# Bachelor of Science Degree College of Liberal Arts and Sciences, ASU Department of Kinesiology (KIN)

# Undergraduate Academic Advisor, Donna Landers, PE West, Room 218, (480) 965-3875

# **MINIMUM GRADE OF "C" REQUIRED IN ALL PREREQUISITE AND MAJOR COURSES**

# I. <u>REQUIRED GENERAL STUDIES COURSES</u> (21 cr.) (prerequisites for KIN core courses):

BIO 201 (SG) – (prerequisite for KIN 335, KIN 340, KIN 345)

BIO 202 (NS) – (prerequisite for KIN 340)

CHM 101 (SQ) – (prerequisite for KIN 340)

MAT 119 or 170 or 210 or higher (MA) – (prerequisite for KIN 335)

PGS 101 (SB) – (prerequisite for KIN 345, KIN 352)

PHY 111 (NS) – (prerequisite for KIN 335)

(General Studies abbreviations used above: SQ & SG = Sciences; MA = Mathematics; SB = Social and Behavioral Sciences; L = Literacy and Critical Inquiry (courses in Kinesiology)\*; NS = Natural Sciences and Mathematics).

**II.** <u>**PRE-CORE**</u> (May be taken concurrently with Scientific Core.) (8 cr.):

KIN 200 Introduction to Kinesiology (2 cr.)

KIN 110 Movement Analysis Lab (6 cr.)

# III. <u>SCIENTIFIC CORE</u> (12 cr.):

KIN 335 Biomechanics

KIN 340 Physiology of Exercise

KIN 345 Motor and Developmental Learning

KIN 352 Psychosocial Aspects of Physical Activity

# IV. AREAS OF CONCENTRATION (21 cr.)

There are three concentrations in Kinesiology. Students must select one of these concentrations. They are **EXERCISE SCIENCE AND MOVEMENT SCIENCE** 

V. **<u>POST CORE CAPSTONE COURSE</u>** (1 cr.):

KIN 498 Pro Seminar: Kinesiology & the Future – (course taken in senior year.)

# \*Courses meeting Literacy and Critical Inquiry (L) requirements:

KIN 414 Electromyographic Kinesiology (prerequisite: KIN 335, KIN 340)

KIN 422 Motor Control in Special Populations (prerequisite: KIN 345)

KIN 441 Physiology of Women in Sport (prerequisite: KIN 340)

KIN 443 Exercise Endocrinology (prerequisite: KIN 340)

KIN 448 Applied Sport Psychology (prerequisite: KIN 352)

KIN 460 Theory of Strength Training (prerequisite: KIN 340)

\*There are other L courses in the university

Bridge Course (s) (CLAS requirement):

\_\_\_\_ KIN 422 Motor Control Special Populations

KIN 452 Exercise Psychology (SB)

### EXERCISE SCIENCE CONCENTRATION

For the student interested in more applied aspects of exercise and sport performance, e.g., strength and conditioning, sports medicine, sport skill acquisition, exercise physiology, biomechanical techniques in exercise and sport, sport psychology.

Exercise Science – 21 credits: Part A and Part B must be completed.

#### Part A: 9 credits

Choose from: KIN 334 Functional Anatomy and Kinesiology KIN 448 Applied Sport Psychology KIN 484 (1-6 cr.) Internship KIN 494 ST:Interpretation of Exercise Performance

#### Part B: 12 credits

Choose from: KIN 283 Prevention and Care Athletic of Injuries KIN 348 Psychological Skills for Optimal Performance KIN 370 Advanced First Aid KIN 412 Biomechanics of the Skeletal System KIN 413 Qualitative Analysis in Sport Biomechanics KIN 441 Physiology of Women in Sport KIN 442 Fuel Metabolism KIN 444 Metabolic Adaptations to Exercise Training KIN 445 Exercise Physiology for Children and Adolescents KIN 450 Biopsychosocial Perspectives of Physical Activity & Health KIN 460 Theory of Strength Training KIN 485 Advanced Techniques of Athletic Training KIN 494 ST:Environmental Exercise Physiology KIN 494 ST: Physiological Basis for Exercise and Sport KIN 494 ST:Sport and Social Issues

#### Other Kinesiology courses with advisor approval

### MOVEMENT SCIENCE CONCENTRATION

For the student interested in pre-health professions and those interested in biomechanical, physiological, motor control, and/or psychological mechanisms underlying human movement performance. Students interested in pursuing post-baccalaureate training in one of several possible professions in the health care industry (e.g., physical therapy, recreational therapy, occupational therapy, physician's assistant, medicine, dentistry, podiatry, chiropractic, etc.) will have additional course work in the sciences to complete (see department for list).

Movement Science – 21 credits: Part A and Part B must be completed.

### Part A: 9 credits

Choose from: KIN 484 Internship (1-6 cr.) KIN 492 Research (1-6 cr.) KIN 493 Honors Thesis (1-6 cr.) KIN 494 ST:Research Methods KIN 499 Individualized Instruction (1-6 cr.)

### Part B: 12 credits

Choose from: KIN 334 Functional Anatomy and Kinesiology KIN 370 Advanced First Aid KIN 412 Biomechanics of the Skeletal System KIN 414 Electromyographic Kinesiology KIN 421 Human Motor Control KIN 422 Motor Control in Special Populations KIN 423 Motor Control and Aging **KIN 440 Exercise Biochemistry** KIN 442 Fuel Metabolism KIN 443 Exercise Endocrinology KIN 445 Exercise Physiology for Children and Adolescents KIN 450 Biopsychosocial Perspectives of Physical Activity & Health KIN 452 Exercise Psychology KIN 494 ST: Physiological Basis for Sport and Exercise KIN 494 ST: Voluntary and Reflex Control of Movement KIN 494 ST:Muscle Physiology KIN 494 ST: Neurophysiological Bases of Movement

Other Kinesiology courses with advisor approval

# **Additional Coursework:**

Attention students in pre-physical therapy and pre-medicine: Suggested course work is as follows: CHM 113; 115 or 116; 231-235 or 331-335 & 332-336; BCH 361; PHY 111-113, 112-114; MAT 170 or 210; statistics or computer science; other courses in biology, microbiology and/or psychology.