

KINESIOLOGY (KINE)

100 Level Courses

KINE 100: *Introduction to Kinesiology*. 3 credits.

Provides overview of the field of kinesiology in the form of an introductory course. Exposes students to the history of the field, and its emphasis on evidence based knowledge. Explains policies and procedures for the major. Explores career options. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Schedule Type: Lecture

200 Level Courses

KINE 200: *Introduction to Personal Training*. 3 credits.

Provides students with basic knowledge and skills associated with exercise training methods, lifting techniques, and health-related fitness testing procedures. Selection of developmentally appropriate exercises emphasized. Participation in fitness tests required. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Registration Restrictions:

Required Prerequisites: (BIOL 124^C, 125^C, ATEP 300^C and KINE 310^C).

^C Requires minimum grade of C.

Schedule Type: Lecture

KINE 249: *An Analysis of Boxing*. 3 credits.

Provides study of the sport of boxing from cultural, historical, physical, and scientific perspectives. Well-known writings from literature on boxing as well as boxing training methods, and program design will be addressed. Physical participation will include basic boxing skills, conditioning, and fitness testing of participants. All students must purchase hand wraps, heavy bag gloves, mouthpieces, and jump ropes. Boxing and/or wrestling shoes are strongly recommended. Notes: All students must purchase hand wraps, heavy bag gloves, mouthpieces, and jump ropes. Boxing and/or wrestling shoes are strongly recommended. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Recommended Prerequisite: ENGH 100 or ENGH 101.

Schedule Type: Lecture

KINE 250: *Endurance Sport Program Design*. 3 credits.

Provides students with knowledge necessary to train another individual safely and effectively for endurance sports. Emphasis will be placed on running; however, cycling and swimming will be covered. Topics covered include: functional, physiology, psychological aspects of endurance competitions, basic nutritional requirements, injury reduction, training techniques, safety, race management, and history of endurance sports. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Recommended Prerequisite: BIOL 124, BIOL 125, ATEP 300, KINE 200.

Schedule Type: Lecture

300 Level Courses

KINE 310: *Exercise Physiology I*. 3 credits.

Introduces students to the physiologic, neuroendocrine, and biochemical changes of the human body that are associated with exercise and work. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Registration Restrictions:

Required Prerequisites: (BIOL 124^C and 125^C).

^C Requires minimum grade of C.

Schedule Type: Lecture

KINE 320: *Principles of Human Nutrition*. 3 credits.

Assesses dietary habits and patterns in relation to nutrient requirements across the age spectrum and for a variety of populations. Emphasizes weight control, diet in relation to physical activity, and current nutritional controversies. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Schedule Type: Lecture

KINE 330: *Seminar in Kinesiology*. 3 credits.

Prepares students for the fieldwork experience in KINE 341: Kinesiology Internship I. Topics covered include: professionalism, review of evidence-based position papers, and discussion of contemporary issues in kinesiology. Offered by Recreation, Health & Tourism. May not be repeated for credit. Equivalent to HEAL 430.

Recommended Prerequisite: Junior standing (60 credit hours)

Registration Restrictions:

Required Prerequisites: KINE 100^C, 200^C and 370^C.

^C Requires minimum grade of C.

Schedule Type: Seminar

KINE 341: *Kinesiology Internship I*. 3 credits.

Provides a paid or voluntary supervised professional experience in an approved exercise science professional setting under the supervision of a practicum University Supervisor and Agency Supervisor. Current CPR, AED, and First Aid Certification required. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Registration Restrictions:

Required Prerequisites: (KINE 200^C, 310^C, 330^C, 350^C and 370^C).

^C Requires minimum grade of C.

Students with a class of Freshman or Sophomore may **not** enroll.

Schedule Type: Internship

KINE 350: *Exercise Prescription and Programming*. 3 credits.

Provides students with an opportunity to develop an understanding of the assessment and evaluation process used in cardio-respiratory training and anaerobic conditioning for healthy, athletic, and symptomatic populations. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Registration Restrictions:

Required Prerequisites: (KINE 200^C, 310^C, 370^C and ATEP 300^C).

^C Requires minimum grade of C.

Schedule Type: Lecture

KINE 360: *Strength Training: Concepts and Applications*. 3 credits.

Provides students with an opportunity to develop an in-depth understanding of the principles of strength training and conditioning, including: anatomical and physiological considerations, lifting techniques, equipment selection, program development/evaluation, and weightlifting safety; thus enabling them to teach and train client.

Offered by Recreation, Health & Tourism. May not be repeated for credit. Equivalent to PHED 364.

Registration Restrictions:

Required Prerequisites: (BIOL 124^C, 125^C and KINE 310^C) and ATEP 300^C.
^C Requires minimum grade of C.

Schedule Type: Lecture

KINE 370: Exercise Testing and Evaluation. 3 credits.

Provides students with an opportunity to develop a understanding of the assessment and evaluation process during exercise in the determination of physical fitness. Offered by Recreation, Health & Tourism. May not be repeated for credit. Equivalent to PHED 365.

Registration Restrictions:

Required Prerequisites: (BIOL 124^C, 125^C and KINE 310^C) and ATEP 300^C.
^C Requires minimum grade of C.

Schedule Type: Lecture

KINE 380: Exercise Prescription and Programming for Special Populations. 3 credits.

Provides the study of the pathophysiology of common diseases and conditions with concentration in the design and implementation of exercise programs. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Registration Restrictions:

Required Prerequisites: KINE 200^C, 310^C, 330^C, 350^C and 370^C.
^C Requires minimum grade of C.

Schedule Type: Lecture

400 Level Courses

KINE 400: Biomechanics. 3 credits.

Focuses on kinetic and kinematic concepts and how they apply to the quantitative assessment of human movement. Analyzes human movement and the functional dynamics of tissue such as muscle or bone. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Registration Restrictions:

Required Prerequisites: BIOL 124^C, 125^C, KINE 360^C and ATEP 300^C.
^C Requires minimum grade of C.

Schedule Type: Lecture

KINE 410: Exercise Physiology II. 3 credits.

Provides study in the advanced theory of exercise physiology. Knowledge related to the physiologic, neuroendocrine, and biochemical changes of the human body associated with both a single bout of exercise and chronic exercise training will be addressed. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Registration Restrictions:

Required Prerequisites: BIOL 124^C, 125^C and KINE 310^C.
^C Requires minimum grade of C.

Schedule Type: Lecture

KINE 420: Sport and Exercise Nutrition. 3 credits.

Explores the fundamental biochemical and physiological rationale for optimal nutrient intake for health, physical fitness, and athletic performance. Specific attention is focused upon the relationship nutrition

has with exercise, physical fitness, health, and athletic performance.

Offered by Recreation, Health & Tourism. May not be repeated for credit.

Registration Restrictions:

Required Prerequisites: (KINE 310^C and 320^C).
^C Requires minimum grade of C.

Schedule Type: Lecture

KINE 441: Kinesiology Internship II. 3 credits.

Provides a supervised professional experience in two separate approved kinesiology professional settings under the supervision of both a University Supervisor and an Agency Supervisor with emphasis placed upon exercise programming and implementation for both clinical (site 1) and performance (site 2) populations. Current CPR, AED, and First Aid Certification required. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Registration Restrictions:

Required Prerequisites: KINE 341^C, 360^C and 380^C.
^C Requires minimum grade of C.

Schedule Type: Internship

KINE 450: Research Methods. 3 credits.

Covers the development of empirical research designs for both practical and theoretical problems in allied health fields such as kinesiology, therapeutic recreation, and athletic training. Includes literature review of hypothesized relationships, and formulation of research proposals. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Specialized Designation: Writing Intensive in the Major

Registration Restrictions:

Required Prerequisites: STAT 250^C, DESC 210^C, OM 210^C, SOCI 313^C or IT 250^C.
^C Requires minimum grade of C.

Students with a class of Freshman or Sophomore may **not** enroll.

Schedule Type: Lecture

KINE 490: Kinesiology Internship III. 12 credits.

Provides a directed, field-based experience, in which students observe and participate in conditions, practices, and settings where sought career roles are conducted. The kinesiology fieldwork coordinator must approve placement for the practicum. Both a University supervisor and an approved agency supervisor with recognized professional certifications coordinate and oversee the student's internship experience. Current CPR, AED, and First Aid Certification required. Offered by Recreation, Health & Tourism. May not be repeated for credit.

Mason Core: Capstone

Registration Restrictions:

Required Prerequisites: (KINE 330^C, 341^C, 400^C, 410^C, 420^C and 441^C).
^C Requires minimum grade of C.

Students with a class of Freshman, Junior or Sophomore may **not** enroll.

Schedule Type: Internship

KINE 499: Independent Study in Kinesiology. 1-3 credits.

Study of a topic regarding theory, research, or practice in kinesiology under the direction of a faculty member. May be repeated, but no more

than 3 total credits hours may be earned. Offered by Recreation, Health & Tourism. May be repeated within the degree for a maximum 3 credits.

Schedule Type: Independent Study