

**UNIVERSITY OF SOUTH CAROLINA
COLUMBIA CAMPUS**

**PROPOSAL TO THE SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION
FOR PROGRAM MODIFICATION, CHANGING CIP CODE
FROM 31.0505 TO 26.0908**

SUBMITTED AUGUST 2009

**DR. HARRIS PASTIDES
PRESIDENT
UNIVERSITY OF SOUTH CAROLINA**

Program Contact Name and Information
Dr J. Larry Durstine, Department Chair
USC Department of Exercise Science
ldurstin@mailbox.sc.edu
(803) 777-7680

CLASSIFICATION

Name of Proposed Program:	Bachelor of Science, Exercise Science
Academic Unit Involved:	Exercise Science Department School of Public Health University of South Carolina, Columbia
Campus	
Designation of Degree:	Bachelor of Science (B.S.), 4 years
Proposed Date of Implementation:	Spring 2010
CIP code:	currently 31.0505, Proposing reclassification to 26.0908
Identification of program as New or Modified:	Modified
Site: Campus	University of South Carolina, Columbia
Program qualifies for supplemental Palmetto Fellows Scholarship and LIFE Scholarship Awards:	Under new CIP classification, yes
Delivery Mode:	Traditional

JUSTIFICATION

The University of South Carolina – Columbia requests approval to reclassify the undergraduate programs of the Exercise Science Department from CIP Code 31.0505 to **26.0908**. The Exercise Science department in the Arnold School of Public Health, ranked #1 in the nation by Academic Analytics in 2007, was formed in 1989 when Exercise Science became a unit within the School of Public Health and Physical Education joined the College of Education. This change marked a conscious move towards a more scientific approach in better understanding the relationship between physical activity, regular practiced exercise and health. CIP codes assigned to the newly formed department at the time did not reflect the breadth of disciplines, nor the science found, within the study of exercise. However, in the year 2000 NCES updated the CIP Code options and the Exercise Science department at the University of South Carolina was not made aware of the change, nor did we receive the opportunity to change our CIP code to the correct one. The newer code proposed here, 26.0908, describes more accurately the sciences, the educational and research practices, and the interests found in the Department of Exercise Science at the University of South Carolina – Columbia.

Purpose and Objectives:

The mission of the Department of Exercise Science is to expand and disseminate the body of knowledge concerning the scientific relationships between exercise participation, physical activity and human health. Through an active, nationally-recognized research agenda, the department seeks to better understand and describe the mechanisms responsible for the effects that physical activity has on human physiology, both as a result of single exercise session and as exercise training adaptations made over time. The department received approximately \$5,000,000 in research funding during the 2008-2009 year from sources such as the National Institutes of Health (NIH), the Department of Defense and DARPA, the Gatorade Sports Science Institute, and the Institute of Nutraceutical Research and has averaged \$3,000,000 to \$4,000,000 per year in research funding during the previous 5 year period. Further, as a unit within the Arnold School of Public Health, all of the Exercise Science programs actively work to apply this knowledge towards understanding the nature and prevention of injury, disease, and disability. Together, these educational and research opportunities provide graduates superior skills in scientific inquiry process and allows the students to go forth after graduation and develop careers in the fields of medicine, physical activity, exercise and public health.

Program Need:

A career in higher education in the field of Public Health requires the collaboration of many disciplines ranging from Physiology, Epidemiology, Psychology, and Health Management. Whereas in previous years the study of physical activity and exercise has not been traditionally addressed in medical schools, this past approach is changing, and medical schools are now adding Exercise Science departments. In addition, the field of Public Health has recognized the potential for exercise to serve as a valuable intervention in improving the health of individuals and groups of people or communities for many years. Crucial to these public health aims is a better understanding of human anatomy and physiology, both at rest and how it changes or responds to the stimulus of physical activity. As science and medicine advance, an essential need has evolved to understand the body's responses and adaptations to exercise on a molecular, cellular and physiological level if physical activity is going to be effectively utilized as a "medicine" for aging, disuse, injury, disease and even genetic determinants.

The student demand for the programs in Exercise Science is readily evidenced by the huge exponential growth experienced by the department. In 1994, the undergraduate program consisted of 284 students. Ten years later, enrollment had grown to 378 students. In the fall of 2008, the department included 630 undergraduates pursuing a B.S. in Exercise Science and for the fall of 2009 the expected enrollment is more than 725 students (notably, for the past academic year approximately 15 to 20 percent of the undergraduate student population were also members of the University of South Carolina prestigious Honor College and Capstone programs). This rate of growth is mirrored by the graduate program, where the increase is at least partially explained by the greater demand for professionals in all sectors of the health care field. Many of the undergraduate students leaving the Department of Exercise Science continue their education endeavors in careers in medicine, health education, public policy and scientific research. Of the 121 students who graduated from the department during the 2008-2009 school year, 90 graduates are going on to graduate or professional schools in the health and science fields, including medical school (26% of the graduating class) and physical therapy school (26%). According to the Bureau of Labor Statistics, these fields are all expected to grow significantly over the next decade to meet the needs of our aging population.

Relationship of the Proposed Program to other Programs within the University:

While there are many connections between Exercise Science and many of the more traditional scientific disciplines found in a university setting, the degrees offered through the department occupy a special niche found only at the USC-Columbia campus. The B.S. degree from Exercise Science is the only undergraduate degree program at USC that includes all the required courses for applying to medical school, and only in Exercise Science are students given the opportunity to extend the study of these concepts of the human body into meaningful health interventions such as exercise. Meanwhile, the programs offered through the College of Education, Physical Education and Athletic Training, focus on humans as subjects only from a clinical perspective, without the same emphasis on scientific inquiry into the biological mechanisms responsible for phenomena seen in the clinical setting.

In short, Exercise Science is the only available route at the University of South Carolina for students who wish to not only study the workings of the human body, but also the impact of physical activity and exercise on human physiology and biochemistry, to better understand the health implications for dealing with chronic diseases and disabilities. Blending several academic disciplines and achieving an integrative study of the human body through Exercise Science is consistent with the dynamic nature of research in physical activity and strengthens the overall mission of the department. These Exercise Science undergraduate programs at the University of South Carolina serve to direct students into professional programs such as Medicine, Physical Therapy, and public health-oriented graduate programs. The overall result of this approach are highly trained physicians and therapists who through employment opportunities foster new interdisciplinary collaborations that will provide better patient medical management and improved health care and public health.

Similarities and Differences between USC's Exercise Science Program and those offered at other institutions:

The Exercise Science program at USC has served as a model for other programs, both nationally outside the state and within the state. Amongst many of the department's peer institutions nationally, the department shares the older code of 30.0505. However, in most of those cases, such as University of Georgia, University of Michigan, and the University of Maryland, the departments have maintained strong ties with Physical Education (for which this code was developed) as reflected in curriculums that feature athletic training, sports management or commerce, and recreational programming. Perhaps the most persuasive precedent to cite is the Kinesiology program at the University of Massachusetts-Amherst. This program was the second Exercise Science program in the country to form within a school of Public Health. The faculty in Exercise Science at UMass-Amherst modeled their program after USC-Columbia's as USC was the first university to include in a school of Public Health an Exercise Science or Kinesiology program. The Kinesiology program at UMass-Amherst also possesses the updated CIP code of 26.0908 that is sought in this program modification proposal.

Within the state of South Carolina, there are no existing programs utilizing the proposed code of 26.0908 while seven programs, including the Exercise Science department here at USC-Columbia, share the current CIP code of 31.0505. These other universities are USC-Aiken, Anderson University, Lander University, Coastal Carolina, Coker College and Erskine College. The programs at Lander, Coker, and Erskine are each housed within their respective schools of

Education. Their major emphasis is on health and wellness counseling with options to focus on sports management and athletic training, similar to the offering of the Physical Education programs here at USC-Columbia. Programs offered by USC-Aiken and Anderson University are part of their university's College of Sciences and offer a broader scope of scientific understanding than traditional Physical Education programs. Each program offers one or two Physiology classes, but the main academic focus still resides on movement and its clinical implications, not the sciences. Of all the programs within the state of South Carolina, Coastal Carolina University's B.S. in Exercise and Sports Science resembles the program at USC-Columbia most closely. The students in each program follow a very similar curriculum as to the program here at USC-Columbia. However, as is the case for all of the above programs, no graduate programs in Exercise Science are available at Coastal Carolina University and none of these programs truly emphasize the sciences as do the Exercise Science programs here at the USC-Columbia campus. In recent years, the department has hired 5 new tenure track faculty members who are nationally known for their expertise in studying the relationship between physical activity and genomics, cancer and other chronic diseases. Thus, there are fewer opportunities to connect the most current scientific work with the classroom, especially in terms of the implications for treating and preventing disease and disability.

Enrollment

Admissions Criteria:

Students may apply to the Exercise Science major directly as an incoming freshman to the university. Undergraduate transfer students from other schools or universities must have at least a 2.75 grade point average (GPA) to gain admission to the program.

Projected Total Enrollment						
Year	Fall		Spring		Summer	
	Headcount	Credit Hours ¹	Headcount	Credit Hours ¹	Headcount	Credit Hours
2007-2008	531	7965	537	8055		925
2008-2009	622	9330	630	9450		1045 ²
2009-2010	725 ³	10875	732 ⁴	10980	-	1181
2010-2011	819 ⁵	12285	826	12390	-	1334
2011-2012	925	13875	932	13980	-	1508
2012-2013	1046	15690	1053	15795	-	1704
2013-2014	1182	17730	1189	17835	-	1925

¹ Based on 15 credit hours per semester

² Based on average annual growth in summer enrollment of 13% over previous 5 years

³ Current enrollment

⁴ Average of the spring increases over the last 2 years

⁵ Based on average annual growth of 13% over the previous 5 years

Enrollment in the Exercise Science undergraduate degree programs has increased significantly over the last 5 years as more students have recognized its value as an effective preparatory program for professional or graduate school. Changes in enrollment between fall and spring terms vary widely as a balance between mid-year graduations and transfers into the program,

but each of the last two years has shown a modest increase. The total number of credit hours during the summer also fluctuates from year to year, but overall has shown significant growth from 571 credit hours in 2004 to 925 credit hours in 2008.

Estimated New Enrollment						
Year	Fall		Spring		Summer	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2009-2010	150 ⁶	2250	150	2250	15 ⁷	45 ⁸
2010-2011	170	2550	170	2550	17	51
2011-2012	192	2880	192	2880	19	57
2012-2013	217	3255	217	3255	22	66
2013-2014	245	3675	245	3675	25	75

⁶ Students new to the university, not changing majors within the university, represent approximately 66% of the new additions to the department each year. Headcounts are not cumulative from year to year.

⁷ Approximately 10% of students new to the university enroll in summer classes at USC-Columbia the first summer after entering the university.

⁸ Based on 3 total hours per student per summer

Curriculum

Exercise Science

Degree Requirements

(120-125 total hours required, depending on area of emphasis)

General Education Requirements (54 hours)

Includes 20 hours of science plus completion of a calculus course. Students are expected to demonstrate proficiency in one foreign language equivalent to a minimal passing grade in the 110 course.

Exercise Science Core Requirements (21 hours)

Required of all areas of emphasis within the major

University 101 (3)

EXSC 191 – Physical Activity and Health (3)

EXSC 223 - Anatomy & Physiology 1 (4)

EXSC 224 – Anatomy & Physiology 2 (4)

EXSC 351 – Acquisition of Motor Skills (3)

EXSC 530/L – Physiology of Muscular Activity (4)

First Aide and CPR certification

Cognate Requirements (45 hours)

Health/Fitness (45 hours)

EXSC 531 – Clinical Exercise Physiology/Lab (3)
EXSC 341A – Health Fitness Practicum (1)
EXSC 481 – Practicum in Community Fitness Programs (9)
HPEB 502 – Nutrition (3)
or EXSC 507 – Exercise, Sport and Nutrition (3)

Selectives – chosen from list of options defined by the faculty (15)
Electives (14)

Motor Development (45 hours)

CHEM 112 or PHYS 202/L (4)
EXSC 303 – Perceptual Motor Development (4)
EXSC 342A – Practicum in Life-Span Motor Development (2)
EXSC 342B – Practicum in Life-Span Motor Development (2)
EXSC 482 – Internship in Life-Span Motor Development (9)
EXSC 563 – Physical Activity and Aging (3)

Selectives – chosen from list of options defined by the faculty (15)
Electives (6)

Scientific Foundations (45 hours)

BIOL 302/L – Cell and Molecular Biology (4)
CHEM 112 – General Chemistry 2 (4)
CHEM 333/L – Organic Chemistry 1 (4)
CHEM 334/L – Organic Chemistry 2 (4)
PHYS 202/L – General Physics 2 (4)
EXSC 499 – Independent Study (3)

Selectives – chosen from list of options defined by the faculty (11)
Electives (11)

Public Health (45 Hours)

EXSC 410 – Psychology of Physical Activity (3)
HPEB 221 – Personal and Community (3)
HPEB 553 – Community Health Psychology (3)
POLI 374 - Public Policy (3)
PSYC 465 – Health Psychology (3)

Selectives – chosen from list of options defined by the faculty (15)
Electives (15)

Selectives

S = Scientific Foundations, F = Health Fitness, M = Motor Development, P = Public Health

<u>Courses approved for major credit</u>	<u>Track</u>
ANTH 565 – Health and Diseases in the Past	P
BIOL 250/L – Microbiology	S, P
BIOL 303 – Fundamental Genetics	S
BIOL 431/L – Bacteriology	S
BIOL 460/L – General Physiology	S
BIOL 505/L – Developmental Biology I	S
BIOL 506/L – Developmental Biology II	S
BIOL 530 – Histology	S
BIOL 531 – Parasitology	S
BIOL 534/L – Animal Biology	S
CHEM – Any course at 300 level or above	S
COMD 500 – Intro to Communication Disorders	F, M
COMD 501 – Anatomy and Phys. of Speech and Hearing	F, M
COMD 507 – Phonetics	F, M
COMD 526 – Articulation Disorders	F, M
COMD 560 – Observation of Speech and Audiology	F, M
COMD 570 – Introduction to Language Development	F, M
EDEX 523 – Introduction to Exceptional Children	M
EXSC 341B/C – Practicum in Health Fitness	F
EXSC 395 – Research Seminar	S
EXSC 410 – Psychology of Physical Activity	S, F, M
EXSC 499 – Independent Study	F, M
EXSC 507 – Exercise, Sport and Nutrition	S, M, P
EXSC 531 – Clinical Exercise Physiology	S, M, P
EXSC 562 – Impairments of Human Motor System	M
EXSC 563 – Physical Activity and Aging	F
GEOG 343 – Human Impact on the Earth	P
HPEB 300 – Introduction to Health Promotion	F, P
HPEB 301 – Practicum in Health Education	P
HPEB 321 – Personal and Community Health	F, P
HPEB 501 – Family Life and Sex Education Programs	P
HPEB 502 – Nutrition	S, M, P
HPEB 511 – Health Problems in a Changing Society	S, F, P
HPEB 513 – US Ethnic Minorities and Health	F, P
HPEB 540 – Drug Education	P
HPEB 542 – Public Health Practice in Tobacco Prevention	P
HPEB 547 - Consumer Health in Society	F, P
HPEB 550 – Behavioral Concepts for Health Professionals	F, P
HPEB 552 – Medical Anthropology	P
HPEB 553 – Community Health Problems	F, P
HPEB 621 – Maternal and Child Health Education	P
HSPM 500 – Intro to Health Care Management	P
PEDU 100-187 – Physical Activity classes	F
PEDU 266 – Care and Prevention of Injuries	F
PEDU 266L – Athletics Training Lab	F
PEDU 340 – Practicum in Instructional Aspects of PE	F
PEDU 360 – Instructional Aspects of Physical Education	F
PEDU 366 – Therapeutic Modalities	F, M
PEDU 420 – Motor Learning in Physical Education	F
PEDU 464 – Conditioning Methods Athletic Performance	F
PEDU 466 – Therapeutic Exercise	F, M
PEDU 650 – American Coaching Effectiveness Program	F

PSYC 380 – Sport Psychology	F
PSYC 400 – Survey of Learning and Memory	S, F
Psych 405 – Cognitive Psychology	F
PSYC 410 – Abnormal Psychology	S, F, M
PSYC 420 – Developmental Psychology	S, F, M
PSYC 430 – Social Psychology	F
PSYC 440 – Personality	F
PSYC 450 – Sensation and Perception	S, F
PSYC 460 – Physiological Psychology	S, F, M
PSYC 465 – Health Psychology	S, F
PSYC 510 – Abnormal Behavior in Children	M
PSYC 521 – Psychology of Adolescence	M
PSYC 523 – Psychology of Aging	F
PSYC 528 – Psychology of Children with Exceptionalities	M
PSYC 529 – Specific Learning Disabilities of Children	M
SOWK 304 – Social Welfare Services for Families	M
WOST 113 – Women and Their Bodies in Health and Disease	P

S = Scientific Foundations, F = Health Fitness, M = Motor Development, P = Public Health

Example Schedules of Courses:

Health Fitness Track

1st Semester (Fall)			2nd Semester (Spring)		
*	ENGL 101 English Composition	3	*	ENGL 102 Composition & Literature	3
*	BIOL 101 Biological Principles I	4	*	BIOL 102 Biological Principles II	4
*	EXSC 191 Physical Activity and Health	3	*	CHEM 111 General Chemistry I	4
*	UNIV 101 Intro to University (EXSC)	3	*	MATH 122 or 141 Calculus	3-4
*	Elective (MATH 111 or 115)	3 or 4			
	Total semester hours	16-17		Total semester hours	14-15
3rd Semester (Fall)			4th Semester (Spring)		
* ~	EXSC 223 Anatomy & Physiology I	4	*	EXSC 224 Anatomy & Physiology II	4
	ENGL Literature or SPCH 140 Public Comm	3		CSCE 102 (or CSCE 101) Comp Science	3
	PSYC 101 Intro to Psychology	3	*	PHYS 201 General Physics I	3
	STAT 201 (or STAT 205) Statistics	3	*	PHYS 201L General Physics I Lab	1
	Foreign Language 109	3		Elective (**PEDU 300)	3
				Foreign Language 110	3
	Total semester hours	16		Total semester hours	17
5th Semester (Fall)			6th Semester (Spring)		
* +	EXSC 530 Phys Msc Act	3	* +	EXSC 531 Clinical Exercise Physiology	3
* +	EXSC 530L Phys Msc Act Lab	1	* +	EXSC 531 L Clinical Exercise Phys Lab	0
* + #	EXSC 341 A Practicum	1	* +	EXSC 351 Acq Motor Skills	3
*	CHEM 112 or PHYS 202 & 202L	4	*	EXSC 454 Health/Fitness Programs	3
*	HPEB 502 Human Nutrition or EXSC 507 Sports Nutrition (Spring)	3		SOCY 101 Intro to Sociology	3
*	Selective	3	*	EXSC 535 Biomechanics	3
*	Selective	3		Elective	3
	Total semester hours	18		Total semester hours	18
7th Semester (Fall)			8th Semester (Spring)		
	Fine Art	3	* + #	EXSC 481 Practicum	9
	Social Science elective	3		Elective	3
	HIST elective	3			
*	Selective	3			
	Elective	3			
	Total semester hours	15		Total semester hours	12

Motor Development Track

1st Semester (Fall)		
* °	ENGL 101 English Composition	3
*	BIOL 101 Biological Principles I	4
*	EXSC 191 Physical Activity and Health	3
*	UNIV 101 Intro to University (EXSC)	3
*	Elective (MATH 111 or 115)	3 or 4
Total semester hours		16-17
3rd Semester (Fall)		
* ~	EXSC 223 Anatomy & Physiology I	4
°	ENGL Literature or SPCH 140 Public Comm	3
*	SOCY 101 Intro to Sociology	3
*	PHYS 201 General Physics I	3
*	PHYS 201L General Physics I Lab	1
*	Selective	3
Total semester hours		17
5th Semester (Fall)		
* +	EXSC 530 Phys Msc Act	3
* +	EXSC 530L Phys Msc Act Lab	1
*	EXSC 303 Perceptual Motor Develmnt (Requires placement into Upper Division)	4
	CSCE 102 (or CSCE 101) Comp Science	3
	Elective (**PEDU 300)	3
	Foreign Language 109	3
Total semester hours		17
7th Semester (Fall)		
* + #	EXSC 342 B Practicum (Requires placement into Upper Division)	2
	Social Science elective	3
	HIST elective	3
*	Selective	3
*	Selective	3
	Selective	3
Total semester hours		17

2nd Semester (Spring)		
* °	ENGL 102 Composition & Literature	3
*	BIOL 102 Biological Principles II	4
*	CHEM 111 General Chemistry I	4
*	MATH 122 or 141 Calculus	3-4
	PSYC 101 Intro to Psychology	3
Total semester hours		17-18
4th Semester (Spring)		
*	EXSC 224 Anatomy & Physiology II	4
*	CHEM 112 or PHYS 202 & 202L	4
	STAT 201 (or STAT 205) Statistics	3
	Fine Art	3
	Elective	3
Total semester hours		17
6th Semester (Spring)		
* +	EXSC 351 Acq Motor Skills	3
* + #	EXSC 342 A Practicum (Requires placement into Upper Division)	2
* +	EXSC 531 Clinical Ex Phys	3
* +	EXSC 531L Clinical Ex Phys Lab	0
*	EXSC 535 Biomechanics	3
*	PEDU 142 Life Guard Training or PEDU 141 Intermediate Swimming	1
	Selective	3
	Foreign Language 110	3
Total semester hours		18
8th Semester (Spring)		
* +	EXSC 563 PA and Aging	3
* + #	EXSC 482 Practicum (Requires placement into Upper Division)	9
Total semester hours		12

Scientific Foundations Track

1st Semester (Fall)		
* °	ENGL 101 English Composition	3
*	BIOL 101 Biological Principles I	4
*	EXSC 191 Physical Activity and Health	3
*	UNIV 101 Intro to University (EXSC)	3
*	Elective (MATH 111 or 115)	3-4
Total semester hours		16

3rd Semester (Fall)		
* ~	EXSC 223 Anatomy & Physiology I	4
°	ENGL Literature or SPCH 140 Public Comm	3
*	PHYS 201 General Physics I	3
*	PHYS 201L General Physics I Lab	1
*	CHEM 112 General Chemistry II	4
	Foreign Language 109	3
Total semester hours		18

5th Semester (Fall)		
* +	EXSC 530 Phys Msc Act	3
* +	EXSC 530L Phys Msc Act Lab	1
*	CHEM 333 Organic Chemistry I	3
*	CHEM 331L Organic Chemistry I Lab	1
	PSYC 101 Intro to Psychology	3
	HIST elective	3
Total semester hours		14

7th Semester (Fall)		
*	BIOL 302 Cell & Molecular Biology	3
*	BIOL 302L Cell & Molecular Biol Lab	1
	Social Science elective	3
*	Selective	3
*	Selective	3
	Elective	3
Total semester hours		16

2nd Semester (Spring)		
* °	ENGL 102 Composition & Literature	3
*	BIOL 102 Biological Principles II	4
*	CHEM 111 General Chemistry I	4
*	MATH 122 or 141 Calculus	3-4
Total semester hours		14-15

4th Semester (Spring)		
*	EXSC 224 Anatomy & Physiology II	4
	STAT 201 (or STAT 205) Statistics	3
	CSCE 102 (or CSCE 101) Comp Science	3
*	PHYS 202 General Physics II	3
*	PHYS 202L General Physics II Lab	1
	Foreign Language 110	3
Total semester hours		17

6th Semester (Spring)		
* +	EXSC 531 Clinical Ex Phys	3
* +	EXSC 531L Clinical Ex Phys Lab	0
*	CHEM 334 Organic Chemistry II	3
*	CHEM 332L Organic Chemistry II Lab	1
	Fine Art	3
*	EXSC 535 Biomechanics	3
	Elective (**PEDU 300)	3
Total semester hours		16

8th Semester (Spring)		
* +	EXSC 351 Acq Motor Skills	3
* + #	EXSC 499 Independent Study	3
	SOCY 101 Intro to Sociology	3
	Selective (EXSC 395)	3
	Selective	3
Total semester hours		15

Public Health Track

1st Semester (Fall)			2nd Semester (Spring)		
* °	ENGL 101 English Composition	3	* °	ENGL 102 Composition & Literature	3
*	BIOL 101 Biological Principles I	4	*	BIOL 102 Biological Principles II	4
*	EXSC 191 Physical Activity and Health	3	*	CHEM 111 General Chemistry I	4
*	UNIV 101 Intro to University (EXSC)	3	*	MATH 122 or 141 Calculus	3-4
*	Elective (MATH 111 or 115)	3-4			
	Total semester hours	16		Total semester hours	14-15
3rd Semester (Fall)			4th Semester (Spring)		
* ~	EXSC 223 Anatomy & Physiology I	4	*	EXSC 224 Anatomy & Physiology II	4
°	ENGL Literature or SPCH 140 Public Comm	3		CSC 102 (or CSC 101) Comp Science	3
	PSYC 101 Intro to Psychology	3	*	ENVR 101 Intro to the Environment or GEOL 103 Envr of the Earth	3
	STAT 201 (or STAT 205) Statistics	3	*	PHYS 201 General Physics I	3
	Foreign Language 109	3	*	PHYS 201L General Physics I Lab	1
				Foreign Language 110	3
	Total semester hours	16		Total semester hours	17
5th Semester (Fall)			6th Semester (Spring)		
* +	EXSC 530 Phys Msc Act	3	* +	EXSC 531 Clinical Ex Phys (Selective)	3
*	EXSC 530L Phys Msc Act Lab	1	* +	EXSC 531L Clinical Ex Phys Lab	0
* +	EXSC 410 Psychology of PA	3	* +	EXSC 351 Acq Motor Skills	3
*	CHEM 112 or PHYS 202 & 202L	4	*	PSYC 465 Health Psychology	3
*	HPEB 547 Cons Health in Contmp Soc	3	*	Selective	3
	Elective (**PEDU 300)	3		SOCY 101 Intro to Sociology	3
	Total semester hours	17		Total semester hours	15
7th Semester (Fall)			8th Semester (Spring)		
	Social Science elective	3	*	POLI 374 Public Policy	3
	Fine Art	3		HIST elective	3
*	Selective	3	*	Selective	3
*	Selective	3		Elective	3
	Elective	3		Elective	3
	Total semester hours	15		Total semester hours	15

Explanation of the assessments of student learning outcomes to be used:

This program will be assessed by evaluating student outcomes and the assessment process will be reviewed by and approved by the School of Public Health to ensure that it will meet SACS accreditation requirements. Evaluating the goals and objectives of the program and tying them to specific learning objectives, coupled with annual reporting of results and use of results, will allow the program to develop and improve.

List of all new courses to be added within five years:

The Exercise Science Department will pursue the approval of various new courses such as those listed below. The purpose of the new courses will be to a) discuss specific topics within exercise physiology, going deeper into the mechanisms behind the scientific principles involved and b) provide smaller classroom experiences of approximately 30 students per class. Upon approval, students will be required to choose at least three of the courses as part of their selective requirement. The courses will all require the prior completion of EXSC 530 and include:

- EXSC XXX – Metabolism
- EXSC XXX – Exercise and Genetics
- EXSC XXX – Cardiovascular Responses to Exercise
- EXSC XXX – Muscle Physiology
- EXSC XXX – Exercise and the Endocrine System
- EXSC XXX – Functional Anatomy
- EXSC XXX – Research Design

Faculty

Rank and Academic Qualifications

List of Staff by Rank	Highest Degree Earned	Field of Study
Professor	PhD	Exercise Physiology/Medical Physiology
Professor	PhD	Exercise Physiology/Neuroscience
Professor	P.E.D.	Physical Education
Professor	PhD	Exercise Physiology
Professor	PhD	Motor Development/Experimental Physiology
Associate Professor	PhD	Exercise Science
Associate Professor	PhD	Physiology
Associate Professor	PhD	Clinical Psychology
Assistant Professor	PhD	Health Education and Behavior Change
Assistant Professor	MD	Medicine/Immunology
Assistant Professor	PhD	Kinesiology
Assistant Professor	PhD	Cognitive Neuroscience
Assistant Professor	PhD	Exercise Psychology
Clinical Asst Professor	PhD	Nutrition/Exercise & Sports Science
Clinical Asst Professor	PhD	Exercise Physiology
Research Professor	PhD	Health Behavior and Health Education
Research Assoc Professor	PhD	Exercise Science
Research Asst Professor	PhD	Exercise Physiology
Instructor	MS	Exercise Science
Instructor	MS	Public Health
Instructor	MS	Exercise Science

New faculty and staff to be added in support of the program

As this program is already in existence, there is no immediate need to increase faculty or staff in relation to this modification proposal specifically. Any immediate needs for increasing personnel resources are due to the growth of the department and desire to add to or improve the curriculum through additional course offerings.

Institutional Plan for Faculty Development

Ongoing evaluation and mentoring of faculty in the areas of teaching, research and service are the responsibility of the School of Public Health. The policies and procedures for faculty development within the school are published by the Office of Academic Affairs at <http://www.sph.sc.edu/academicaffairs/policies.htm>

Definition of Full Time Equivalent (FTE's)

For USC faculty, 1.0 FTE is recognized as a faculty position in which a faculty member is under full-time contract and for which the faculty member meets the requirements of his assigned teaching, service and research obligations. Assigned credit hours of instructional load vary widely among faculty and departments.

Unit Administration/Faculty/Staff Support						
YEAR	NEW		EXISTING		TOTAL	
	Headcount	FTE	Headcount	FTE	Headcount	FTE
Administration						
2009-2010	0	0	0	0	0	0
2010-2011	0	0	0	0	0	0
2011-2012	0	0	0	0	0	0
2012-2013	0	0	0	0	0	0
2013-2014	0	0	0	0	0	0
Faculty						
2009-2010	1	1.0	21	21.0	22	22.0
2010-2011	0	0	22	22.0	22	22.0
2011-2012	0	0	22	22.0	22	22.0
2012-2013	0	0	22	22.0	22	22.0
2013-2014	0	0	22	22.0	22	22.0
Staff						
2009-2010	1	1.0	3	3.0	4	4.0
2010-2011	0	0	4	4.0	4	4.0
2011-2012	0	0	4	4.0	4	4.0
2012-2013	0	0	4	4.0	4	4.0
2013-2014	0	0	4	4.0	4	4.0

It has been proposed to add one new full-time faculty position and one new full-time staff position for the 2009-2010 year. These positions are a direct result of the increases in the size of the Exercise Science Department.

Physical Plant

Since this is an existing program, existing classroom and office space is adequate. With the recent growth of the program, it may become necessary to seek additional classrooms, laboratory and administrative space. However, growth is an issue separate from the purpose of this proposal.

Equipment

It is anticipated that only the commonly used items for instruction and research will be necessary for the continued operation of the Exercise Science undergraduate program.

Library Resources

Exercise Science is a multidisciplinary field involving research in the basic and applied sciences as well as teaching in the basic and applied sciences requiring resources in a variety of natural sciences as well as experimental scientific fields such as biostatistics, epidemiology, and psychology. The strength of the USC Library System's collection is that it supports teaching and research in all required subject areas. The latest rankings from the Association of Research Libraries shows the University of South Carolina libraries are ranked 49th in North America in collection size with over 3,500,000 volumes. Our collections support a broad range of activities from high level research conducted by faculty to basic information needs of undergraduate students.

Exercise Science is an interdisciplinary field and the Library's collections strongly support the necessary topics including biology, biochemistry, psychology, medicine and public health. Combining these subjects, the Library subscribes to over 500 different journals that can be accessed directly or through 35 searchable databases. Included in these indexes are ScienceDirect, Science Citation and Medline access to PubMed. These resources are available to students at the library and remotely through use of proxy authentication. Access to this array of resources is further simplified by Gamecock Power Search which allows users to simultaneously search all the available databases across multiple disciplines. In addition to the many book titles held on site, additional titles are available for 2-day delivery from across the state through the PASCAL consortium.

In order students to effectively use the USC Library collections, the library offers many services to undergraduates. USC students are eligible to use the interlibrary loan service to borrow materials not held locally. Reference assistance is available in person, by phone, by email, and by chat service. Faculty members can arrange for a librarian to provide instruction on using library resources and students can make appointments with librarians to plan a research project.

Accreditation, Approval, Licensure or Certification

The current program is not subject to accreditation or approval by any state agency other than CHE. Graduates are not directly subject to licensure or certification by outside agencies.

Articulation

There are formal articulation agreements established between the University of Carolina-Columbia and other post-secondary schools, particularly between the university, its sister campuses across the state, and the South Carolina technical schools. These agreements make advancement and transferring to USC-Columbia a relatively seamless process. The department of Exercise Science also works closely with other departments to build opportunities for cross-curricular experiences, such as granting selective credit for minors completed in other departments. Finally, the faculty and advising staff are very active in researching and communicating the requirements of the many graduate programs our undergraduates may pursue.

In addition to building these curricular links for students, the Exercise Science department has been a leader and model for other programs, actively providing support and guidance to the growth of programs such as Coastal Carolina University, USC-Aiken, and UMass-Amherst.

Total New Costs associated with the proposed modification

This program has been in existence for 20 years and consequently, no essentially new costs in implementing the proposed CIP code modification are required. As part of the department's mission to expand and disseminate new knowledge, the Exercise Science Department is in the process of developing a series of upper-division courses that delve with greater depth and detail into the biological mechanics of specific topics and include metabolism, muscle physiology, genetics, immunology, and research design. The department already employs faculty who are well-qualified to teach these courses; in fact, these new courses reflect research areas in which the faculty are currently working. Consequently, the only foreseeable future costs would be relatively minor, aimed primarily at gathering and developing instructional materials.