



May 12, 2011

HARRIS PASTIDES
PRESIDENT

Dr. Garrison Walters
Executive Director
South Carolina Commission on Higher Education
1333 Main Street, Suite 200
Columbia, South Carolina 29201

RECEIVED

MAY 16 2011

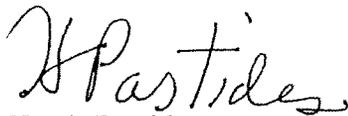
South Carolina Commission
on Higher Education
Academic Affairs Division

Dear Dr. Walters:

Accompanying this letter please find a new program proposal for the modification of a concentration within the Bachelor of Science degree with a major in Physical Education, School of Education, University of South Carolina Upstate.

The planned modification addresses curricular needs in the discipline, and is in keeping with the mission and goals of the USC system. I write to request that the summary be submitted for discussion at the next Commission on Higher Education Advisory Committee on Academic Programs meeting.

Sincerely,



Harris Pastides

HP/mbf

Attachment

Copy: Kristia H. Finnigan, Director, Academic Programs

Program Modification

for the

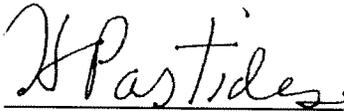
**Bachelor of Science in Physical Education
with a Concentration in Exercise and Sport Science**

to be offered by the

School of Education

of the

University of South Carolina Upstate


Harris Pastides, President

January 2011

CLASSIFICATION

Name of proposed program:	Bachelor of Science in Physical Education with a Concentration in Exercise and Sport Science
Academic Unit Involved:	School of Education, Program in Physical Education
Designation, type, and level of degree:	Bachelor of Science, Undergraduate, 120 hours (4 year)
Proposed date of implementation:	August 2011
CIP Code:	13.1314
New CIP Code:	13.1314
Identification of Program:	Program Modification
Site:	USC Upstate
Program qualifies for supplemental Palmetto Fellows and LIFE Scholarship awards:	No
Delivery mode:	Traditional

JUSTIFICATION

This program modification is to change the degree of B.S. Physical Education with a concentration in Corporate Fitness into a B.S. Physical Education with a concentration in Exercise and Sport Science (ExSS). The purpose of the program is currently to prepare students for careers in strength and conditioning, fitness, and personal training, with preparation for graduate study in exercise physiology, sports nutrition, cardiac rehabilitation, physical therapy, and other health related professions.

Current objectives of the program are as follows:

- Students will have a comprehensive basic knowledge of the scientific underpinnings of the field of fitness and exercise science, particularly exercise physiology and biomechanics.
- Students will be able to read and interpret research in the fields of exercise physiology, biomechanics, sport nutrition, and strength and conditioning.
- Students will learn and demonstrate critical thinking skills as they relate to information in the fields of fitness and exercise science.
- Students will possess strong scientific writing skills.
- Students will have the ability to measure a variety of fitness and performance-related values in athletes and other generally healthy individuals.
- Students will have the ability to design and execute fitness and performance training programs for athletes and other generally healthy individuals.
- Students will be prepared to take two national certification exams: the National Strength and Conditioning Association's (NSCA) Certified Strength and Conditioning Specialist exam, and the American College of Sports Medicine's (ACSM) Health and Fitness Specialist exam.

Deficiencies in the current degree

The current degree needlessly requires 125 credit hours, has very little flexibility, and does not conform to any known national standards for a degree in Fitness, Kinesiology, Recreation, or Exercise Science. Therefore the primary purpose of the proposed changes is to bring the curriculum into conformity with national standards for the field of ExSS, add an option for a minor, and reduce the credit hours requirement to 120 while still meeting the stated objectives of the program. The American College of Sports Medicine has established a standardized set of knowledge, skills and abilities (KSAs) for curricula

in Exercise Science and/or Fitness, which have been adopted by the Committee on Accreditation for the Exercise Sciences (CoAES) under the auspices of the Commission on Accreditation of Allied Health Education Programs (CAAHEP). The modified degree would follow these recommendations.

Need for the program

Exercise and Sport Science is a field that includes a variety of careers, from general fitness-related professions to more specific professions in exercise physiology, cardiac rehabilitation, nutrition, and sport strength and conditioning. Other health-related professions, including physical therapy, have their roots in ExSS, and physical therapy programs regularly accept applicants with an undergraduate degree in that field. Figures from the Bureau of Labor Statistics (Fig. 1) predict robust job growth in most of these areas, indicating continuing opportunities for graduates of the program.

Fig. 1: Jobs Outlook for Fitness and Related Fields

	Employment, 2008	Projected Employment, 2018	Percent change 2008-2016
Fitness trainers and aerobics instructors	261,100	337,900	29
Physical therapists	185,500	241,700	30
Dietitians and nutritionists	60,300	65,800	9

Because fitness trainers are not required to be licensed, the question of how knowledgeable a fitness trainer is has important consumer safety implications. A recent study by Malek (2002) shows a substantial difference in fitness knowledge between trainers with and without bachelor’s degrees in the field. Individuals with certifications from either the ACSM or the NSCA are even more knowledgeable than those with only a bachelor’s degree. Because of this, there is a growing requirement for a bachelor’s degree and/or certification for employment as a fitness trainer, creating substantial demand for programs like the one now proposed.

Centrality of the Program to the Mission of USC Upstate

Viewed in context, the Physical Education program’s mission and objectives to provide a professional education to its students that will allow them to contribute to the needs of the community are clearly aligned with the mission of the University as a whole to be recognized as a leading metropolitan university, providing a practical education to students that match the needs of the local and regional economy. Because of the growing demand for professionals in fitness and related health fields, there is no doubt that the proposed modifications to the current Corporate Fitness, while enhancing the ability of the program in Physical Education to provide a more comprehensive education, will match the needs of the community and thus the mission of the University.

ENROLLMENT

The table below represents estimated enrollments and credit hours for new students beginning in fall of 2011. The numbers represent best estimates of students that are expected to enroll because of the modifications to the program, and do not include new students who might otherwise enroll regardless of changes. Based on informal polling, we estimate 8 new students the first year, 10 the second year, and 12 each year thereafter with no losses between fall and spring semesters. Based on the University’s overall retention rate of approximately 68%, we estimate losing 2-3 students per year between the freshman and

sophomore years. Credit hours generated was calculated based on the expected typical four-year class schedule for the modified degree.

Fig. 2: Estimated New Enrollment

Year	Fall		Spring		Summer	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2011-2012	8	8	8	0	0	0
2012-2013	16	34	16	18	1	3
2013-2014	25	88	25	57	2	6
2014-2015	36	140	36	153	2	6
2015-2016	35	162	35	179	2	6

CURRICULUM

The modification proposal includes three primary changes to the existing degree: 1) Addition of classes to meet national standards, 2) Deletion of courses that do not address the objectives of the program, and 3) expansion of a 9-hour elective 'related concentration courses' requirement into a full 18-21 hour required minor.

As stated earlier, the purpose of the program is to prepare students for careers in strength and conditioning, fitness, and personal training, with preparation for graduate study in sports nutrition, cardiac rehabilitation, physical therapy, and other health related professions. The changes outlined in the modification reflect a consolidation of coursework that provides a greater degree of choice while better addressing the purpose and objectives of the program.

The current concentration (see page 6) is a 125 hour degree with four elective hours, and has serious deficiencies in scientific and field-related content that inhibit voluntary accreditation efforts and deprive students of critical knowledge. Many courses currently included in the degree are more appropriate for the separate field of recreation, and their inclusion comes at the expense of more important basic coursework and much valued curricular flexibility. The new curriculum (page 7) would address deficiencies and reduce the total required hours from 125 to 120, and provide additional flexibility for students to pursue a minor of their choosing. Rationale for specific course additions or deletions can be found in the table below. The change in the title of the concentration would more accurately reflect the focus of the program and the available career options.

Because of the high rate of transfer students to USC Upstate (the highest among all public universities in South Carolina), the University places a high priority on making the transition to our campus as seamless as possible. The recent creation of the 'Upstate Direct Connect' program affirms this goal. According to Admissions office documentation, the program assures that, "any student who graduates with an AA, AS or select AAS from Greenville Tech, Spartanburg Community College, or Spartanburg Methodist College is guaranteed admission to the University of South Carolina Upstate." Students in the program are also given enhanced advising, priority registration and the opportunity for concurrent enrollment in classes at

Upstate after completing 45 hours. This program should improve our already robust transfer admissions and help to further ease the transition from community college to the Upstate campus.

Fig. 3: Rationale for Specific Curricular Changes

Modification	Rationale
Add SBIO 232: Human Anatomy	This is currently a 'hidden' prerequisite for 3 upper-level major courses. Adding it eliminates confusion.
Add SBIO 242: Human Physiology	A prerequisite for upper level courses in this discipline at every major University.
Add SPED 457: Essentials of Strength and Conditioning	Addresses content deficiency according to national standards.
Add SPED 459: Sport Nutrition	Replaces SNUR 301: Normal Nutrition, no longer available to non-nursing majors.
Delete SREC 200, 201, 301, 401, 462, and SPED 140, 235, 265, 445	Courses do not address program objectives.
Delete SPSY 302: Developmental Psychology	Necessary content included in existing classes.

Bachelor of Science in Education
Major in Physical Education: Corporate Fitness Concentration
Current Student Worksheet

_____ General Education Requirements

I. Communication 9

- _____ English 101
- _____ English 102
- _____ Speech 201

II. Mathematics 6

- _____ SMTH 120
- _____ SMTH 102

III. Information Technology 3

- _____ SCSC 138

IV. Natural Science 8

- _____ SBIO 110/L
- _____ SAST111/L; SBIO 206, 240, 242/L; 270; SCHM 101, 105, or 106, 107/L SPHS 101/L or 109/L, 111L, 112L, SGEG 201; SGEL;101/L, 102/L, 103/L, 120, 121, 123/L,131;PSHS 011/L, 201/L,020/L, 211/L, 212/L

V. Arts and Humanities 6

- _____ *One course selected from*
SAAS 24; SATH 101, 105 or 106; SMUS 110, 140; STHE 161, 170
- _____ *One course selected from the following (No more than 3 credit hours from a specific discipline)*
SAAS 204; SAMS 101, 102; SATH 101, 105, 106; SEGL 250, 252, 275, 279, 280, 283, 289, 290 291; SMUS 110, 140; SPHL 102, 211; SREL 103, STHE 161, 170

VI. Foreign Language 3

- _____ SFRN 102; SGRM 102; or SSPN 102 Placement in a 201 or higher level language Course
(Students placing into the 201 or higher level of a language have satisfied this requirement but will have additional hours in electives, if hours are required in their major)

VII. History 3

- _____ SHST 101, 102, 105, 106

VIII. Social Behavioral Sciences 6

- _____ SPSY 101
- _____ One course from the following: SAAS 201; SANT 102; SECO 221, 222; SGEG 101, 103; SGIS 201, 301, 320; SSOC 101; SWST 101

_____ Major Requirements:¹

- _____ SPED 120: Conditioning 1
- _____ SPED 128: Aerobics 1
- _____ SPED 140: Adult Recreational Sports 1
- _____ SPED 180: Swimming or 1
- _____ SPED 280: Swimming and Water Safety

- _____ SPED 235: Dance and Gymnastics 3
- _____ SPED 265: Officiating of Sports 3
- _____ SPED 301: Exercise Physiology 4
- _____ SPED 302: Biomechanics 3
- _____ SPED 320: Team Sports I 3
- _____ SPED 390: Field Experience 3
- _____ SPED 415: Individual/Dual Sports 3
- _____ SPED 445: Measurement and Evaluation of Physical Education 3
- _____ SPED 455: Fitness Assessment and Prescription 4
- _____ SREC 200: Introduction to Recreation. 3
- _____ SREC 201: Programming in Recreation 3
- _____ SREC 301: Administration of Recreation 3
- _____ SREC 401: Lifetime Leisure 3
- _____ SREC 462: Special Populations 3
- _____ SREC 480: Internship 6
- _____ SREC 485: Senior Seminar 1

_____ Related Concentration Courses 9

- _____ Six semester hours must be from one academic area and three semester hours from a different academic area
- Academic Area 1*
- _____ SPSY 325: Experimental Psychology or higher
- Academic Area 2*
- _____ Financial Accounting 225
Managerial Accounting 226
Business Systems 290, or any upper division business course with consent of instructor
- Academic Area 3*
- _____ Science: Any upper division biology course or any chemistry, geology, or physics course
- Academic Area 4*
- _____ Sociology: any upper division course

_____ Supporting Courses

- _____ SHED 170: First Aid 1
- _____ SHED 221: Lifelong Health and Wellness 3
- _____ SNUR 301: Normal Nutrition 3
- _____ SPED 270: Introduction to Athletic Training 3
- _____ SPSY 302: Developmental Psychology 3

_____ Electives 4

_____ Total hours required 125

Bachelor of Science in Education
Major in Physical Education: Exercise and Sport Science Concentration
Proposed Student Worksheet

General Education Requirements	
I. Communication	9
_____ English 101	
_____ English 102	
_____ Speech 201	
II. Mathematics	6
_____ SMTH 120	
_____ SMTH 102	
III. Information Technology	3
_____ SCSC 138	
IV. Natural Science	8
_____ SBIO 110/L or SBIO 101/L	
_____ SCHM 109/L or 111/L	
V. Arts and Humanities	6
_____ <i>One course selected from</i>	
SAAS 24; SATH 101, 105 or 106; SMUS 110, 140; STHE 161, 170	
_____ <i>One course selected from the following (No more than 3 credit hours from a specific discipline)</i>	
_____ SAAS 204; SAMS 101, 102; SATH 101, 105, 106; SEGL 250, 252, 275, 279, 280, 283, 289, 290 291; SMUS 110, 140; SPHL 102, 211; SREL 103, STHE 161, 170	
VI. Foreign Language	3
_____ SFRN 102; SGRM 102; or SSPN 102	
Placement in a 201 or higher level language Course (Students placing into the 201 or higher level of a language have satisfied this requirement but will have additional hours in electives, if hours are required in their major)	
VII. History	3
_____ SHST 101, 102, 105, 106	
VIII. Social Behavioral Sciences	6
_____ SPSY 101	
_____ One course from the following: SAAS 201; SANT 102; SECO 221, 222; SGEG 101, 103; SGIS 201, 301, 320; SSOC 101; SWST 101	

Major Requirements:¹	
_____ SPED 120: Conditioning	1
_____ SPED 128: Aerobics OR	1
_____ SPED 180: Swimming OR	
_____ SPED 280: Swimming/Water Safety	
_____ SPED 301: Exercise Physiology	4
_____ SPED 302: Biomechanics	3
_____ SPED 320: Team Sports I	3
_____ SPED 390: Field Experience	3
_____ SPED 415: Individual/Dual Sports	3
_____ SPED 455: Fitness Assessment and	4

Prescription	
_____ SPED 457: Essentials of Strength and Conditioning	3
_____ SPED 459: Sport Nutrition	3
_____ SREC 480: Internship	6
_____ SREC 485: Senior Seminar	1

Supporting Courses	
_____ SPED 270: Introduction to Athletic Training	3
_____ SHED 170: First Aid	1
_____ SHED 221: Lifelong Health and Wellness	3
_____ SBIO 232: Human Anatomy	4
_____ SBIO 242: Human Physiology	4

Physical Education – Exercise and Sport Science majors must choose either an approved minor (18-24 hours)^{1,2,3,5} OR a cognate (12 hours)⁴

Minor Option^{1,2,3}	18-24

OR

Cognate Option^{1,4}	12

Electives⁵	2-14

Total hours required	120
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¹A minimum grade of C is required in all coursework.
²Approved minors include, Biology, Business Administration, Chemistry, Sociology, or Psychology.
³Up to 6 hours of General Education (<300 level) may be used to satisfy requirements of a minor
⁴Cognates must be approved by the program coordinator in advance of their implementation.
⁵Students completing a minor in business may not take more than 6 hours of electives in Johnson College of Business and Economics courses.

New Courses

No new courses will be created in the next five years. Four new courses will be added to the program, two of which were added to the catalog in 2010-2011. Those two courses are described below.

SPED 457. Essentials of Strength and Conditioning (3) The scientific foundations of strength training and athletic conditioning, program design for both power and endurance athletes, performance-enhancing substances, performance testing, and facility organization and management. Prepares students to sit for the NSCA's Certified Strength and Conditioning Specialist exam. Prerequisites: SPED 301, SPED 302, junior standing.

SPED 459. Sport Nutrition (3) Impact of optimal nutrition on exercise performance. Important topics include digestion, thermoregulation, metabolism and fuel usage, sports supplements, and weight control. Prerequisites: SPED 301, junior standing.

FACULTY

No new faculty will be added as a result of the program modification. One full-time tenure track faculty and two adjunct faculty members are sufficient to offer the full curriculum.

PHYSICAL PLANT

The program modification will have no effect on the ability of the existing physical plant to support the program. No new facilities or modifications to existing facilities are needed as a result of the program modification. The program currently has a designated lab space and ancillary facilities that adequately support the mission and objectives of the program.

EQUIPMENT

The program currently maintains a Human Performance Laboratory with necessary equipment to support a full lab curriculum and basic student and faculty research. Current equipment includes a Biopac MP35 physiologic data collection system, a Monark bike ergometer, and other small equipment needed for basic instruction. New equipment acquisitions as necessary for instruction and research will be financed with lab fees and grants.

LIBRARY RESOURCES

No new library allocations will be needed to support the program with the new modifications. The modification is not expected to affect the library's ability to support the program. Any new allocations or library resources will be due the natural evolution of the program over time rather than to the modification itself.

ACCREDITATION, APPROVAL, LICENSURE, OR CERTIFICATION

Although the program is housed within the School of Education, there are no requirements for programs in Exercise and Sport Science to be individually accredited by any local or national body. The program does plan to apply for recognition by the NSCA based on the proposed changes, and will likely apply for accreditation by CoAES/CAAHEP in 2011-2012. These applications are based on the recognized benefits of accreditation for students and the program as a whole and are not required. However, the success of these applications is tied to the program

modification, and the proposed curricular changes are guided in part by accreditation standards from these two national bodies.

Students are not currently required to be licensed or certified to be employed in those careers that require only a bachelor's degree. However, preparations for two national certifications in the form of required classes, as outlined in the program objectives, will be included in the modified program and are currently offered to students on a voluntary basis. The curriculum for these classes is based on the listed expectations of knowledge, skills and abilities by the certifying bodies involved, and therefore students will have an excellent chance of success if they successfully complete the classes with a reasonable grade. In the modified program, students will be required to take these preparatory courses, but will not be required to take the certification exam at the present time.

ESTIMATED NEW COSTS

There will be no new administrative, faculty, support, material, library, equipment, or facilities costs for the modified program. No new "unique cost" or state appropriations will be required or requested.

ESTIMATED NEW COSTS BY YEAR

CATEGORY	1 st	2 nd	3 rd	4 th	5 th	TOTALS
Program Administration	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Faculty Salaries	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Adjunct Faculty	\$ 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	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Equipment/Software	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Facilities	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
TOTALS	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

SOURCES OF FINANCING BY YEAR

CATEGORY	1 st	2 nd	3 rd	4 th	5 th	TOTALS
Estimated FTE Revenue Generated from The State MRR funded at 63% (actual amount cannot be determined)	\$0	\$0	\$0	\$0	\$0	\$0
Tuition Funding (based on in-state)	\$2368	\$16,280	\$44,696	\$88,504	\$102,712	\$254,560
Other State Funding	\$0	\$0	\$0	\$0	\$0	\$0
Reallocation of Existing Funds	\$0	\$0	\$0	\$0	\$0	\$0
Federal Funding	\$0	\$0	\$0	\$0	\$0	\$0
Other Funding	\$0	\$0	\$0	\$0	\$0	\$0
TOTALS	\$2368	\$16,280	\$44,696	\$88,504	\$102,712	\$254,560

INSTITUTIONAL APPROVAL

After approval by the School of Education in the fall of 2009, the program modification was approved by the university's Executive Academic Affairs Committee on March 1, 2010, followed by approval from the Faculty Advisory Committee on March 19th, 2010. Final campus

approval was provided by the Faculty Senate on March 26th, 2010. No further approval was required.

REFERENCES

Malek MH, Nalbone DP, Berger DE, Coburn JW. Importance of health science education for personal fitness trainers. *Journal of Strength and Conditioning Research*. 16(1):19-24, 2002.