


# EXERCISE SCIENCE AND SPORT (ESS)

 - General Education Course

<b>ESS 123 Phys Ability Motor Skills</b>	<b>1 Credit hour</b>	
<b>Attributes:</b> PE Activity		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 124 Fundamentals of Movement</b>	<b>1 Credit hour</b>	
<b>Attributes:</b> PE Activity		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 211 Physiology of Fitness</b>	<b>3 Credit hours</b>	
The student will gain knowledge of behavior change, components of exercise sessions, cardinal principles of conditioning, basics of fitness programming, and instructing individual and group exercise sessions.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 215 Intro to Exercise Science</b>	<b>3 Credit hours</b>	
Introductory overview of the current trends and theories in exercise science. Preview the body systems, exercise training, and preparation for professional certification and careers in exercise science.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 220 Fitness and Wellness</b>	<b>3 Credit hours</b>	
Course addresses fitness and weight control and modes of change. Primary focus is on goals in nutrition, label identification, nutrient assessment, weight control, and fitness and how to reach them safely.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 295 Adult Fitness Prog Indust</b>	<b>2 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 301 Phil Sport &amp; Phys Activity</b>	<b>3 Credit hours</b>	
Development of philosophic reasoning skills to better understand the role that philosophy plays in our understanding and conception of physical activity and sport.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 345 Exercise Physiology</b>	<b>3 Credit hours</b>	
Focuses on physiological and functional alterations in response to acute and chronic exercise with emphasis on metabolic, neuroendocrine, neuromuscular, cardiopulmonary, and environmental adaptations.		
<b>Pre-req:</b> BSC 228 with a minimum grade of C.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 346 Exercise Physiology Lab</b>	<b>2 Credit hours</b>	
Laboratory course that demonstrates and reinforces concepts pertaining to the effects of exercise on physiological systems.		
<b>Pre-req:</b> ESS 345 (may be taken concurrently).		
<b>Concurrent PR:</b> ESS 345		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 365 Tests &amp; Measurements PE</b>	<b>3 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 375 Fitness Assess &amp; Exerc Prescr</b>	<b>3 Credit hours</b>	
Focuses on the processes and procedures of physical fitness evaluation and prescription. Emphasis is placed on the design of individual and group exercise programs.		
<b>Pre-req:</b> ESS 345 with a minimum grade of C.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 385 Devel Adult Fitness Prog</b>	<b>3 Credit hours</b>	
<b>Pre-req:</b> ESS 345.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 386 Adult Fitness</b>	<b>3 Credit hours</b>	
Discuss health risk appraisal and exercise benefits of commonly seen pathophysiology among the U.S. adults.		
<b>Pre-req:</b> ESS 345 with a minimum grade of C.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 418  Ancient &amp; Medi Sport History</b>	<b>3 Credit hours</b>	
An in-depth investigation of the role of sport in ancient and medieval societies. The course focuses on ancient Greece, Rome, and medieval Europe, but will also briefly cover non-Western cultures.		
<b>Attributes:</b> Multicultural		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 427 Methods Coaching Football</b>	<b>2 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 428 Methods Coaching Baseball</b>	<b>2 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 429 Methods Coaching Golf</b>	<b>2 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 436 Methods Coaching Tennis</b>	<b>2 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 437 Method Coach Volleyball</b>	<b>2 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 442 Princ of Strength &amp; Cond</b>	<b>3 Credit hours</b>	
Application of strength and conditioning principles in the development and administration of sport-based exercise programs. Emphasis on the teaching of flexibility, powerlifting, Olympic weightlifting, and speed and agility programs.		
<b>Pre-req:</b> HS 365 with a minimum grade of D.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 443 Prin of Strength Cond Lab</b>	<b>1 Credit hour</b>	
Laboratory course that demonstrates strength and conditioning skills. Practical application of strength and conditioning principles with emphasis on the teaching of flexibility, powerlifting, Olympic weightlifting, and speed and agility programs.		
<b>Pre-req:</b> ESS 345 with a minimum grade of D or ESS 321 with a minimum grade of D.		
<b>Co-req:</b> ESS 442		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 447 Advanced Exercise Physiology</b>	<b>3 Credit hours</b>	
The course in Advanced Exercise Physiology will focus on the detailed study of the cardiovascular, endocrine, immune, neuromuscular, and respiratory systems in response to acute and chronic exercise.		
<b>Pre-req:</b> ESS 345.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 476 Theo Prac Aspect Coaching</b>	<b>3 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 478 Energy Sources Body Comp</b>	<b>3 Credit hours</b>	
<b>Pre-req:</b> ESS 345 with a minimum grade of C.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 480 Special Topics</b>	<b>1-4 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ESS 481 Special Topics</b>	<b>1-4 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		

**ESS 482 Special Topics** 1-4 Credit hours

**Grade Mode:** Normal Grading Mode

**ESS 483 Special Topics** 1-4 Credit hours

**Grade Mode:** Normal Grading Mode

**ESS 485 Independent Study** 1-4 Credit hours

**Grade Mode:** Normal Grading Mode

**ESS 486 Independent Study** 1-4 Credit hours

**Grade Mode:** Normal Grading Mode

**ESS 487 Independent Study** 1-4 Credit hours

**Grade Mode:** Normal Grading Mode

**ESS 488 Independent Study** 1-4 Credit hours

**Grade Mode:** Normal Grading Mode

**ESS 491 🌿 Internship Exercise Science** 1-12 Credit hours

Field internship experience.

**Pre-req:** ESS 375 with a minimum grade of C.

**Attributes:** Capstone Course, No Textbook Required

**Grade Mode:** Normal Grading Mode