Proposed 2021-2022 Catalog Description

Exercise and Sport Science, B.S.

Through coursework, research, and practice, the Bachelor of Science in exercise and sport science (EXSS) prepares students for entry into this dynamic and growing field. Students in the EXSS program acquire the knowledge, skills, and abilities of effective beginning professionals. Students study scientific and foundational content of human movement, engage in scholarly inquiry, and apply knowledge and theory to practice.

Graduates of the EXSS major are trained to assess, design, and implement individual and group exercise programs for healthy individuals as well as those with chronic disease. They 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. The exercise and sport science professional has demonstrated competence as a leader in university, corporate, commercial, or community settings in which their clients participate in movement and fitness-related activities. They are also prepared for advanced study in allied health or medical-related fields (e.g. physical therapy, cardiac rehabilitation). ~~Students will complete their undergraduate education with a full-time internship experience (9-12 credit hours) and will have the opportunity to sit for a nationally recognized certification exam (ACSM Certified Exercise Physiologist; CEP).~~ In addition, upon completion students will have the knowledge and skills required to complete one or more of the certification programs offered by organizations such as the American College of Sports Medicine and the National Strength and Conditioning Association.

Mission Statement

Coastal Carolina University's exercise and sport science (EXSS) program is comprised of teacher-scholars trained to prepare students for successful entry into EXSS professions and related graduate study. The program provides a focal point for scientific scholarship and expertise through the development and dissemination of faculty-driven research and scholarship. EXSS provides students with multiple opportunities for active learning through laboratory-based activities, student-mentored research, service to local communities, and internship experiences. Through these activities, students acquire knowledge of scientifically-based health/fitness concepts and develop skills related to exercise programming and leadership with the ultimate goal of enhancing the quality of life for residents of Horry County and beyond.

Student Learning Outcomes

At the completion of the exercise and sport science program, students will be able to:

1. Describe and apply anatomical, physiological, biomechanical, biochemical, behavioral, and psychological concepts important to physical activity and exercise settings.

2. Properly conduct health appraisals and assessments using current technologies and scientifically-based methods for a variety of populations and settings.
3. Properly plan and evaluate individualized exercise prescriptions and programs using health/fitness appraisals and assessments, knowledge of risk factors, and individual health status.
4. Properly implement individualized and group exercise programs by using correct exercise techniques, methods, and programmatic variables.
5. Apply the skills of scientific inquiry, research, and evaluation in the field of exercise and sport science.
6. Monitor program administration including, but not limited to, management of emergency and safety procedures, risk management, facility design, and program evaluation/assessment.
7. Demonstrate the dispositions of an effective entry-level exercise science professional including, but not limited to, physical activity and exercise, working within specific community or agency goals, and serving as a resource person.

Policies and Requirements

Students must earn a grade of 'C' or better in each course used to satisfy a) EXSS major requirements and b) all EXSS foundation courses. A grade of 'C' or better is also required in ENGL 101 and ENGL 102. All EXSS students are required to successfully complete one of the EXSS Concentration: Exercise Science Professional Concentration, Strength and Conditioning Concentration, or Pre-Allied Health Professions Concentration. A grade of 'C' or better is required for all concentration courses. ~~complete a capstone 9-credit or 12-credit internship at an approved exercise and sport science site. Students are expected to demonstrate mastery of the student learning outcomes during this experience. Students will have the opportunity to sit for the national American College of Sports Medicine (ACSM) Certified Exercise Physiologist (CEP) exam as part of their internship. The ACSM CEP exam provides students with an opportunity to gain a valuable external credential/certification.~~

Admission requirements to the internship (EXSS 495):

1. Demonstration of acceptable professional dispositions;
2. 'C' or better in all EXSS major requirements;
3. 'C' or better in all EXSS foundation requirements;
4. Successful completion of all undergraduate required coursework;
5. Current CPR certification.

Degree Requirements (120 Credits)

Core Curriculum Requirements

Core Curriculum (38-40 Total Credit Hours)

Graduation Requirements

Graduation Requirements (3-6 Total Credit Hours)

Foundation Courses (19-33 Credits) *

Complete the following courses:

BIOL 121 - Biological Science I (3 credits) AND

BIOL 121L - Biological Science I Laboratory (1 credit)

BIOL 232 - Human Anatomy and Physiology I (3 credits) AND

BIOL 232L - Human Anatomy and Physiology I Laboratory (1 credit)

BIOL 242 - Human Anatomy and Physiology II (3 credits) AND

BIOL 242L - Human Anatomy and Physiology II Laboratory (1 credit)

EXSS 122 - Lifetime Fitness and Physical Activity (3 credits)

EXSS 222 - Functional Kinesiology and Sport Conditioning (3 credits)

Choose one from the following:

CHEM 101 - Introductory Chemistry (3 credits) AND

CHEM 101L - Introductory Chemistry Laboratory (1 credit)

CHEM 111 - General Chemistry I (3 credits) AND

CHEM 111L - General Chemistry Laboratory I (1 credit)

PHYS 205 - Introductory Physics for Life Sciences I (3 credits) AND

PHYS 205L - Introductory Physics for Life Sciences I Laboratory (1 credit)

PHYS 211 - Essentials of Physics I (3 credits) AND

PHYS 211L - Essentials of Physics I Laboratory (1 credit)

Choose one from the following:

MATH 131 - Trigonometry (3 credits)

MATH 132 - Calculus for Business and Social Science (3 credits)

MATH 135 – Precalculus (4 credits)

~~MATH 160 - Calculus I (4 credits)~~

MATH 160A - Calculus I A (2 credits) AND

MATH 160B - Calculus I B (2 credits)

Complete the following:

STAT 201 - Elementary Statistics (3 credits) AND

STAT 201L - Elementary Statistics Computer Laboratory (1 credit)

Choose one from the following:

PSYC 101 - General Psychology (3 credits)

SOC 101 - Introductory Sociology (3 credits)

Note:

* Credits for courses taken as part of the core curriculum are not counted elsewhere in the major.

Major Requirements (31~~46-49~~ Credits)

Complete the following courses:

EXSS 205 - Introduction to Exercise and Sport Science (3 credits)

EXSS 310 - Exercise and Sport Nutrition (3 credits)

EXSS 330 - Injury Management (3 credits)

EXSS 340 - Sport and Exercise Behavior (3 credits)

EXSS 350 - Exercise Physiology (3 credits) AND

EXSS 350L - Laboratory in Exercise Physiology (1 credit)

EXSS 360 - Motor Behavior (3 credits) AND

EXSS 360L - Laboratory in Motor Behavior (1 credit)

EXSS 385 - Exercise Testing and Prescription (3 credits) AND

EXSS 385L - Laboratory in Exercise Testing and Prescription (1 credit)

EXSS 400 - Biomechanics (3 credits)

EXSS 415 - Personal Fitness Leadership (3 credits)

EXSS 490 - Seminar in Exercise and Sport Science

~~EXSS 495 - Internship in Exercise and Sport Science~~

Students must complete ONE of the following concentration experiences. Students are strongly encouraged to consult with their academic advisor when making this selection.

Exercise Science Professional Concentration

The Exercise Science Professional concentration is designed to give students significant real-life exposure to the profession. Students will complete a semester long internship in an exercise science related organization that aligns with their career goals. Options include, but are not limited to, cardiac rehabilitation, corporate health and wellness programs, and sport-specific and personal training.

Exercise Science Professional Courses (15-18 Credit Hours)

Complete the following:

EXSS 495 - Internship in Exercise and Sport Science (9-12 credits)

Exercise Science Electives- Choose 6 credits from the following:

EXSS 320 - Research Design in Exercise Science (3 credits)

EXSS 390 - Strength and Conditioning (3 credits)

EXSS 399 - Independent Study in Exercise and Sport Science (1 to 3 credits)

EXSS 401 – Psychology of Sport-Related Injury (3 credits)

EXSS 405 - Exercise Testing and Prescription for Diverse Populations (3 credits)

EXSS 410 - Cardiopulmonary Rehabilitation (3 credits)

EXSS 420 - Exercise and Aging (3 credits)

EXSS 450 - Laboratory Skills in Exercise Science (3 credits)

EXSS 499 - Directed Undergraduate Research in Exercise and Sport Science (1-6 credits)

Strength and Conditioning Concentration

The Strength and Conditioning concentration is for students who are interested in applying their knowledge to assess and enhance health across the spectrum and facilitate sports performance through strength training and conditioning. Students that select this concentration will focus on the development of exercise programs designed to enhance health, general fitness, and exercise and sports performance.

Strength and Conditioning Courses (15-18 Credit Hours)

Complete the following:

EXSS 390 - Strength and Conditioning (3 credits)

EXSS 397 - Field Experience (9 credits)

One or Two additional Exercise Science Elective courses (3-6 credits)

Exercise Science Electives:

EXSS 320 - Research Design in Exercise Science (3 credits)

EXSS 399 - Independent Study in Exercise and Sport Science (1 to 3 credits)

EXSS 401 - Psychology of Sport-Related Injury (3 credits)

EXSS 405 - Exercise Testing and Prescription for Diverse Populations (3 credits)

EXSS 410 - Cardiopulmonary Rehabilitation (3 credits)

EXSS 420 - Exercise and Aging (3 credits)

EXSS 450 - Laboratory Skills in Exercise Science (3 credits)

EXSS 499 - Directed Undergraduate Research in Exercise and Sport Science (1-6 credits)

Pre-Allied Health Professions Concentration

The Pre-Allied Health Professions concentration provides students with the opportunity to complete the exercise science degree while also preparing for admission into graduate level programs in allied health fields such as physical therapy, occupational therapy, physician assistant studies, etc. Students are strongly encouraged to identify and research specific admission requirements for those programs to which they intend to apply.

Pre-Allied Health Professions Courses (15-18 Credit Hours)

Complete the following:

EXSS 397 - Field Experience (3 credits)

Exercise Science Electives- Choose 6-9 credits from the following:

EXSS 320 - Research Design in Exercise Science (3 credits)

EXSS 390 - Strength and Conditioning (3 credits)

EXSS 399 - Independent Study in Exercise and Sport Science (1 to 3 credits)

EXSS 401 - Psychology of Sport-Related Injury (3 credits)

EXSS 405 - Exercise Testing and Prescription for Diverse Populations (3 credits)

EXSS 410 - Cardiopulmonary Rehabilitation (3 credits)

EXSS 420 - Exercise and Aging (3 credits)

EXSS 450 - Laboratory Skills in Exercise Science (3 credits)

EXSS 499 - Directed Undergraduate Research in Exercise and Sport Science (1-6 credits)

Complete two or three courses from the courses listed below (6-9 credits)

BIOL 122 - Biological Science II (3 credits) AND

BIOL 122L - Biological Science II Laboratory (1 credit)

CHEM 111 - General Chemistry I (3 credits) AND

CHEM 111L - General Chemistry Laboratory I (1 credit)

CHEM 112 - General Chemistry II (3 credits) AND

CHEM 112L - General Chemistry Laboratory II (1 credit)

PHYS 205 - Introductory Physics for Life Sciences I (3 credits) AND

PHYS 205L - Introductory Physics for Life Sciences I Laboratory (1 credit)

PHYS 206 - Introductory Physics for Life Sciences II (3 credits) AND

PHYS 206L - Introductory Physics for Life Sciences II Laboratory (1 credit)

PSYC 410 - Abnormal Psychology (3 credits)

PSYC 302 - Developmental Psychology (3 credits)

PUBH 222 - Medical Terminology (3 credits)

EDUC 336- Introduction to Human Growth and Development (3 credits)

Any preapproved 300 level or higher Chemistry, Biology, Physics, or Psychology course (3-4 credits)

Note: Courses that are used to fulfill Exercise Science Foundation Course requirements cannot be used to fulfill Pre-Allied Health Professions requirements.

Electives (0-8~~11~~ Credits)

Total Credits Required: 120 Credits