

HES Courses, Prerequisites, Restrictions, Offerings

Current as of: Wednesday, March 07, 2007

Course#	Course Title	Credit	WE?	Fee	Offering	Block: Fall/Spring
BIOL365	Human Anatomy	3	hour(s)			
<i>Restriction(s): Soph, Junior or Senior.</i>						
The body as a whole, structural units, integrative systems, maintenance systems, and reproduction. (May not be used as a biology elective by biology majors- unrestricted elective only.)						
BIOL365L	Human Anatomy Lab	1	hour(s)			
<i>Restriction(s): ES or HLTH major, Junior or Senior.</i>						
The body as a whole, structural units, integrative systems, maintenance systems, and reproduction. (May not be used as a biology elective by biology majors- unrestricted elective only.)						
<i>This course is initially reserved for junior and senior Health Science and Exercise Science majors only. At the conclusion of the pre-registration period, additional seats may be available to non-majors or sophomore HES majors through open enrollment. Laboratory is held at KCOM. Student must be able to provide transportation to KCOM. Monday/Wednesday lab sections WILL MEET on the first day of class.</i>						
ES102	Varsity Football	1	hour(s)			
Varsity football participation.						
ES103	Varsity Basketball	1	hour(s)			
Varsity basketball participation. (Men and women)						
ES104	Varsity Track	1	hour(s)			
Varsity track participation. (Men and women)						
ES105	Varsity Tennis	1	hour(s)			
Varsity tennis participation. (Men and women)						
ES106	Varsity Golf	1	hour(s)			
Varsity golf participation. (Men and women)						
ES107	Varsity Cross Country	1	hour(s)			
Varsity cross country participation. (Men and women)						
ES108	Varsity Wrestling	1	hour(s)			
Varsity wrestling participation.						
ES109	Varsity Baseball	1	hour(s)			
Varsity baseball participation.						
ES111	Varsity Softball	1	hour(s)			
Varsity softball participation.						
ES112	Varsity Volleyball	1	hour(s)			
Varsity volleyball participation.						

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ES113	Varsity Swimming Varsity swimming participation. (Men and women)	1	hour(s)			
ES114	Varsity Soccer Varsity soccer participation. (Men and women)	1	hour(s)			
ES120	Volleyball Basic skills of power volleyball.	1	hour(s)			
ES130	Beginning Swimming Basic water skills for non-swimmers to develop safety and confidence in water activities.	1	hour(s)		Fall only	
ES131	Intermediate Swimming Development of proficiency in various swimming strokes and forms of rescue and surface diving. Recommended: ES 130. Instructor reserves the right to remove persons with insufficient skill level.	1	hour(s)		Spring only	
ES132	Basic Swimming-Senior Citizens Basic water skills for senior citizens to gain safety and confidence in water activities.	0	hour(s)			
ES133	Lifeguard Training Course is designed to teach lifeguards the skills and knowledge needed to prevent and respond to aquatic emergencies. Course continuation requirement: (1) minimum age of 15, (2) swim 500 yards (200 yards front crawl with rhythmic breathing and stabilizing kick, 100 yards breaststroke, and 200 yards either front crawl with rhythmic breathing and stabilizing kick or breaststroke, and (3) 20 yards front crawl or breaststroke; dive to bottom of pool with retrieval of 10 pound object; swim 10 pound object 20 yards return holding with both hands. Successful completion of all critical course skills and passing required exams with a score of 80% or better could result in American Red Cross certification.	2	hour(s)	\$4.00	Spring only	
ES134	Lifeguard Training Instructor Course is designed to train instructor candidates to teach Lifeguard Training (including first aid and CPR for the professional rescuer, Community Water Safety, and Lifeguarding Instructor Aide). Course continuation requirement: minimum age of 17, evidence of having completed Fundamentals of Instructor Training course, and successful completion of lifeguard training skills, CPR for the Professional Rescuer Skills, and Lifeguard Training knowledge exam with a grade of 80% or better. Successful completion of the instructor course requirements can result in certification as an ARC Lifeguarding Instructor.	2	hour(s)		Fall only	
ES135	Water Safety Instructor This course is designed to train candidates to teach Infant and Preschool Aquatics Program, the seven levels of the Learn to Swim Program, Community Water Safety, and Water Safety Instructor Aide courses. Course continuation requirements: (1) minimum age of 17, (2) evidence of having completed Fundamentals of Instructor Training Course, (3) successful completion of tests of water safety and swimming skills and knowledge with a minimum grade of 80%.	2	hour(s)		Spring only	
ES143	Beginning Tennis Fundamental tennis skills, rules, and mechanical principles.	1	hour(s)		Fall B1; Spring B2	B1 B2
ES144	Intermediate Tennis Instruction in intermediate strokes and strategy applied to singles and doubles play. Recommended: ES 143. Instructor reserves the right to remove persons with insufficient skill level.	1	hour(s)		Fall only	B1 B2
ES146	Beginning Racquetball Rules, techniques, and strategy of four-wall racquetball.	1	hour(s)			

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ES149	Mountain Biking	0.5 hour(s)		Fall only	
	This course is designed to introduce the student to mountain biking. Aspects of mountain biking for safely climbing, descending, and general trail riding on single track and fire roads will be incorporated. Effective power generation, anaerobic endurance, and aerobic endurance will be discussed. Techniques for special trail condition riding such as traversing fallen trees and climbing or descending over trail obstacles will be experienced. Other topics will include training programs for in-season and off-season (both on the bike and off of the bike), bike upgrades and replacements, and bike maintenance. Student must provide his/her own mountain bike. Instructor reserves the right to request disenrollment if, in his/her opinion, the bike is viewed as being unsafe.				
ES151	Irish Ceili Dance	1 hour(s)		Fall only	
	Activity oriented course providing instruction in Irish dance history, culture, music, and basic dance skills. Fundamental steps and regional styles provide the foundation for various popular "ceile" (party) dances. Safe warm-up/cool-down practice, cardiovascular fitness, and flexibility are emphasized.				
ES152	Irish Set Dance	1 hour(s)		Spring only	
	This course is intended as an introduction to Irish setdance--the 8-hand social dance which dominates Irish cultural events throughout the world. This is one of the two oldest forms of Irish dance. Historically, in the 18th C, Irish soldiers returning from the continent "quadrille" dances back from Europe to the high parties and kitchen gatherings of Ireland where they became enormously popular. So popular were these dances, in fact, that they spread across the island, with nearly every region developing its own characteristic dances and styles.				
ES154	Ballroom Dancing	1 hour(s)			
	Activity oriented course providing basic instruction in techniques, terminology, and stylization of ballroom dances. Dances regularly included are swing, waltz, cha-cha, foxtrot, and tango.				
ES156	Beginning Tap Dancing	1 hour(s)			
	Activity oriented course providing basic instruction in tap technique, terminology, and choreography at a beginning skill level. Clogging will also be included.				
ES157	Beginning Jazz Dance	1 hour(s)			
	Activity oriented course providing basic instruction in fundamental jazz dance techniques, terminology, and combinations. Several jazz styles will be experienced.				
ES158	Aerobic Dancing	1 hour(s)			
	Incorporates muscle toning and the development of cardiovascular fitness through the medium of dance. Participants receive instruction concerning flexibility, warm-up, aerobic dance, and cool-down routines.				
ES159	Social and Country-Western Dance	1 hour(s)			
	Activity oriented course providing basic instruction in techniques, stylization, and terminology of country-western dance. In addition to line and couple dances, social dance forms of swing, waltz, and Texas two-step are included.				
ES167	Weight Training - Free Weights	1 hour(s)			
	Scientifically founded isotonic weight training programs; development of muscular strength, endurance, and flexibility.				
ES168	Weight Training - Nautilus	1 hour(s)			
	Scientifically founded isotonic weight training programs; development of muscular strength, endurance, and flexibility utilizing Nautilus equipment.				
ES179	Outdoor Activities	0.5 hour(s)	\$15.00	Fall only	B1 B2
	<i>Restriction(s): ES major.</i>				
	Course is designed to introduce the teaching and supervision of outdoor adventure programming, particularly for children and adolescents. Activities include canoeing, outdoor cooking, and emergency situation management. Some Saturday activities are required. Special course fee applies.				
	Course is designed for Exercise Science majors only. At the conclusion of the pre-registration period, additional seats may be available to non-majors with approval from the instructor and Program Director.				
ES184	Beginning Golf	0.5 hour(s)			
	<i>Restriction(s): ES major, Jr, Sr, or Grad.</i>				
	This course is designed to introduce the student to the basic fundamentals of competitive golf. The student will learn proper techniques, rules, etiquette, and scoring. Basic equipment will also be covered.				

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ES185	Beginning Resistance & Core Training	0.5 hour(s)			B2 B1
	This course introduces students to basic resistance and core strength training exercising and principles. Students will learn concepts and techniques of free weights, machine weights, Pilates, and core exercises, among others. Students will also learn to develop a personalized strength training routine that will assist them in reaching their fitness goals.				
ES186	Outdoor Venture Activities	0.5 hour(s)	\$10.00		B1 B2
	<i>Restriction(s): ES major.</i>				
	This course is designed to introduce low to medium risk outdoor venture activities that challenge the student's abilities in a non-traditional setting. Activities can include ropes course work, climbing, rappelling, and orienteering. Saturday labs are generally required. Course fee applies.				
	<i>Course is designed for Exercise Science majors only. At the conclusion of the pre-registration period, remaining seats may be available to non-majors with approval from the instructor and Program Director.</i>				
ES189	Beginning Cardiovascular Fitness	0.5 hour(s)			B1 B2
	This course provides students with the knowledge and skills of several forms of aerobic exercise. Students will also learn how to develop a personalized cardiovascular training program that will improve their overall cardiovascular endurance.				
ES190	Foundations of Exercise Science	3 hour(s)			
	<i>Restriction(s): ES major.</i>				
	This course investigates the nature, scope and philosophy of exercise science, as well as historical influences on the field. Also examined are biological, physiological, psychological and sociological interpretations of exercise science. Career opportunities and the corresponding professional responsibilities related to exercise science are also explored.				
ES192	Microcomputer Applications	2 hour(s)			
	<i>Restriction(s): ES or CMDS major.</i>				
	This class is designed to fulfill the requirements of the Liberal Studies Program/Essential Skills in regards to computer literacy. As such, the course will guide students through practical, computer-related tasks including database searches, Internet sources, advanced word processing, spreadsheets, presentation software, web authoring software, and database software applications. The main goal of this course is to allow students to use computers with greater proficiency in other coursework as well as their daily life.				
ES200	Techniques of Aerobic Dance	1 hour(s)			
	Provides instruction designed to develop aerobic dance competencies and related health and exercise concepts necessary for analyzing and teaching aerobic dance. Emphasis is on learning through practical teaching experiences.				
ES205	First Aid & CPR	2 hour(s)	\$10.00		
	Course designed to teach American Red Cross First Aid, Cardiopulmonary Resuscitation, Preventing Disease Transmission, and using an Automated External Defibrillator.				
ES207	First Aid & CPR Recertification	1 hour(s)	\$10.00		
	The purpose of this course is to provide individuals, currently certified in American Red Cross Basic Life Support (Adult CPR with AED, Child/Infant CPR) and First Aid, a means to renew their certifications. Upon successful completion of the class, students will receive certificates from the American Red Cross for Adult CPR with AED, Child/Infant CPR, First Aid and Preventing Disease Transmission.				
ES211	Folk & Social Dance	1 hour(s)			
	Instruction in beginning and intermediate folk and social dance techniques, stylization and terminology. The unique cultural heritage of a variety of nations will be understood and appreciated.				
ES212	Modern Dance	1 hour(s)			
	Introduction in beginning modern dance techniques, elements of composition and philosophy. Basic movement concepts and approaches to creative expression will be studied.				
ES214	Elementary Ballet	1 hour(s)			
	Introduction to basic ballet techniques, creative composition, and style of ballet.				
ES215	Intermediate Ballet	1 hour(s)			
	Intermediate course to further develop ballet technique, terminology and choreography attained in elementary ballet. Recommended: ES 214. Instructor reserves the right to remove persons with insufficient skill level.				

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ES232	Sport Management	3 hour(s)	WE		
	<i>Restriction(s): ES major.</i>				
	This class provides a foundation for the management of sport organizations. General management skills such as philosophy development, leadership, decision-making, motivation, evaluation, marketing, public relations and risk management are taught. In addition, the class covers legal concerns in the field of exercise science. Special attention is given to writing and the communication process throughout the class.				
ES235	Physical Activity for the Young Child	2 hour(s)			
	Organization, planning, and administration of physical education programs for the elementary schools. Teaching methods, identification of growth and development patterns and their effect on behavior and movements, motivation techniques, and safety in conducting elementary school physical education.				
ES236	Creative Movement for Children	1 hour(s)			
	Introduction to and analysis of developmental movement patterns and activities, creative movement concepts, dance elements, and their interrelationships.				
ES247	Data Interpretation in Exercise Science	2 hour(s)			
	<i>Prerequisite(s): STAT190, D or higher. Restriction(s): ES major or STAT minor.</i>				
	The application of fundamental statistical processes as they apply to the collection, analysis, and interpretation of exercise science data are discussed. Emphasis is placed on the practical application of statistical procedures for research purposes.				
ES250	Practicum I	1 - 3 hours			
	<i>Prerequisite(s): ES190, D or higher. Restriction(s): Jr or Sr.</i>				
	AR Clinical experience in a physical education or coaching related activity. Desirable options are serving as a teacher aid, assisting in the training room or Human Performance Laboratory, supervisory roles in intramurals, assisting in city recreation programs, coaching youth sports, volunteer assistance in public or private schools, church programs, or summer camps. Junior or senior status and consent of academic advisor and program director required.				
ES256	Intermediate Tap Dancing	1 hour(s)			
	Activity course providing instruction in intermediate tap technique, terminology, shorthand tap notation, and choreography. Funk tap and Irish step dancing will be explored. Recommended: ES 156. Instructor reserves the right to remove persons with insufficient skill level.				
ES257	Intermediate Jazz Dance	1 hour(s)			
	Activity course providing instruction in intermediate jazz technique, terminology, and choreography. Additional jazz styles covered include funk, lyrical, Afro-Haitian, and Broadway/musical comedy. Recommended: ES 157. Instructor reserves the right to remove persons with insufficient skill level.				
ES261	Applied Sport Psychology in Human Performance	2 hour(s)		Spring only, even yrs.	
	<i>Prerequisite(s): ES190, D or higher; PSYC166, D or higher.</i>				
	This course will examine various psychological principles that effect human performance. Students will learn psychological theories and techniques that have been used to effectively enhance the performance and personal growth of participants from all levels of sport and physical activity. The course will maintain an applied perspective with an emphasis on major psychological barriers including anxiety, confidence, motivation, and burnout.				
ES270	Research Methods in Exercise Science	2 hour(s)			
	<i>Restriction(s): ES major or STAT minor.</i>				
	The purpose of this course is to help students gain a basic understanding of the research process, become critical consumers of published work, and to be competent in the application of basic research methodology in a variety of exercise science settings.				
ES280	Principles of Athletic Training	3 hour(s)		Spring only	
	<i>Prerequisite(s): BIOL365, D or higher (or concurrent). Restriction(s): ES major.</i>				
	This course is an introduction to the profession of Athletic Training. Emergency procedures, protective equipment, environmental hazards, substance abuse, and injury classification and mechanisms will be discussed. Skill acquisition will focus on equipment fitting, emergency procedures, splinting, taping, and basic injury evaluation. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association.				
ES290	Athletic Training Practicum I	1 hour(s)		Fall only	
	<i>Restriction(s): ES major.</i>				
	AR This course is designed to introduce students to the field of athletic training. Students will be instructed in the basic skills and theories used in the profession of athletic training. This course will provide students with the opportunity to obtain directed clinical experience in an athletic setting. This experience will take place before, during, and after practices and games of various Truman State University athletic teams. Students will practice their skills relating to taping, wrapping, emergency procedures, and vital signs. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association.				

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ES291	Athletic Training Practicum II	1 hour(s)		Spring only	
	<i>Prerequisite(s): ES290, D or higher. Restriction(s): ES major.</i>				
	This course is designed give students the opportunity to utilize their classroom knowledge in a practical setting. This course is designed to be taken following ES 290 (Athletic Training Practicum I) and ES 205 (First Aid and CPR). This course will provide students with the opportunity to apply the skills learned in ES 290 in both lab and clinical settings. This experience will take place before, during, and after practices and games of the various Truman State University sports' teams. Students will demonstrate their skills relating to taping, emergency procedures, and equipment. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association.				
ES301	Football - Theory of Coaching	1 hour(s)		Spring only, odd yrs.	
	This course is designed to provide a methodology for those students interested in coaching football to organize and implement the total program. Emphasis is on job selection, location, coordination of medical staff and coaches, offensive and defensive schemes, and the kicking game.				
ES302	Basketball - Theory of Coaching	1 hour(s)		Fall only, even yrs.	
	Course provides instruction in coaching techniques of basketball, basketball terminology, history, and on the floor instruction in offense and defense.				
ES304	Track/Field - Theory of Coaching	1 hour(s)		Spring only, even yrs.	
	Investigates the history of track and field, coaching and leadership, training theories and their application, meet management, practice planning and organization, event rules, technique, training, and athlete selection.				
ES307	Volleyball - Theory of Coaching	1 hour(s)		Spring only, even yrs.	
	Offensive and defensive strategies, practice organization, team drills, scouting, and player management.				
ES308	Softball - Theory of Coaching	1 hour(s)		Spring only, odd yrs.	
	Offensive and defensive strategies, practice organization, team drills, and player management.				
ES311	Soccer - Theory of Coaching	1 hour(s)		Spring only, even yrs.	
	Theory and practice in coaching soccer, offensive and defensive skills and strategies, organization and administration.				
ES334	Physiological Assessment	3 hour(s)			
	<i>Prerequisite(s): ES190, D or higher; STAT190, D or higher. Restriction(s): ES major or STAT minor.</i>				
	This course is designed to introduce students to the functional assessment of human fitness and performance. Students will be actively involved in the measurement and evaluation of components of body composition, cardiorespiratory, musculoskeletal, and skill-related fitness.				
	<i>Exercise Science majors only. Health Science majors must enroll in HLTH 334.</i>				
ES342	Concepts of Biomechanics	3 hour(s)			
	<i>Prerequisite(s): ES190 OR HLTH190, D or higher; Elementary Functions Essential Skill requirement, D or higher. Restriction(s): ES or HLTH major.</i>				
	Concepts of Biomechanics investigates the anatomical and mechanical bases of human movement. The anatomical component focuses on the skeletal, articular, and neuromuscular systems as they affect movement. The mechanical component focuses on kinematic and kinetic principles and their relationship to human movement.				
ES343	Motor Learning & Control	2 hour(s)			
	<i>Prerequisite(s): ES190, D or higher; ES247, D or higher; ES270, D or higher. Restriction(s): ES major.</i>				
	Investigates the neuropsychological principles and factors affecting the acquisition and retention of motor skills, teaching styles and the inter-relationship of teaching styles and motor skill acquisition and retention. Course also introduces the student to basic research principles and the problems inherent to data collection and interpretation. Note: Must be concurrently enrolled in lab.				
ES343L	Motor Learning & Control Lab	1 hour(s)	WE		
	<i>Prerequisite(s): ES190, D or higher; ES247, D or higher; ES270, D or higher. Restriction(s): ES major.</i>				
	This class is designed to allow the student to have hands on experience with research equipment associated with Motor Learning. Students are expected to engage in mini-research projects related to reaction/movement time, anticipation time, kinesthesia, gross body stability, fine motor coordination, tracking, optical impression, multiple-choice reaction time and proprioception. Note: Must be concurrently enrolled in lecture.				
ES344	Lifespan Motor Development	3 hour(s)			
	<i>Prerequisite(s): ES247, D or higher; ES270, D or higher. Restriction(s): ES major.</i>				
	This course surveys motor development across the lifespan with emphasis on the change in physiological systems with age. Discussions will focus on growth and development of muscle, bone, and nerve and how nutrition, exercise, and medicine influence each of those systems. (Recommended: ES 334)				

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ES345	Introduction to Exercise Physiology w/Lab	3 hour(s)			
	<i>Prerequisite(s): ES247, D or higher; ES270, D or higher. Restriction(s): ES or HLTH major.</i>				
	The purpose of this course is to survey the acute and chronic responses and adaptations of the human body to exercise stress. Emphasis is placed on the practical application of theoretical findings from the research literature. (Recommended: BIOL107, BIOL108, ES334.)				
ES348	Adapted Physical Education	3 hour(s)		Spring only, odd yrs.	
	<i>Prerequisite(s): ES235, D or higher.</i>				
	Philosophy and role of physical education for individuals with disabilities. Etiology and its implications for setting up various programs for the exceptional along with specific teaching activities and aids are emphasized.				
ES350	Practicum II-Event & Game Mgmt	1 - 3 hours			
	Clinical experience in a physical education or coaching related activity. Extension of options included in ES 250. Consent of academic advisor and program director required.				
ES370	Field Experience in Exercise Science	4 hour(s)		Summer only	
	<i>Restriction(s): ES major, Jr or Sr.</i>				
AR	This course is designed to provide Exercise Science majors with the opportunity to apply career-oriented skills in an off-campus internship setting for a minimum of 200 contact hours. The student must follow the procedures in the application process before enrolling. The student may not be enrolled in more than one additional class during the field experience. Mandatory attendance at two informational sessions; junior or senior status; consent of advisor and program director; minimum 2.0 cumulative GPA; minimum 2.5 major GPA required. See Program Office or http://hes.truman.edu/fieldexp.shtml for complete enrollment procedures.				
	<i>Prerequisites: Mandatory attendance at two informational sessions; consent of advisor and program director; minimum 2.0 cumulative GPA; minimum 2.5 major GPA. See HES Program Office or http://hes.truman.edu/fieldexp.shtml for complete enrollment procedures and manual. Failure to adhere to stated procedures will result in ineligibility to enroll for the course.</i>				
ES375	Independent Studies in Exercise Science	1 - 4 hours			
	<i>Prerequisite(s): ES190, D or higher. Restriction(s): ES major.</i>				
AR	Individualized study in specialized areas of Exercise Science. Consent of academic advisor and program director required. <i>Students wanting to enroll in ES 375 must first complete a form in the HES Program Office (PB 212).</i>				
ES390	Athletic Training Practicum III	1 hour(s)		Fall only	
	<i>Prerequisite(s): ES291, D or higher; ES280, D or higher. Restriction(s): ES major.</i>				
	This course is designed give students the opportunity to utilize their classroom knowledge in a practical setting. This course is designed emphasize the competencies and proficiencies taught in ES 280 (Principles of Athletic Training). This course will provide students with the opportunity to obtain directed experience involving emergency procedures and care, basic taping, and protective equipment. This experience will take place before, during, and after practices and games of the Truman State University teams. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association.				
ES391	Athletic Training Practicum IV	1 hour(s)		Spring only	
	<i>Prerequisite(s): ES390, D or higher; ES433, D or higher; ES436, D or higher. Restriction(s): ES major.</i>				
	This course is designed give students the opportunity to utilize their classroom knowledge in a practical setting. This course is designed to be taken following ES 436 (Athletic Injury Evaluation) and ES 433 (Therapeutic Modalities). This course will provide students with the opportunity to obtain directed experience involving injury evaluation and administration while in an athletic setting. Students will become more proficient in injury evaluation, discrimination of appropriate special tests, and interpretation of evaluation results. This experience will take place before, during, and after practices and games of the Truman State University teams (in a sport which emphasizes either upper or lower extremity) Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association.				
ES430	Principles of Coaching	2 hour(s)		Fall only, odd yrs.	
	<i>Restriction(s): ES major.</i>				
	The intent of this course is to develop students' knowledge and skills for coaching sports. The course is designed to reflect and incorporate several humanistic and social values. Although theory-based, the course is task-oriented for practical application.				
ES431	Injury Care of Active People	2 hour(s)			
	<i>Prerequisite(s): BIOL365, D or higher (or concurrent); ES190, D or higher. Restriction(s): ES major.</i>				
	This course is designed to introduce students to the mechanisms, underlying prevention, and care of various injuries and illnesses associated with an active lifestyle. Topics include emergency procedures, sports nutrition, legal concerns, and injury prevention and care. Lab portions will teach the students how to perform protective taping, splinting and applying of protective equipment.				
ES433	Therapeutic Modalities	3 hour(s)		Fall only	
	<i>Prerequisite(s): ES280 OR ES431, D or higher. Restriction(s): ES major.</i>				
	This course provides students with the knowledge and skills to utilize a variety of therapeutic modalities. Students will acquire a detailed understanding of the psychological and physiological processes of pain and healing. Students will use a problem based approach to apply theories, principals, and techniques of thermal, electrical, mechanical, light, and alternative therapies. A laboratory portion will address proficiency in the application of these modalities.				

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ES434	Physical Rehabilitation	3 hour(s)		Spring only	
<i>Prerequisite(s): ES280 OR ES431, D or higher. Restriction(s): ES major.</i>					
This course involves the study in the appropriate use of therapeutic rehabilitation for musculoskeletal injuries. Students will acquire a scientific and physiological rationale, selection criteria, indications and contraindications of exercise, and return to activity guidelines. Techniques and skill provided in both classroom and laboratory experiences will address range of motion, strengthening, proprioception, cardiovascular fitness, and joint specific protocols.					
ES435	Athletic Training Administration	3 hour(s)		Spring only	
<i>Prerequisite(s): ES280, D or higher. Restriction(s): ES major.</i>					
This course provides students the knowledge and skills necessary for the administration of and athletic training program. Course content will include administrative components of athletic training, physical exams, legal issues, emergency planning, record keeping, athletic training facility design, and administrative / leadership skills will be emphasized. Professional development and the role and structure of the National Athletic Trainer's Association (NATA) are also discussed.					
ES436	Injury Evaluation	3 hour(s)		Fall only	
<i>Prerequisite(s): ES280, D or higher. Restriction(s): ES major.</i>					
The purpose of this course is to instruct the students on the proper methods of orthopedic injury evaluation. Students will learn the mechanical and physiological basis of injury and injury evaluation techniques. They will be instructed on the proper methods of documentation, patient interview and history, observation, palpation, strength testing, and special tests. Students will acquire skills in the testing of joint laxity and neurological evaluation. Assessment will take place in the form of written examinations and lab practical/injury scenarios. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association.					
ES450	Professional Issues in Exercise Science	1 hour(s)			
<i>Restriction(s): ES major, Jr or Sr.</i>					
Class is designed for students emerging into the job market or student contemplating applying to graduate school, to allow students to gain valuable knowledge and information relative to interview procedures, resume construction, statement of career goals, types of application letters, and portfolio development. Budget planning, tax calculation, credit card risk, and various forms of insurance will also be covered.					
ES451	Applied Movement Analysis: Aerobic Conditioning	1 hour(s)			
<i>Prerequisite(s): (ES 232 or ES 435) and ES 334 and ES 342 and ES 345. Restriction(s): ES major.</i>					
This purpose of this course is to provide students the opportunity to apply, in a human movement context, concepts obtained in the Exercise Science core. As an upper-level course, students are expected to possess a firm grasp of physiology, biomechanics, motor learning/control, sport management, and lifespan motor development and be able to apply these concepts in a variety of human movement contexts. This course, along with the other 400-level Applied Movement Analysis courses, and ES 450, constitute the capstone experience in Exercise Science.					
ES452	Applied Movement Analysis: Aerobic Dance	1 hour(s)			
<i>Prerequisite(s): (ES 232 or ES 435) and ES 334 and ES 342 and ES 345. Restriction(s): ES major.</i>					
This course will provide students with the opportunity to apply, in a human movement context, concepts obtained in the Exercise Science core. As an upper-level course, students are expected to possess a firm grasp of physiology, biomechanics, motor learning/control, sport management, and lifespan motor development and be able to apply these concepts in a variety of human movement contexts. This course, along with the other 400-level Applied Movement Analysis courses, and ES 450, constitute the Capstone Experience in Exercise Science.					
ES453	Applied Movement Analysis: Anaerobic Conditioning	1 hour(s)			
<i>Prerequisite(s): (ES 232 or ES 435) and ES 334 and ES 342 and ES 345. Restriction(s): ES major.</i>					
The purpose of this course is to provide students the opportunity to apply concepts obtained in the Exercise Science core within the varied contexts of anaerobic conditioning. As an upper-level course, students are expected to possess a firm grasp of physiology, biomechanics, motor learning/control, sport management, and lifespan motor development and be able to apply these concepts in a variety of human movement contexts. This course, along with the other 400-level Applied Movement Analysis courses, and ES 450 constitute the Capstone Experience in Exercise Science.					
ES454	Applied Movement Analysis: Dance	1 hour(s)		Fall only	
<i>Prerequisite(s): (ES 232 or ES 435) and ES 334 and ES 342 and ES 345. Restriction(s): ES major.</i>					
This course will provide students with the opportunity to apply, in a human movement context, concepts obtained in the Exercise Science core. As an upper-level course, students are expected to possess a firm grasp of physiology, biomechanics, motor learning/control, sport management, and lifespan motor development and be able to apply these concepts in a variety of human movement contexts. This course, along with the other 400-level Applied Movement Analysis courses, and ES 450 constitute the Capstone Experience in Exercise Science.					
ES455	Applied Movement Analysis: Gymnastics	1 hour(s)		Spring only	
<i>Prerequisite(s): (ES 232 or ES 435) and ES 334 and ES 342 and ES 345. Restriction(s): ES major.</i>					
This course will provide students with the opportunity to apply, in a human movement context, concepts obtained in the Exercise Science core. As an upper-level course, students are expected to possess a firm grasp of physiology, biomechanics, motor learning/control, sport management, and lifespan motor development and be able to apply these concepts in a variety of human movement contexts. This course, along with the other 400-level Applied Movement Analysis courses, and ES 450, constitute the Capstone Experience in Exercise Science.					
ES456	Concepts of Aquatics	1 hour(s)			
<i>Prerequisite(s): (ES 232 or ES 435) and ES 334 and ES 342 and ES 345. Restriction(s): ES major.</i>					
The purpose of this course is to review the basic concepts of understanding in swimming today. Students will be instructed on relevant topics pertaining to history, hydrodynamics, stroke mechanics, water safety, lifetime fitness, training principles, aquatics for the disabled and aquatic management. Emphasis will be placed upon discussion and active practice.					

<i>Course#</i>	<i>Course Title</i>	<i>Credit</i>	<i>WE?</i>	<i>Fee</i>	<i>Offering</i>	<i>Block: Fall/Spring</i>
ES465	Special Topics in Exercise Science	1 - 4 hours				
	<i>Restriction(s): ES major.</i>					
AR	This course allows a student to pursue an area of academic study that may not be reflected in normal curricular offerings. Specific subject matter and evaluation should be negotiated between the student, academic advisor, and potential instructor. Course content and evaluation must be approved by the program director. Course requirements are at the discretion of the instructor. Must obtain permission from Program Office before enrolling.					
ES470	Research in Exercise Science	1 - 4 hours				
	<i>Prerequisite(s): ES247, D or higher; ES270, D or higher; STAT190, D or higher. Restriction(s): ES major.</i>					
AR	Directed student research in Exercise Science. Consent of academic advisor, research mentor, and program director required. <i>Students wanting to enroll in ES 470 must first complete a form in the HES Program Office (PB 212).</i>					
ES474	Athletic Training Practicum V	1 hour(s)			Fall only	
	<i>Prerequisite(s): ES391, D or higher; ES433, D or higher; ES434, D or higher. Restriction(s): ES major.</i>					
	This course is designed give students the opportunity to utilize their classroom knowledge in a practical setting. This course is designed to be taken following ES 434 (Rehabilitation of Athletic Injuries) and ES 433 (Therapeutic Modalities). This course will provide students with the opportunity to obtain directed experience involving injury rehabilitation while in an athletic setting. This experience will take place in lab and clinical settings. The clinical experience will take place before, during, and after practices and games of the Truman State University teams. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association.					
ES475	Athletic Training Practicum VI	1 hour(s)				
	<i>Prerequisite(s): ES474, D or higher; ES509, D or higher. Restriction(s): ES major.</i>					
	This course is designed give students the opportunity to utilize their classroom knowledge in a practical setting. This course is designed emphasize the competencies and proficiencies taught in ES 509 (Advanced Athletic Training). This course will provide students with the opportunity to obtain directed experience involving general medical and pharmacological issues. This experience will take place at the Student Health Center and before, during, and after practices and games of the Truman State University teams. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association.					
ES501	Advanced Exercise Physiology	3 hour(s)	WE		Spring only	
	<i>Prerequisite(s): BIOL315 OR BIOL325, D or higher; ES345, D or higher. Restriction(s): ES, MAE.</i>					
	Fundamental physiological processes resulting from acute and chronic exercise stress. Emphasis is on integrating systems and organs into a functional whole. Laboratories provide experience in evaluating exercise stress by modern methods and equipment.					
ES501G	Advanced Exercise Physiology	3 hour(s)			Spring only	
	<i>Prerequisite(s): BIOL315 OR BIOL325, D or higher; ES345, D or higher. Restriction(s): ES, MAE, Grad, Sr. Permitted.</i>					
	Fundamental physiological processes resulting from acute and chronic exercise stress. Emphasis is on integrating systems and organs into a functional whole. Laboratories provide experience in evaluating exercise stress by modern methods and equipment.					
ES502	Social Problems in Sport	3 hour(s)	WE			
	<i>Prerequisite(s): ES270, D or higher; ES247, D or higher. Restriction(s): ES, MAE.</i>					
	The purpose of this course is to critically examine several problems that exist in contemporary American sport. Particular emphasis will be placed on using sociological theory as a lens in which to examine the various social problems identified. Topics covered reflect student interest but typically include race, gender equity, violence, and youth sport. This course will also emphasize the development of writing and presentation skills. The student will be expected to research selected topics and make both written and oral presentations on the researched material.					
ES502G	Social Problems in Sport	3 hour(s)				
	<i>Prerequisite(s): ES270, D or higher; ES247, D or higher. Restriction(s): ES, MAE, Grad, Sr. Permitted.</i>					
	The purpose of this course is to critically examine several problems that exist in contemporary American sport. Particular emphasis will be placed on using sociological theory as a lens in which to examine the various social problems identified. Topics covered reflect student interest but typically include race, gender equity, violence, and youth sport. This course will also emphasize the development of writing and presentation skills. The student will be expected to research selected topics and make both written and oral presentations on the researched material.					
ES503	Exercise and Sport Psychology	3 hour(s)	WE			
	<i>Prerequisite(s): ES270, D or higher; ES247, D or higher. Restriction(s): ES, MAE.</i>					
	The purpose of this course is to develop a basic understanding of sport and exercise psychology. Particular emphasis will be placed on the psychology of exercise including determinants, meaning, adherence, injury rehabilitation, mood state fluctuations, and pathology. Students will develop a thorough understanding of the role of psychology in the exercise context and be exposed to a variety of techniques designed to facilitate the exercise experience in a broad range of physically active populations. This course will also emphasize the development of technical writing and presentation skills. The student will be expected to research selected topics and make both written and oral presentations of the researched material.					
ES503G	Exercise and Sport Psychology	3 hour(s)				
	<i>Prerequisite(s): ES270, D or higher; ES247, D or higher. Restriction(s): ES, MAE, Grad, Sr. Permitted.</i>					
	The purpose of this course is to develop a basic understanding of sport and exercise psychology. Particular emphasis will be placed on the psychology of exercise including determinants, meaning, adherence, injury rehabilitation, mood state fluctuations, and pathology. Students will develop a thorough understanding of the role of psychology in the exercise context and be exposed to a variety of techniques designed to facilitate the exercise experience in a broad range of physically active populations. This course will also emphasize the development of technical writing and presentation skills. The student will be expected to research selected topics and make both written and oral presentations of the researched material.					

<i>Course#</i>	<i>Course Title</i>	<i>Credit WE?</i>	<i>Fee</i>	<i>Offering</i>	<i>Block: Fall/Spring</i>
ES505	Advanced Biomechanical Analyses	3 hour(s)	WE		
<i>Prerequisite(s): BIOL365, D or higher; ES270, D or higher; ES342, D or higher. Restriction(s): ES, MAE.</i>					
Students are introduced to the principle mechanical analysis of sport activities. Students will be taught a scientific and applied approach to analysis of human movement.					
ES505G	Advanced Biomechanical Analyses	3 hour(s)			
<i>Prerequisite(s): BIOL365, D or higher; ES270, D or higher; ES342, D or higher. Restriction(s): ES, MAE, Grad, Sr. Permitted.</i>					
Students are introduced to the principle mechanical analysis of sport activities. Students will be taught a scientific and applied approach to analysis of human movement.					
ES506	Advanced Sport Management	3 hour(s)		Spring only, odd yrs.	
<i>Prerequisite(s): ES232, D or higher. Restriction(s): ES major.</i>					
The class is designed to facilitate interdisciplinary learning in the fields of sport and recreation management through the use of applied methods. Students are expected to bring knowledge of marketing, law, organizational behavior and finance to the class. Students will have the opportunity to synthesize their knowledge with advanced concepts in the field of sport management. These concepts will focus on problem analysis, problem solving, risk management, facility management, advertising, leadership and event management.					
ES506G	Advanced Sport Management	3 hour(s)		Spring only, odd yrs.	
<i>Prerequisite(s): ES232, D or higher. Restriction(s): ES, MAE, Grad, Sr. Permitted.</i>					
The class is designed to facilitate interdisciplinary learning in the fields of sport and recreation management through the use of applied methods. Students are expected to bring knowledge of marketing, law, organizational behavior and finance to the class. Students will have the opportunity to synthesize their knowledge with advanced concepts in the field of sport management. These concepts will focus on problem analysis, problem solving, risk management, facility management, advertising, leadership and event management.					
ES509	Advanced Athletic Training	3 hour(s)		Fall only	
<i>Prerequisite(s): ES433, D or higher; ES434, D or higher; ES436, D or higher. Restriction(s): ES, MAE.</i>					
This course addresses general medical and pharmacological issues generally found in the field of athletic training. Students will be exposed to topics including, dermatology, neurological disorders, pulmonary disease, respiratory infections and viral infections, autoimmune disorders, oncology, gastrointestinal conditions, and sexually transmitted infections. A significant portion of the course is also dedicated to pharmacology and various medications used to treat the preceding medical conditions. A laboratory portion will address proficiency with various diagnostic instruments including an ophthalmoscope, otoscope, and stethoscope. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association.					
ES515	Exercise Testing & Prescription	3 hour(s)		Spring only	
<i>Prerequisite(s): ES345, D or higher. Restriction(s): ES, MAE, HS, MAE.</i>					
This course is designed to train exercise scientists in the skills of assessment, planning, and implementation, and evaluation relevant to the development of individualized exercise prescriptions.					
ES515G	Exercise Testing & Prescription	3 hour(s)		Spring only	
<i>Prerequisite(s): ES345, D or higher. Restriction(s): ES, MAE, HS, MAE, Grad, Sr. Permitted.</i>					
This course is designed to train exercise scientists in the skills of assessment, planning, and implementation, and evaluation relevant to the development of individualized exercise prescriptions.					
ES532	Cardiac Pathophysiology	3 hour(s)		Fall only	
<i>Prerequisite(s): BIOL325, D or higher; ES345, D or higher. Restriction(s): ES, MAE.</i>					
An advanced course in cardiac physiology and the mechanisms of cardiac, pulmonary, and some metabolic disease. Includes extensive work on electrocardiogram interpretation, cardiac pharmacology, and disease intervention programs.					
ES532G	Cardiac Pathophysiology	3 hour(s)		Fall only	
<i>Prerequisite(s): BIOL325, D or higher; ES345, D or higher. Restriction(s): ES, MAE, Grad, Sr. Permitted.</i>					
An advanced course in cardiac physiology and the mechanisms of cardiac, pulmonary, and some metabolic disease. Includes extensive work on electrocardiogram interpretation, cardiac pharmacology, and disease intervention programs.					
ES545	Exercise Physiology Seminar	3 hour(s)		Spring only	
<i>Prerequisite(s): ES334, D or higher; ES344, D or higher; ES345, D or higher. Restriction(s): ES, MAE.</i>					
Emphasis will be placed on reviewing and integrating information from current literature in exercise physiology, biomechanics, sports psychology, cardiac rehabilitation, athletic injuries, and exercise biochemistry. (Recommended: ES501 and ES515.)					
ES545G	Exercise Physiology Seminar	3 hour(s)		Spring only	
<i>Prerequisite(s): ES334, D or higher; ES344, D or higher; ES345, D or higher. Restriction(s): ES, MAE, Grad, Sr. Permitted.</i>					
Emphasis will be placed on reviewing and integrating information from current literature in exercise physiology, biomechanics, sports psychology, cardiac rehabilitation, athletic injuries, and exercise biochemistry. (Recommended: ES501 and ES515.)					
ES608G	Management of Instruction	3 hour(s)		Spring only	
<i>Prerequisite(s): ED389, D or higher; ED393, D or higher; ED593, D or higher (or concurrent). Restriction(s): ES, MAE, Grad, Sr. Permitted.</i>					
Management of Instruction investigates the techniques of effective teaching and relationships between teacher and learner. The course is designed to allow the teaching internship in the Master of Arts in Education to gain practical experience necessary for becoming an effective instructor of physical education. The purpose is to provide students with a systematic understanding of how to structure knowledge in physical education.					

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ES647G	Analysis and Interpretation of Data	3 hour(s)			
	<i>Restriction(s): ES, MAE, Grad, Sr. Permitted.</i>				
	The methods of data analysis employed in health and physical education research such as t-tests; chi-square; correlations; analysis of variance and multiple regression analysis are examined.				
ES649G	Research Methods in Health & Exercise Science	3 hour(s)			
	<i>Restriction(s): ES or HLTH MAE, Grad, Sr. Permitted.</i>				
	The course focuses upon research procedures utilized in experimental, descriptive, historical and other methodologies as they apply to health.				
ES650G	Individual Study in Health/Exercise Science	1 - 3 hours			
	<i>Restriction(s): ES or HLTH MAE, Grad, Sr. Permitted.</i>				
	Written investigation of a problem within Health, Physical Education, Recreation, or Coaching under the supervision of a faculty advisor.				
HLTH150	Nutrition in Health & Wellness	3 hour(s)			
	<i>Restriction(s): HLTH or ES major or HLTH minor.</i>				
	Interdependence of human nutrition and food in the health and behavior of consumers. Diet analysis, controversies, and issues.				
HLTH160	Essentials of Stress Management	2 hour(s)			
	<i>Restriction(s): HLTH minor.</i>				
	The purpose of this course is to expose each student to the concept of holistic stress management: the principles, theories, and skills needed to effectively manage personal stress, to understand the psychosomatic (mind-body-spirit) relationship, and to employ a holistic approach to stress management—cognitive strategies and relaxation techniques in both personal and public health arenas.				
HLTH192	Microcomputer Applications	2 hour(s)			
	<i>Restriction(s): HLTH or CMDS major.</i>				
	This class is designed to fulfill the requirements of the Liberal Studies Program/Essential Skills in regards to computer literacy. As such, the course will guide students through practical, computer-related tasks including database searches, Internet sources, advanced word processing, spreadsheets, presentation software, web authoring software, and database software applications. The main goal of this course is to allow students to use computers with greater proficiency in other coursework as well as their daily life.				
HLTH195	Lifetime Health and Fitness	1.5 hour(s)			
	The purpose of this course is to integrate material from human physiology, psychology, sociology, and nutrition to present an interdisciplinary framework for disease prevention and health promotion. The course focus is to promote a behavioral lifestyle change in which students integrate into their lives patterns of physical activity, health, and well-being. Concurrent enrollment in HLTH 196 required. This course in conjunction with HLTH 196 fulfills the Personal Well-Being requirement of the Liberal Studies Program.				
HLTH196	Lifetime Physical Activities:	0.5 hour(s)			
	This course is designed to introduce the student to a pattern of lifetime fitness and physical activity through a variety of activity modes. Regardless of activity mode, concepts of aerobic and anaerobic conditioning techniques will be explored. Where appropriate, issues of safety, equipment, theory, technique and other factors will be introduced. Concurrent enrollment in HLTH 195 required. This course in conjunction with HLTH 195 fulfills the Personal Well-Being requirement of the Liberal Studies Program.				
HLTH240	Issues in Consumer Health	3 hour(s)		Spring only, even yrs.	
	<i>Restriction(s): HLTH minor.</i>				
	The purpose of this course is to help students gain a basic understanding of the multitude of issues related to consumer health in the United States. Course topics include Consumer Bill of Rights, consumer driven health care, impacts of advertising on consumer spending (wants vs. needs), consumer protection laws/agencies/organizations, analysis of conventional vs. alternative/complementary medicine, and how to complain effectively. Emphasis will be on how these issues currently affect one's health and well-being.				
HLTH245	Substance Abuse Prevention	3 hour(s)		Spring only	
	This course is designed primarily for health science and exercise science/pre-MAE majors to convey the impact of drug use and/or abuse on the lives of ordinary people. It will assist students in gaining a realistic perspective of drug-related problems in our society. Topics explored will include the history of drugs; how and why drug abuse occurs; how drug abuse relates to each profession; and drug abuse prevention. This course includes an integrated service learning component.				
HLTH250	Practicum I	1 - 3 hours			
	<i>Prerequisite(s): HLTH190, D or higher.</i>				
	AR Course is designed to allow students to obtain practical experience in an area related to their major or pattern. Students may engage in an investigation, work in an allied field, or a combination of the two. Student is expected to complete a daily log and submit a written report detailing their experience as it relates to the major or pattern. Consent of academic advisor and program director required.				
HLTH255	Introduction to Community & Public Health	3 hour(s)			
	<i>Restriction(s): HLTH [or ES/Phys Ed. Major].</i>				
	A survey of the methods and techniques by which community health workers identify and measure the scope and intensity of health problems. This course includes an integrated service learning component.				

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HLTH260	Human Sexuality <i>Restriction(s): HLTH [or ES/Phys Ed. Major].</i> Course discussions include anatomy/physiology, decision-making skills, disease outcomes, relationships, parenting, birth control, and sexual expression. This course includes an integrated service learning component.	3 hour(s)				
HLTH265	Drugs in Society <i>Restriction(s): HLTH minor.</i> Introduction to topics associated with drug-taking behavior, emphasizing drug education. Physiological and sociological aspects of drug-taking behavior are examined.	3 hour(s)			Fall only	
HLTH270	Consumer Health <i>Restriction(s): HLTH major.</i> The course provides an overview of the complex health marketplace in order to assist consumers in selecting health products and services intelligently. Topics explored include fraud/quackery, fact/fiction, self-care, advertising, cancer, health-care facilities, insurance, aging/death and dying consumer issues and more. This course includes an integrated service learning component.	3 hour(s)			Fall only	
HLTH290	Principles of Health Education and Health Science <i>Prerequisite(s): HLTH255, D or higher. Restriction(s): HLTH major.</i> This course will aid in the development of a basic foundation of awareness, knowledge, and skills from which to apply subsequent health education and health promotion principles. The course is based on the Seven Responsibilities of a Health Educator. In this course students will participate in a group research project and become familiar with widely-used statistical software. This course includes an integrated service learning component.	3 hour(s)				
HLTH320	Patient Education and Clinical Health <i>Prerequisite(s): HLTH290, D or higher. Restriction(s): HLTH major.</i> In addition to an overview of patient education/clinical health promotion; the course will focus on: patient and family education, the Health Educator/clinician's role/responsibility, health education and learning theories, materials and counseling/teaching in health promotion, patients with special needs/special populations, patient compliance and motivation, health professional-patient interaction, patient as a partner, creation of effective patient education materials/programs, resources for patients/clinicians/health educators, delivery of patient education, and health policy. This course will include a service learning component. creation of effective patient education materials/programs, resources for patients/clinicians/health educators, delivery of patient education, and health policy. This course will include a service learning component	3 hour(s)			Fall only, odd yrs.	
HLTH325	Health Promotion Management and Marketing <i>Prerequisite(s): HLTH290, D or higher. Restriction(s): HLTH major.</i> Introduction to the skills and principles necessary for marketing, strategic planning and leadership/management of successful health promotion programs. This course includes an integrated service learning component.	3 hour(s)	WE		Fall only	
HLTH330	Community Nutrition for Special Populations <i>Prerequisite(s): HLTH290, D or higher. Restriction(s): HLTH major.</i> This course will aid in the development of a basic foundation of awareness, knowledge, and skills from which to apply the principles of community nutrition to various constituencies (elderly populations, children, impoverished populations, women, diabetics, etc.). As part of the integrated service learning component, course information will be applied to aid in students' understanding of local program planning, policies, resources, and nutrition issues specific to community nutrition for various populations. This course will also present material relevant to solving community nutritional and health problems, including program delivery, nutrition education, nutrition assessment, and planning nutrition interventions.	3 hour(s)			Spring only	
HLTH334	Physiological Assessment <i>Prerequisite(s): STAT190, D or higher. Restriction(s): HLTH major or HLTH minor.</i> This course is designed to introduce students to the functional assessment of human fitness and performance. Students will be actively involved in the measurement and evaluation of components of body composition, cardiorespiratory, musculoskeletal, and skill-related fitness. <i>Health Science majors or Health Studies minors only. Exercise Science majors must enroll in ES 334.</i>	3 hour(s)				
HLTH349	Research Methods in Health Science <i>Prerequisite(s): STAT 190 and HLTH 190. Restriction(s): HLTH major.</i> The purpose of this course is to help students gain a basic understanding of the research process, become critical consumers of published work, and to be prepared to conduct research in a variety of health science settings.	3 hour(s)				
HLTH350	Practicum II <i>Prerequisite(s): HLTH250, D or higher.</i> AR Practical experience in an area related to major or pattern. Extension of options included in HTLH 250. Consent of academic advisor and program director required.	1 - 3 hours				
HLTH361	Mental Health <i>Prerequisite(s): HLTH290 OR ES190, D or higher. Restriction(s): HLTH [or ES/Phys Ed. Major].</i> In this course, we will draw the parameters of mental health, examine Healthy People 2010 and the Surgeon General's Report of Mental Health, explore current schools of thought that dominate the field, and determine the role that positive mental health plays in the achievement of optimal health and wellness. Selected topics include: positive mental health, self-esteem, emotional health, non-violent conflict resolution/peer mediation, stress and stress management, problems of everyday living, community-based mental health services, and health counseling skills. This course includes an integrated service learning component. <i>This section designated for Health Science majors or students following the Physical Education/Health/Coaching pattern in Exercise Science only</i>	3 hour(s)			Fall only, even yrs.	

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HLTH362	Environmental Health	3 hour(s)			
	<i>Restriction(s): HLTH major, HLTH or ENVI minor, Soph, Jr or Sr.</i>				
	The course actively involves the student in the determination of environmental health concerns. We will examine the impact of the environment on individual and population health, Healthy People 2010 objectives for environmental health, and the sources/etiology, effects, and control measures for selected environmental and personal safety hazards. This course includes an integrated service learning component.				
HLTH366	Program Assessment and Planning	3 hour(s)	WE		
	<i>Prerequisite(s): HLTH290, D or higher. Restriction(s): HLTH major.</i>				
	In addition to an overview of the theories and models of community health/individual and population health, the course will explore issues pertinent to the community health educator: core public health functions (assessment, policy development, assurance), community health assessment/mobilization/promotion, culturally competent health promotion, health education programming in the community setting, and legislative advocacy/grant writing for health education issues. This course includes an integrated service learning component.				
	<i>This section designated for Health Science majors or students following the Physical Education/Health/Coaching pattern in Exercise Science only</i>				
HLTH370	Field Experience in Health Science	4 hour(s)		Summer only	
	<i>Prerequisite(s): HLTH366, D or higher. Restriction(s): HLTH major, Jr or Sr.</i>				
AR	This course is designed to provide Health Science majors with the opportunity to apply career-oriented skills in an off-campus internship setting for a minimum of 200 contact hours. The student must follow the procedures in the application process before enrolling. The student may not be enrolled in more than one additional class during the field experience. Mandatory attendance at two informational sessions, junior or senior status; consent of advisor and program director; minimum 2.0 cumulative GPA; minimum 2.5 major GPA required. See Program Office or http://hes.truman.edu/fieldexp.shtml for complete enrollment procedures.				
	<i>Prerequisites: Mandatory attendance at two informational sessions; consent of advisor and program director; minimum 2.0 cumulative GPA; minimum 2.5 major GPA. See HES Program Office or http://hes.truman.edu/fieldexp.shtml for complete enrollment procedures and manual. Failure to adhere to stated procedures will result in ineligibility to enroll for the course.</i>				
HLTH374	Independent Study in Health Science	1 - 4 hours			
	<i>Prerequisite(s): HLTH190, D or higher. Restriction(s): HLTH major.</i>				
AR	Individualized study in specialized areas of health science. Consent of academic advisor and program director required.				
	<i>Students wanting to enroll in HLTH 374 must first complete a form in the HES Program Office (PB 212).</i>				
HLTH405	Global Public Health	3 hour(s)		Fall only	
	<i>Restriction(s): HLTH major, HLTH minor, Soph, Jr or Sr.</i>				
	Course explores disease prevention and health promotion in the global community. Current global health issues will be addressed.				
HLTH410	Health Communication Methods	3 hour(s)	WE		
	<i>Prerequisite(s): HLTH366, D or higher. Restriction(s): HLTH major.</i>				
	The course actively involves the student in the development and selection of materials, methods, and techniques for communicating health and health education information to individuals and populations. Students will select a health education agency/organization and a health topic/issue to communicate a mass media/multi-media persuasive health communication message/campaign to a targeted population in a community. The student will demonstrate proficiency in communicating this health information/targeted message via multiple media methods. This course includes an integrated service learning component.				
HLTH440	Program Implementation & Evaluation	3 hour(s)			
	<i>Prerequisite(s): HLTH410, D or higher. Restriction(s): HLTH major.</i>				
	This course is designed to develop a more complete understanding of the skills and abilities needed by health educators/promoters for program planning, implementation, and evaluation. The student will be exposed to a wide variety of learning activities and discussions that focus on the core competencies for entry level health educators. In addition, topics will be presented that further the concept of planning, implementation, evaluation, and replanning as a cyclic event. This course includes an integrated service learning component.				
HLTH450	Professional Issues in Health Science	1 hour(s)			
	<i>Restriction(s): HLTH major, Jr or Sr.</i>				
	Class is designed for students emerging into the job market or student contemplating applying to graduate school, to allow students to gain valuable knowledge and information relative to interview procedures, resume construction, statement of career goals, types of application letters, and portfolio development. Budget planning, tax calculation, credit card risk, and various forms of insurance will also be covered.				
HLTH455	School Health Programs	3 hour(s)		Spring only	
	<i>Prerequisite(s): HLTH366, D or higher. Restriction(s): HLTH [or ES/Phys Ed. Major].</i>				
	In this course, we conduct advocacy for Coordinated School Health Programs (CSHPs), design a program plan for a CSHP, prepare a lesson project for Comprehensive School Health Education, review the MO School Assessment Program, and evaluate health education curriculum and materials.				
HLTH467	Introduction to Epidemiology	3 hour(s)		Spring only	
	<i>Prerequisite(s): HLTH349, D or higher. Restriction(s): HLTH major or STAT minor.</i>				
	Increasing an understanding of epidemiological concepts, practices, and methods is a primary focus. Topics covered during the course are history of epidemiology, disease etiology, measures of morbidity and mortality, descriptive means of epidemiology, data uses in the field, study designs, measures of effect, data interpretation issues, screening guidelines, and epidemiological aspects of infectious diseases, work and the environment. A separate focus will be placed on the practice of analyzing data in epidemiological investigations.				

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HLTH470	Research in Health Science	1 - 4 hours				
	<i>Prerequisite(s): STAT190, D or higher. Restriction(s): HLTH major.</i>					
AR	Directed student research in Health Science. Consent of academic advisor, research mentor, and program director required. <i>Students wanting to enroll in HLTH 470 must first complete a form in the HES Program Office (PB 212).</i>					
HLTH480	Worksite Health	3 hour(s)			Spring only	
	<i>Prerequisite(s): HLTH366, D or higher. Restriction(s): HLTH major.</i>					
	The course will examine worksite health promotion and health protection on the educational, organizational, and environmental levels. The student will design, implement, and evaluate a comprehensive worksite health promotion program and occupational safety and health program, provide a rationale for worksite health promotion and safety programs, and create a comprehensive occupational safety and health manual and corresponding training program.					
HLTH499	WKSP: Personal Stress Management for Enhanced Health	1 hour(s)			Summer only	
	An examination of the psychophysiology of the stress response and indicators of excessive stress. Stress management techniques are examined and a personal stress management plan is developed, implemented and evaluated.					
HPP200	Medical Terminology	1 hour(s)				
	Medical Terminology allows the student to develop mastery with terminology that is used in Allied Health occupations. In the process of developing mastery with medical terminology, a student will have the opportunity to preview or review the fundamentals of anatomy, evaluate a medical brief, and learn proper pronunciation of medical terms. The course is designed as a programmed learning and self-paced approach by body systems.					
JINS302	Wilderness Leadership	3 hour(s)	WE	\$10.00		
	<i>Restriction(s): Jr or Sr.</i>					
	Wilderness Leadership is an interdisciplinary analysis of small group (team) leadership dynamics in wilderness setting, emphasizing the interplay of factors (psychological, physiological, sociological) in extreme conditions.					
JINS321	Leadership Analysis: Exploring the Final Frontier	3 hour(s)	WE	\$10.00		
	<i>Restriction(s): Jr or Sr.</i>					
	This course examines the dynamics of small-group leadership in the exploration of aerospace and undersea environments. Leadership analysis courses expand upon knowledge learned in the modes of inquiry as an in-depth exercise in critical thinking.					
JINS341	Sport and Society: The Olympics	3 hour(s)	WE			
	<i>Restriction(s): Jr or Sr.</i>					
	This course investigates the relationship between sports and the societies that produce them. Many people and civilizations have practiced competitive and recreational athletics throughout human history, but the forms, functions, and ideologies of sports have differed considerably. This class will focus on key aspects of athletics using a variety of different disciplinary methodologies. Topic: The Olympics: The summer Olympics constitute the largest international gathering of people in the world. It is an event that captivates citizens of all countries with the best in human performance, pageantry, and drama. In their original form, the games were supposed to be apolitical, promote international goodwill, and involve only amateur athletes. However, these ideals have virtually disappeared from the Olympics as international politics, sociological forces, and historical events have drastically influenced their evolution. The purpose of this class is to fully explore the Olympic games as an intersection among the disciplines of history, political science, sociology, and sport. Through this exploration process, the course seeks to improve both the critical thinking and writing skills of its participants.					
JINS366	Potent Potables: A Reflection on America	3 hour(s)	WE			
	<i>Restriction(s): Jr or Sr.</i>					
	American culture is fascinated with beer. The manufacturing and marketing of this potent potable has developed from being an illegal, black market enterprise to a billion dollar industry that has become interwoven into the fabric of America. The influence of beer can be felt in our sporting arenas, government policies, and in our social behaviors. Thus, beer is more than a beverage; it is an influential aspect of our own culture. This course is the exploration of the culture of beer as an intersection between the disciplines of political policy, physiology, sociology, chemistry, and sport. This course is an investigation into the place beer holds in American culture--it does not advocate, in any way, individual decisions regarding alcohol consumption.					
JINS373	Stress in America	3 hour(s)	WE			
	<i>Restriction(s): Jr or Sr.</i>					
	An examination of the psychophysiology of the stress response and sources of stress in American culture. The sometimes conflicting contributions of various disciplines such as physiology, public policy, psychology, education, and sociology to the study of stress will be reviewed and assessed					
JINS374	The Parenting Process	3 hour(s)	WE			
	<i>Restriction(s): Jr or Sr.</i>					
	Deciding to have children is a life changing decision affecting many aspects of life. This course will explore parenting from the initial attempt of getting pregnant to raising the children utilizing the viewpoints of health science, biology, finance, religion, psychology, and philosophy.					