost	Date
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Ronald Ingle President	Date
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Oran Smith Chair, Academic Affairs, Committee, Board of Trustees	Date
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Charles Hodge Chair, Board of Trustees	Date
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