

**New Program Proposal  
Bachelor of Science in Exercise Science  
The Citadel**

**Summary**

The Citadel requests approval to offer a program leading to the Bachelor of Science degree in Exercise Science to be implemented in Spring 2013. The proposed program is to be offered through traditional instruction on campus to Core of Cadet students.

The Program Planning Summary was submitted to the Commission on November 1, 2011, and reviewed and voted upon favorably without substantive comment by the Advisory Committee on Academic Programs (ACAP) on January 19, 2012. The New Program Proposal was received by the Commission on February 15, 2012, but was withdrawn and revised based on feedback received from Commission staff. The revised proposal was received by the Commission on May 14, 2012.

According to the proposal, the proposed program will provide students with knowledge of the foundations of exercise science, health and wellness, sport management, and physical fitness. Students will learn human movement concepts as well as biomechanical and physiological outcomes associated with physical work; they will be able to assess areas of aerobic fitness, anaerobic fitness, muscular endurance, muscular strength, body composition, and flexibility; they will understand the benefits of exercise in healthy, diseased/injured, and special populations; and they will be able to assess athletic-related injuries, provide treatment for such injuries, and create safer environments for athletes. As such, these students will be prepared for a variety of employment options, including that of fitness trainer and instructor, physical therapist, and occupational therapist.

The proposal states that the program is needed because of curriculum changes over the years. The proposed program is a modification to an existing program; the concentration in Health and Wellness in the B.S. in Physical Education will be replaced by the proposed B.S. in Exercise Science. According to the proposal, when The Citadel began offering the B.S. in Physical Education in the 1970s, students seeking that degree were preparing themselves for careers in teaching physical education and coaching at the secondary level. However, interests and aspirations of students have changed, which has likewise resulted in curricular changes. The Citadel's B.S. in Physical Education offered three concentrations: Teaching, Sport Management and Administration, and Health and Wellness; The Citadel intends to replace all three concentrations with individual degree programs.

The proposal states that the requirements of the concentration in Health and Wellness in the B.S. in Physical Education have been refined throughout the years and have been modified substantially to warrant a change from a concentration to a new program. The proposal claims that the proposed change will bring the title of the program in line with other institutions offering comparable degree programs with similar requirements. Likewise, the change will provide students with a degree program that will be easily recognized by admission committees for allied health and related graduate programs as well as better prepare students for such graduate programs and for careers in the field. As a result, the change should result in improved recruitment of students into the major.

According to the 2012-13 *Occupational Outlook Handbook* of the Bureau of Labor Statistics, the employment of Fitness Trainers and Instructors is expected to increase 24% from 2010-2020, which is greater than the average for all other occupations. Similarly, in response to an inquiry made by the Committee on Academic Affairs and Licensing, the institution provided South Carolina employment projections that show the employment of Fitness Trainers and Instructors is expected to increase 29% by 2018, while the employment of Physical Therapists is expected to increase 30%, Dietitians and Nutritionists 9%, and Occupational Therapists 26%. The proposal also notes that 140 students are currently enrolled in the concentration in Health and Wellness in the B.S. in Physical Education; this number represents a 126% increase from the 2005-2006 academic year. In addition, the proposal states that the proposed B.S. in Exercise Science is needed to provide appropriate preparation for students who aspire to work in any allied health field; in a fitness facility; or in a hospital or rehabilitation center. According to the proposal, most of these careers require graduate study, and the proposed program will provide the flexibility for students to prepare for any of these careers.

Presently, eight colleges and universities in the state offer undergraduate programs in Exercise Science. Coastal Carolina University, the College of Charleston, Lander University, USC Aiken, USC Columbia, and Winthrop University offer similar programs and the proposal acknowledges the program offered by the College of Charleston, but notes that the two institutions have distinctly different missions and recruit from different student populations. Anderson University also offers a comparable program in Kinesiology and Coker College offers Exercise Science as a concentration in the B.S. in Physical Education.

Based on enrollment in the concentration currently offered, the proposal states that the institution anticipates enrolling 147 students (149.3 FTE) in the program in the first year, 37 of which will be new students. The institution estimates a 5% increase in enrollment each year so that by the fifth year, the institution anticipates enrolling 178 students (189.9 FTE) in the program. If enrollment and program completion projections are met, the proposed program will meet the Commission's productivity standards.

Admission to the proposed program will require that students meet The Citadel's admission standards. The curriculum consists of 132 credit hours, including 59 credit hours in the core curriculum and 58 credit hours of general education courses, and is designed to provide sufficient flexibility to enable students to be prepared to enter their chosen career or graduate or professional program. Two new courses will be added to the institution's course catalog as a result of the proposed program: PHED 401 Exercise Testing and Prescription and PHED 320 Exercise Physiology II. The proposed program's assessment plan has several components as students will be assessed through written tests, oral tests, oral presentations, laboratory reports, and class projects. The program will also be assessed by surveys sent to each graduate to determine how well the degree program has prepared the graduate for employment or for entry in to a graduate or professional degree program. The survey will ask about strengths and weakness of the program and for suggestions of areas that need to be strengthened and in which the program can provide less emphasis. A survey will also be sent to employers of graduates and to admissions committees for graduate and professional schools to which graduates apply. These assessments by graduates and external organizations will be carefully considered by the program's administration to make improvements to the program.

According to the proposal, the institution has adequate faculty, staff, and administrators to deliver the program. As a result of staff inquiry, a representative of The Citadel stated that two additional faculty positions will be needed to support the proposed program and that a tenure track position in the area of Exercise Science will be advertised in Fall 2012 and a visiting

instructor will start in August 2013 on a three-year renewable contract. The proposal indicates the program will be supported with one administrator (0.5 FTE), 11 faculty members (6.75 FTE), and two staff member (1.25 FTE) for its first five years.

The proposal states that no physical plant or significant equipment needs are anticipated for the proposed program. The proposal discusses the 2010 opening of the Dr. Hank Cross Human Performance Laboratory, which was a gift from a donor company, Bite Tech Inc., in support of students in the Health and Wellness concentration and the research of the faculty supporting that concentration. The laboratory includes space for exercise testing of athletics and subjects, blood and hormone laboratory space, a conference room, and three offices. According to the proposal, this facility has improved program delivery and research visibility within the field of exercise science. The proposal states that during the 2012-2013 school year, new equipment such as a pH analyzer, CO-oximeter, ultrasonic flow meter and probes, peristaltic pumps, and electrical stimulator for research in the area of single fiber and whole muscle physiology may need to be purchased for the new tenure track faculty member. In response to staff inquiry, an institutional representative explained that funding for this equipment is not included in the proposed program's budget because if such equipment does need to be purchased, the institution will seek funding from The Citadel Foundation. The representative stated that when the institution provides an offer letter to a new faculty member, the letter include an offer for start-up funds for the purchase of new equipment and other items needed in support of the faculty member's scholarship. The amount of these funds will depend on the needs presented by the faculty member and cannot be determined at this time, but the funds will come from an annual award to the College from The Citadel Foundation. According to the proposal, library resources are sufficient as the library has more than more than 10,500 titles in health, exercise science, and physical education and accesses over 650 print and electronic journal subscriptions, some of which are accessible through the Partnership Among South Carolina Academic Libraries (PASCAL).

As a result of staff inquiry, institutional personnel stated that the institution will not seek specialized accreditation for the proposed program. Staff research revealed that while specialized accreditation is available through the Committee on Accreditation for the Exercise Sciences (CoAES) which was established in 2004 by the Commission of Accreditation of Allied Health Education Programs (CAAHEP), this specialized accreditation for Exercise Science is not included in the scope of recognition for CAAHEP in U.S. Department of Education's list of nationally recognized accrediting agencies and no Exercise Science program in the state is accredited by CoAES. The proposal notes that graduates of the proposed program will be prepared to take the Health Fitness Specialist Exam by the American College of Sports Medicine and the Certified Strength and Conditioning Specialist Exam by the National Strength and Conditioning Association. According to the proposal, these exams are highly regarded by experts in the field and are important credentials to possess for employment prospects. In addition, the results on these exams will provide valuable documentation to the program's administration about how well graduates are prepared for entry in careers as fitness trainers and instructors.

The proposal states there are no formal articulation agreements for the proposed program, but notes that transfer students from the state's technical colleges will be able to pursue the degree if admitted to the Corps of Cadets. The proposal also notes collaboration with the Medical University of South Carolina (MUSC). In response to an inquiry made by the Committee on Academic Affairs and Licensing, institutional representatives provided additional information about this collaboration. According to the representative, the Department of Health, Exercise, and Sport Science has developed an informal but robust collaboration with

MUSC that includes research as well as internships and field experiences for students. For example, the representative stated that many of The Citadel's pre-allied health students complete field experience hours with MUSC's physical therapy program.

Costs and sources of financing identified by the institution for the proposed program are shown in the following table.

<b>ESTIMATED COSTS BY YEAR</b>						
<b>CATEGORY</b>	<b>1<sup>st</sup></b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b>5<sup>th</sup></b>	<b>TOTALS</b>
Program Administration	\$24,914	\$25,786	\$26,689	\$27,623	\$28,589	\$133,601
Faculty Salaries	\$265,930	\$275,238	\$284,871	\$294,841	\$305,160	\$1,426,040
Graduate Assistants						
Clerical/Support Personnel	\$24,113	\$24,957	\$25,831	\$26,735	\$27,671	\$129,307
Supplies and Materials	\$23,908	\$24,745	\$25,611	\$26,507	\$27,435	\$128,206
Library Resources						
Equipment						
Facilities						
Other (Operating)						
<b>TOTALS</b>	<b>\$338,865</b>	<b>\$350,726</b>	<b>\$363,002</b>	<b>\$375,706</b>	<b>\$388,855</b>	<b>\$1,817,154</b>

<b>SOURCES OF FINANCING BY YEAR</b>						
Tuition Funding	\$23,908	\$24,745	\$25,611	\$26,507	\$27,435	\$128,206
Program-Specific Fees						
State Funding						
Reallocation of Existing Funds	\$314,957	\$325,981	\$337,391	\$349,199	\$361,420	\$1,688,948
Federal Funding						
Other Funding (Specify)						
<b>TOTALS</b>	<b>\$338,865</b>	<b>\$350,726</b>	<b>\$363,002</b>	<b>\$375,706</b>	<b>\$388,855</b>	<b>\$1,817,154</b>

These data show that if the institution meets the projected student enrollments and contains costs as they are shown in the proposal, the proposed program will be able to cover costs beginning in the first year and thereafter.

In summary, The Citadel requests approval to offer a program leading to the Bachelor of Science degree in Exercise Science. The proposed program will prepare students for a variety of positions in the exercise science field and for graduate study in the field or in allied health programs.

**Recommendation**

The Committee on Academic Affairs and Licensing commends favorably to the Commission approval of the program leading to the Bachelor of Science degree in Exercise Science at The Citadel, to be implemented in Spring 2013, provided that no “unique cost” or other special state funding be required or requested.