

CLINICAL EXERCISE SCIENCE

The advisement track in Clinical Exercise Science (CES) is designed for students who wish to pursue academic and career interests in a variety of clinical settings that involve the therapeutic application of exercise and physical activity. Through careful course selection, students can further specialize in areas such as clinical exercise physiology, pathokinesiology, and athletic health care. Course work in this advisement track also can help prepare students for specialized certifications from various professional organizations.

KNES 508	Statistical Methods in Kinesiology (3 units)	<i>KNES 349</i>
KNES 510	Research Methods in Kinesiology (3)	<i>KNES 349, 508</i>
	Project (3) - <i>or</i> - Thesis (3)	<i>Committee Approval</i>
	- <i>or</i> - Comprehensive Exam (0) and 500-Level Course (3)	<i>Committee Approval</i>
KNES 551	Adv Study in Physiology of Exercise (3)	<i>KNES, 348, 348L</i>
KNES 561	Adv Study in Biomechanics (3)	<i>KNES 300, 461</i>
KNES 571	Adv Study in Human Motor Control and Learning (3)	<i>KNES 371</i>
KNES 580	Adv Study in Sport and Exercise Psychology (3)	<i>KNES 383</i>
KNES 432	Applied Exercise Psychology (3)	<i>KNES 383</i>
KNES 451	Sports Medicine (3)	<i>KNES 348, 348L</i>
KNES 452	Graded Exercise Testing and Prescription (3)	<i>KNES 348, 348L</i>
KNES 454	Physical Activity and the Aging Process (3)	<i>6 units of KNES or GERO</i>
KNES 455	Function Perform Assess Program Older Adults (3)	<i>KNES 353, 371 or 454</i>
KNES 461	Biomechanical Analysis of Human Movement (3)	<i>KNES 210, 260, 300</i>
KNES 463	Biomechanics of Musculoskeletal Injuries (3)	<i>KNES 210, 260, 300</i>
KNES 465	Admin and Leadership in Athletic Training (3)	<i>KNES 200, 365</i>
KNES 471	Motor Control and Movement Dysfunction (3)	<i>KNES 371</i>
KNES 555	Applied Strength and Conditioning (3)	<i>KNES 348, 348L, 351, 551</i>
KNES 556	Environmental Exercise Physiology (3)	<i>KNES 348, 348L, 551</i>
HESC 440	Determinants of Health Behavior (3)	<i>HESC 320 or KNES 202</i>
KNES 499	Independent Study (1-3)	<i>Adviser Approval</i>

KNES 550	Graduate Internship (3)	<i>Adviser Approval</i>
KNES 599	Graduate Independent Research (1-3)	<i>Adviser Approval</i>

FITNESS AND HEALTH PROMOTION

The advisement track in Fitness and Health Promotion (FHP) provides opportunities for students to pursue academic and career interests in a variety of allied fitness and health professions including such areas as personal training, health and fitness instruction, planning and management, older adult fitness and health promotion, and corporate fitness/worksite health promotion.

KNES 508	Statistical Methods in Kinesiology (3 units)	<i>KNES 349</i>
KNES 510	Research Methods in Kinesiology (3)	<i>KNES 349, 508</i>
KNES 597/8	Project (3) - <i>or</i> - Thesis (3)	<i>Committee Approval</i>
	- <i>or</i> - Comprehensive Exam (0) and 500-Level Course (3)	<i>Committee Approval</i>
KNES 551	Adv Study in Physiology of Exercise (3)	<i>KNES 210, 348, 348L</i>
KNES 561	Adv Study in Biomechanics (3)	<i>KNES 210, 260, 300, 461</i>
KNES 571	Adv Study in Human Motor Control and Learning (3)	<i>KNES 371</i>
KNES 580	Adv Study in Sport and Exercise Psychology (3)	<i>KNES 383</i>
HESC 400	Program Design in Kinesiol and Health Promotion (3)	<i>KNES 202 or HESC 220</i>
KNES 406	Principles of Sport and Exercise Management (3)	<i>None</i>
KNES 432	Applied Exercise Psychology (3)	<i>KNES 383</i>
KNES 451	Sports Medicine (3)	<i>KNES 348, 348L</i>
KNES 452	Graded Exercise Testing and Prescription (3)	<i>KNES 348, 348L; 351 & 451 rec.</i>
KNES 454	Physical Activity and the Aging Process (3)	<i>6 units of upper division KNES/GERO</i>

KNES 455	Function Perform Assess Program Older Adults (3)	<i>KNES 349 and 353, 371 or 454</i>
KNES 555	Applied Strength and Conditioning (3)	<i>KNES 351, 551</i>
KNES 556	Environmental Exercise Physiology (3)	<i>KNES 551</i>
HESC 401	Epidemiology (3)	<i>HESC 220, 349</i>
HESC 440	Determinants of Health Behavior (3)	<i>HESC 220 or KNES 202</i>
HESC 460	Worksite Health Promotion (3)	<i>HESC 220 or KNES 202</i>
HESC 461	Occupational Health and Safety (3)	<i>HESC 220 or KNES 202</i>
KNES 499	Independent Study (1-3)	<i>Adviser Approval</i>
KNES 550	Graduate Internship (3)	<i>Adviser Approval</i>
KNES 599	Graduate Independent Research (1-3)	<i>Adviser Approval</i>

GEROKINESIOLOGY

The advisement track in Gerokinesiology provides background knowledge and experience to prepare students to work with the growing population of older adults in a variety of physical activity settings including personal training, group exercise classes, senior center and residential wellness programs, and in balance and mobility training/rehabilitation programs.

KNES 508	Statistical Methods in Kinesiology (3 units)	<i>KNES 349</i>
KNES 510	Research Methods in Kinesiology (3)	<i>KNES 349, 508</i>
KNES 597/8	Project (3) - <i>or</i> - Thesis (3)	<i>Committee Approval</i>
	- <i>or</i> - Comprehensive Exam (0) and 500-Level Course (3)	<i>Committee Approval</i>
KNES 454	Physical Dimensions of Aging (3)	<i>6 Upper Div units of KNES /GERO</i>
KNES 455	Function Perform Assess Program Older Adults (3)	<i>KNES 353, 371 or 454</i>
KNES 550	Graduate Internship	<i>Adviser Approval</i>
KNES 551	Adv Study in Physiology of Exercise (3)	<i>KNES 210, 348, 348L</i>
KNES 561	Adv Study in Biomechanics (3)	<i>KNES 210, 260, 300, 461</i>
KNES 571	Adv Study in Human Motor Control and Learning (3)	<i>KNES 371</i>
KNES 580	Adv Study in Sport and Exercise Psychology (3)	<i>KNES 383</i>
KNES 432	Applied Exercise Psychology (3)	<i>KNES 383</i>
KNES 461	Biomechanical Analysis of Human Movement (3)	<i>KNES 300</i>
KNES 463	Biomechanics of Musculoskeletal Injuries (3)	<i>KNES 300</i>
KNES 471	Motor Control and Movement Dysfunction (3)	<i>KNES 371</i>

KNES 550	Applied Strength and Conditioning	<i>KNES 351, 551</i>
HESC 401	Epidemiology (3)	<i>HESC 220, 349,</i>
HESC 440	Determinants of Health Behavior (3)	<i>HESC 220 or KNES 202</i>
HESC 450	Applied Health Promotion in Aging Populations	<i>HESC 220 or KNES 202</i>
HESC 460	Worksite Health Promotion (3)	<i>HESC 220 or KNES 202</i>
GERO 410	Women, Health and Aging	<i>None</i>
GERO 500	Process of Adult Development and Aging (3)	<i>Instructor Consent</i>
GERO 503	Aging and Public Policy (3)	<i>GERO 500</i>
GERO 507	Professional Issues in Gerontology	<i>None</i>
KNES 499	Independent Study (1-3) May be repeated once	<i>Adviser Approval</i>
KNES 599	Graduate Independent Research (1-3) Repeat Once	<i>Adviser Approval</i>

PERFORMANCE ENHANCEMENT / SPORT PSYCHOLOGY

The advisement track in Performance Enhancement / Sport Psychology (PESP) is designed for those wishing to develop knowledge and skills to assist others in maximizing their performance in a variety of athletic, coaching, occupational, and other human movement settings. In addition to the special emphasis on the psychological/mental aspects of coaching and performance, students can also further concentrate their study in the areas of physical training, biomechanical analysis/ergonomics, and motor control and learning.

KNES 508	Statistical Methods in Kinesiology (3 units)	<i>KNES 349</i>
KNES 510	Research Methods in Kinesiology (3)	<i>KNES 349, 508</i>
KNES 597/8	Project (3) - <i>or</i> - Thesis (3)	<i>Committee Approval</i>
	- <i>or</i> - Comprehensive Exam (0) and 500-Level Course (3)	<i>Committee Approval</i>
KNES 551	Adv Study in Physiology of Exercise (3)	<i>KNES 348, 348L</i>
KNES 561	Adv Study in Biomechanics (3)	<i>KNES 461</i>
KNES 571	Adv Study in Human Motor Control and Learning (3)	<i>KNES 371</i>
KNES 580	Adv Study in Sport and Exercise Psychology (3)	<i>KNES 383</i>
KNES 430	Applied Sport Psychology (3)	<i>KNES 383</i>
KNES 432	Applied Exercise Psychology (3)	<i>KNES 383</i>
KNES 461	Biomechanical Analysis of Human Movement (3)	<i>KNES 300</i>
KNES 463	Biomechanics of Musculoskeletal Injuries (3)	<i>KNES 300</i>
KNES 471	Motor Control and Movement Dysfunction (3)	<i>KNES 371</i>
KNES 555	Scientific Bases of Training (3)	<i>KNES 210, 348, 348L, 351, 551</i>
KNES 556	Environmental Exercise Physiology (3)	<i>KNES 210, 348, 348L, 551</i>

KNES 557	Instruct Strategies in Physical Educ and Sport (3)	<i>KNES 371 or 383</i>
KNES 581	Consultation in Applied Sport Psychology (3)	<i>KNES 383, 430</i>
HESC 460	Worksite Health Promotion (3)	<i>HESC 320 or KNES 202</i>
HESC 461	Occupational Health and Safety (3)	<i>HESC 320 or KNES 202</i>
COUN 511	Pre-Practicum (3)	<i>PSYC 101, 341, COUN 500</i>
COUN 520	Modes of Individual Counseling (3)	<i>PSYC 101, 341, COUN 500, 511</i>
HUSR 450	Theory and Practice of Group Counseling (3)	<i>HUSR 300, 380</i>
KNES 499	Independent Study (1-3)	<i>Adviser Approval</i>
KNES 550	Graduate Internship (3)	<i>Adviser Approval</i>
KNES 599	Graduate Independent Research (1-3)	<i>Adviser Approval</i>

SPECIAL STUDIES

The advisement track in Special Studies makes it possible for students to design a program that suits their academic and professional goals better than any other advisement track. This option may be especially suitable for those whose major interest is to pursue advanced/doctoral study in one or more subdisciplines of kinesiology including biomechanics, exercise physiology, motor control and learning, philosophical perspectives, sports psychology, or sociocultural perspectives.

KNES 508	Statistical Methods in Kinesiology (3 units)	<i>KNES 349</i>
KNES 510	Research Methods in Kinesiology (3)	<i>KNES 349, 508</i>
KNES 597/8	Project (3) - or - Thesis (3)	<i>Committee Approval</i>
	- or - Comprehensive Exam (0) and 500-Level Course (3)	<i>Committee Approval</i>
KNES 516	Adv Study of the Phil Perspectives of Human Movt (3)	<i>KNES 380</i>
KNES 551	Adv Study in Physiology of Exercise (3)	<i>KNES 348, 348L</i>
KNES 558	Adv Study in Teaching Human Movement (3)	<i>KNES 300; or 371</i>
KNES 561	Adv Study in Biomechanics (3)	<i>KNES 260, 300, 461</i>
KNES 571	Adv Study in Human Motor Control and Learning (3)	<i>KNES 371</i>
KNES 580	Adv Study in Sport and Exercise Psychology (3)	<i>KNES 383</i>
KNES 582	Adv Study in Sociocult Perspect of Human Movt (3)	<i>KNES 381, 384</i>
KNES 550	Graduate Internship (3)	<i>Adviser Approval</i>

KNES 599	Graduate Independent Research (1-3)	<i>Adviser Approval</i>
	(Other 400 and 500 Level Courses may be selected with graduate adviser approval)	

SPORTS STUDIES

The advisement track in Sports Studies provides background knowledge/experience for advanced study, for personal enrichment, and/or for advancement in various career paths such as athletic coaching, teaching physical education, youth development, sociocultural aspects of sport, or sport and exercise management.

KNES 508	Statistical Methods in Kinesiology (3 units)	<i>KNES 349</i>
KNES 510	Research Methods in Kinesiology (3)	<i>KNES 349, 508</i>
KNES 597/8	Project (3) - <i>or</i> - Thesis (3)	<i>Committee Approval</i>
	- <i>or</i> - Comprehensive Exam (0) and 500-Level Course (3)	<i>Committee Approval</i>
KNES 516	Adv Study of the Phil Perspectives of Human Movt (3)	<i>KNES 380</i>
KNES 551	Adv Study in Physiology of Exercise (3)	<i>KNES 348, 348L</i>
KNES 561	Adv Study in Biomechanics (3)	<i>KNES 461</i>
KNES 571	Adv Study in Human Motor Control and Learning (3)	<i>KNES 371</i>
KNES 580	Adv Study in Sport and Exercise Psychology (3)	<i>KNES 383</i>
KNES 582	Adv Study in Sociocult Perspect of Human Movt (3)	<i>KNES 381, 384</i>

KNES 400	Program Design in Kinesiol and Health Promotion (3)	<i>KNES 202</i>
KNES 430	Applied Sport Psychology (3)	<i>KNES 383</i>
KNES 432	Applied Exercise Psychology (3)	<i>KNES 383</i>
KNES 480	Women and Sport (3)	<i>15 units of KNES</i>
KNES 483	Sport in Film and Fiction (3)	<i>KNES 380, 381 or 383</i>
KNES 511	Sport/Exercise Administration and Operations(3)	<i>KNES 406</i>
KNES 557	Instructional Strategies in Physical Education and Sport	<i>KNES 371 or 383</i>
KNES 499	Independent Study (1-3)	<i>Adviser Approval</i>
KNES 550	Graduate Internship (3)	<i>Adviser Approval</i>

TEACHER EDUCATION / PEDAGOGICAL STUDIES

The Teacher Education track is designed to prepare those interested in improving their teaching and/or coaching effectiveness, prepare students for administrative roles in education, or both. Study in this area will help students design, develop, and evaluate curriculum and instruction, improve supervisory skills, and develop expertise in behavioral research methods. The Teacher Education track may also support Single-Subject Teaching Credential holders in meeting Induction (Level II Credential) requirements.

KNES 508	Statistical Methods in Kinesiology (3 units)	<i>KNES 349</i>
KNES 510	Research Methods in Kinesiology (3)	<i>KNES 349, 508</i>
KNES 597/8	Project (3) - or - Thesis (3)	<i>Committee Approval</i>
	- or - Comprehensive Exam (0) and 500-Level Course (3)	<i>Committee Approval</i>

KNES 558	Adv Study in Teaching Human Movement (3)	<i>KNES 210, 260, 300; or 371</i>
KNES 582	Adv Study in Sociocult Perspect of Human Movt (3)	<i>KNES 381, 384</i>
KNES 571	Adv Study in Human Motor Control and Learning (3)	<i>KNES 371</i>
KNES 561	Adv Study in Biomechanics (3)	<i>KNES 461</i>
KNES 551	Adv Study in Physiology of Exercise (3)	<i>KNES 348, 348L</i>
KNES 461	Biomechanical Analysis of Human Movement (3)	<i>KNES 300</i>
KNES 451	Sports Medicine	<i>KNES 348 & 348L</i>
KNES 432	Applied Exercise Psychology (3)	<i>KNES 383</i>
KNES 430	Applied Sport Psychology (3)	<i>KNES 383</i>
KNES 499	Independent Study (1-3)	<i>Adviser Approval</i>
KNES 550	Graduate Internship (3)	<i>Adviser Approval</i>
KNES 599	Graduate Independent Research (1-3)	<i>Adviser Approval</i>