EXERCISE AND SPORT SCIENCE

Chair: David Norman

The exercise and sport science (ESS) program provides students in a liberal arts environment the opportunity to combine ESS courses with other academic disciplines to develop interdisciplinary degrees. The ESS minor prepares students for a career in teaching and coaching at the high school and elementary levels. The program promotes a life-long appreciation for wellness and physical activity.

Through the interdisciplinary major option students may prepare for a career that combines a course of study in exercise and sport science with another field such as business administration or biology. The department chair should be consulted in the design of an interdisciplinary program.

Degree Plans Offered in Exercise and Sport Science
Minor in Exercise and Sport Science
Austin College Teaching Program Certification Track

A minor in exercise and sport science consists of:

Required Courses (2 courses)
_____ ESS 121 Introduction to Exercise and Sport Science
_____ ESS 495 Senior Conference

Electives (3 courses)
_____ ESS any level
_____ ESS any level
_____ ESS 300 level or higher

Total Credits Requirement = 5 course credits

Austin Teacher Program Requirements for EC-12 Teaching Certification

_____ ESS 115 Basic First Aid
_____ ESS 121 Introduction to Exercise and Sports Science
_____ ESS 353 Teaching Movement Education in the Elementary School
_____ ESS 354 Teaching Methods in the Secondary School
_____ ESS 363 Energy, Nutrition, and Human Performance
_____ ESS 462 Biomechanics
_____ ESS 495 Senior Conference

Total Credits Requirement = 7 course credits

COURSES
ESS 115 Basic First Aid Techniques
Designed to prepare students to make appropriate decisions regarding first aid care and to action those decisions in an emergency situation before medical help arrives. The course provides opportunities for Community First Aid and Safety Certification and the CPR Professional Rescuer Certification. Seven-week course. 0.50 course credit. (Each spring)

ESS 121 Introduction to Exercise and Sport Science
An introduction and presentation of the basic facts and beliefs concerning the field of exercise and sport science (historically known as physical education). Attention is focused on professional opportunities in the field of exercise and sport science. (Fall and spring)

ESS 241 Coaching Team Sports
A course that covers the coaching philosophy and techniques involved in specific team sports. Football, basketball, volleyball, soccer, and baseball. Seven-week course. 0.50 course credit units. May be repeated when topic varies. (Offered on an occasional basis)

ESS 242 Current Issues in Exercise and Sport Science
An opportunity to identify and explore current issues in exercise and sport science, which may include physiological, psychological, and sociological implications. Supporting data for opposing views are an integral part of the decision-making process. (Offered on an occasional basis)

ESS 245 Principles of Coaching Sports
An overview intended to explore the foundations of coaching for the professional. This course will review the philosophy and methods involved in coaching sports at all levels. Topics include coaching roles and responsibilities, risk management, principles of training, skill assessment, the role of sportsmanship, and development of leadership in sport. Students will also develop a personal coaching philosophy as part of this course. (Offered on an occasional basis)

ESS 244 Personal Health
This course is designed to provide relevant information that will allow students to make wise decisions regarding their health throughout their lifetime. Topics include psychological health and stress management; nutrition, fitness, and weight management; personal relationships and human sexuality; protecting against diseases; aging, death and dying; and consumerism and environmental health. (Usually each spring)

ESS 250 Intermediate Topics in Exercise and Sport Science
Specialized topics offered on an occasional basis. Possible topics include personal growth through physical challenge, women in sports, modern Olympics, ethics in coaching, and personal health. PREQ: Instructor permission. May be repeated when topic varies.

ESS 260 Intermediate Directed Study
Student investigation of topic of interest working in collaboration with a faculty member resulting in significant oral and written work. See On-Campus Learning Opportunities for more information. PREQ: Freshman Jan Term or Sophomore standing. Special permission required. Offered in variable course credit from 0.25-1.00.
ESS 353 Teaching Movement Education in the Elementary School
Construction of movement tasks in rhythm and game skill movement for children in grades K-6. PREQ: Exercise and Sport Science 121 or Education 225. (Each spring)

ESS 354 Teaching Methods in the Secondary School
A study of the skills and techniques required to design and implement effective instructional programs in physical education at the secondary school level. PREQ: Exercise and Sport Science 121 or Education 225 (Each fall)

ESS 363 Energy, Nutrition, and Human Performance
A multi-dimensional study of energy, nutrition, and human performance, dealing with the relationship between food nutrients, physiological, and metabolic systems. Study will include physiological systems of energy, delivery, and utilization and the role of exercise in cardiovascular health and aging. PREQ: Instructor permission (Each fall)

ESS 450 Advanced Topics in Exercise and Sport Science
A critical examination of physical perspectives. This course can serve to provide an in-depth study of selected topics such as biomechanics, analysis of sport skills, advanced athletic training, and other subjects involving sport science and human performance. May be repeated when topic varies.

ESS 460 Advanced Directed Study
Student investigation of topic of interest related to the major or minor working in collaboration with a faculty member resulting in significant oral and written work. See On-Campus Learning Opportunities for more information. PREQ: Junior or Senior standing. Special permission required. Offered for variable course credit from 0.25-1.00.

ESS 462 Biomechanics
A study of the fundamental movements of the human body to determine the actions and motion of the body in physical activity and the development of body control. Special emphasis is placed on the correction or identification of common physical deviations and analysis of movement patterns. PREQ: Exercise and Sport Science 363. (Each spring)

ESS 464 Teaching/Learning Participation
An individualized study that includes sharing in the instructional process for a particular Exercise and Sport Science course under the supervision of the faculty member teaching the course. Open only to certain highly qualified juniors and seniors by invitation. See On-Campus Learning Opportunities for more information.

ESS 471 Administration of Athletics, Physical Education, and Recreation
Organizing and administering programs in physical education, athletics, and recreation. Special attention is given to personnel and program administration in both the highly competitive and the recreational context. PREQ: Exercise and Sport Science major or minors only. (Offered on an occasional basis)

ESS 490 Independent Study
Student-driven independent work to produce a high quality body of work such as paper, report, art project, etc. See On-Campus Learning Opportunities for more information. PREQ: Junior or Senior standing. Special permission required. Offered in variable course credit from 0.25-1.00.

**ESS 491 Honors Thesis in Exercise and Sport Science**
Extensive independent study in the major in a topic of special interest culminating in a bachelor’s thesis with oral examination by thesis committee resulting in a bachelor’s degree with Honors upon completion. See Departmental Honors Program for more information. Completed in last three semesters before graduation. Offered for variable course credit from 1.00-2.00.

**ESS 492 Independent Study Off-Campus/NSOC**
Student-driven independent study in a topic related to the major completed at an off-campus site. See Off-Campus Learning Opportunities for more information. PREQ: Junior or Senior standing. Special permission required. Offered in variable course credit from 0.25-1.00.

**ESS 495 Senior Conference**
PREQ: Senior exercise and sport science major or minors only. (Each Fall and spring)

**ESS 562 Current Trends in Elementary and Secondary Exercise and Sport Science**
Students will investigate a variety of concerns in physical education which will include trends in methodology, curriculum design, student evaluations, teacher evaluation, extra-curricular opportunities, and identification of concerns that could affect physical education and athletics in the future. (For Masters of Arts in Teaching Program only, usually in the summer).

**PHYSICAL FITNESS**

Austin College believes that physical fitness and an understanding of a healthy lifestyle should be an integral part of the overall educational experience. This requirement for graduation may be met by participation in a lifetime sports class, approved college transfer or for non-academic credit by successful participation in an intercollegiate varsity sport.

**LS 010 Intercollegiate Varsity Athletics**
Successful participation in a varsity athletic team sport will fulfill the physical fitness requirement. Participants will not receive academic credit. Austin College offers varsity sports in men and women’s soccer, men and women’s swimming and diving, men and women’s tennis, men and women’s basketball, women’s volleyball, football, baseball, and softball. Zero course credit.

**LS 115 Lifetime Sports**
Basic physical skills development in a variety of selected sports activities. Sample activities: aerobic conditioning, aerobic dance, golf, racquet sports, swimming, and strength training. (Graded on S/D/U basis). May be repeated for a total of one course credit unit when content varies. 0.25 course credit unit. (Each fall and spring)