

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. Explorers career options. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 110: *Physical Activity and Wellness*. 3 credits.

Introduces theoretical and practical information related to physical activity and its effect on personal wellness. Through physical activity literacy and personal reflection, this course engages individuals in the dynamics of fitness-wellness across the lifespan. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

200 Level Courses

KINE 200: *Methods of Exercise Instruction*. 3 credits.

Provides conceptual and practical introduction to performing common exercises with proper technique utilizing free weights, resistance training machines, cardiovascular equipment, body weight and other fitness techniques. Develops exercise leadership skills through the communication, instruction and demonstration of cardiovascular, resistance and flexibility exercises. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (BIOL 124^C or 124^{XS}).

* May be taken concurrently.

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Laboratory, Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

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

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 260: *Behavior Modification for Physical Activity*. 3 credits.

Provides students with basic knowledge of theories associated with health behavior change and exercise psychology. Examines the factors which influence adopting healthy behaviors as well as behavioral interventions to improve adherence to health and fitness programs. Introduces students to the effects of exercise on mental health. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Recommended Prerequisite: KINE 100

Recommended Corequisite: KINE 200

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 295: *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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (BIOL 124^C or 124^{XS}) and (BIOL 125^C or 125^{XS}).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 311: *Exercise Physiology Lab*. 1 credit.

Demonstrates the body's physiological responses to exercise with specific testing and assessment procedures commonly used in the field of Kinesiology. These laboratory experiences will allow students

to apply the theories they are learning in lecture. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Recommended Prerequisite: ATEP 300

Registration Restrictions:

Required Prerequisites: (BIOL 124^C or 124^{XS}) and (BIOL 125^C or 125^{XS}) and (KINE 310^{*C} or 310^{XS}).

* May be taken concurrently.

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Laboratory

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Recommended Prerequisite: Junior standing (60 credit hours)

Registration Restrictions:

Required Prerequisites: (KINE 100^C or 100^{XS}) and (KINE 200^C or 200^{XS}) and (KINE 370^C or 370^{XS}).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Seminar

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 340: Exercise Testing and Evaluation. 3 credits.

Provides students with an opportunity to develop an understanding of the assessment and evaluation process in the determination of physical fitness. Fosters practical knowledge by introducing students to laboratory and field-based methods for assessing health related components of fitness. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: ((BIOL 124^C or 124^{XS}) and (BIOL 125^C or 125^{XS}) and (KINE 310^{*C} or 310^{XS})) and (ATEP 300^C or 300^{XS}).

* May be taken concurrently.

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Laboratory, Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 341: Kinesiology Practicum. 3 credits.

Provides a paid or voluntary supervised professional experience in an approved fitness, clinical or sport performance setting under the supervision of a practicum University Supervisor and Agency Supervisor. Current CPR, AED, and First Aid Certification required. Offered by School

of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (KINE 200^C or 200^{XS}) and (KINE 310^C or 310^{XS}) and (KINE 330^C or 330^{XS}) and (KINE 350^C or 350^{XS}) and (KINE 340^C or 340^{XS}) and (KINE 370^C or 370^{XS}).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

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

Schedule Type: Internship

Grading:

This course is graded on the Undergraduate Special scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 350: Exercise Prescription and Programming. 3 credits.

Provides study of the design and implementation of exercise programs for the general population. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (KINE 370^C, 370^{XS} or 340^C).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Laboratory, Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 355: Introduction to 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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

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

^C Requires minimum grade of C.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: ((BIOL 124^C or 124^{XS}) and (BIOL 125^C or 125^{XS}) and (KINE 310^C or 310^{XS})) and (ATEP 300^C or 300^{XS}).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 361: *Advanced Resistance Training Techniques*. 3 credits.

Provides students with an opportunity to acquire skills and competencies needed to instruct various advanced resistance training techniques, such as Olympic lifts, plyometrics, speed and agility training, and strength training specific to sport and athletics. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisite: KINE 360^C.

* May be taken concurrently.

^C Requires minimum grade of C.

Schedule Type: Laboratory, Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (KINE 200^C or 200^{XS}) and (KINE 310^C or 310^{XS}) and (KINE 330^C or 330^{XS}) and (KINE 350^C or 350^{XS}) and (KINE 370^C or 370^{XS}).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

400 Level Courses

KINE 404: *Motor Control Theory and Application*. 3 credits.

Covers motor control theory and application to common activities such as gait, balance and more complex movement skills. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (KINE 310^C and 355^C).

^C Requires minimum grade of C.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 405: *Health and Fitness Facility Administration and Management*. 3 credits.

Focuses on the organization, administration and oversight of health and fitness facilities, particularly emphasizing strength and training.

Examines professional standards and behavior for those seeking employment in fitness and allied health industries. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to two attempts.

Recommended Corequisite: KINE 490

Registration Restrictions:

Required Prerequisite: KINE 341^C.

^C Requires minimum grade of C.

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

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 409: *Strength and Conditioning*. 3 credits.

Applies periodization theory to design strength and conditioning programs that enhance performance and reduce injury risk. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (KINE 360^C or 360^{XS}) and (KINE 361^C or 361^{XS}).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Enrollment is limited to students with a concentration in Strength and Conditioning.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (BIOL 124^C or 124^{XS}) and (BIOL 125^C or 125^{XS}) and (KINE 310^C or 310^{XS}).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Laboratory, Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (KINE 310^C or 310^{XS}) and (KINE 320^C or 320^{XS}).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Registration Restrictions:

Required Prerequisites: (KINE 341^C or 341^{XS}) and (KINE 360^C or 360^{XS}) and (KINE 380^C or 380^{XS}).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

Schedule Type: Internship

Grading:

This course is graded on the Undergraduate Special scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). Limited to three attempts.

Mason Core: Mason Core (All) (<http://catalog.gmu.edu/mason-core/>)

Specialized Designation: Writing Intensive in Major

Registration Restrictions:

Required Prerequisites: ((STAT 250^C, 250^{XS}, SOCI 313^C, 313^{XS}, EDRS 220^C or 220^{XS}) and (ENGH 302^C or 302^{XS}) and (KINE 350^C and 355^C)).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

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

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 480: Special Topics in Kinesiology. 3 credits.

Selected topics reflecting recent trends and interests in specialized areas in the kinesiology field. Topics vary. Notes: May be repeated when topic is different. May be used to fulfill requirements for different concentrations in the BS in kinesiology depending on the topic. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>).

development/school-kinesiology/). May be repeated within the term for a maximum 9 credits.

Specialized Designation: Topic Varies

Registration Restrictions:

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

Schedule Type: Lecture

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 490: Kinesiology Internship. 6-12 credits.

Provides a directed, field-based experience, in which students observe and participate in conditions, practices, and settings where sought career roles are conducted. Notes: 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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May be repeated within the term for a maximum 12 credits.

Mason Core: Mason Core (All), Mason Apex (<http://catalog.gmu.edu/mason-core/>)

Registration Restrictions:

Required Prerequisites: ((KINE 341^C or 341^{XS}) and (KINE 400^C or 400^{XS}) and (KINE 410^C or 410^{XS}) and (KINE 420^C or 420^{XS}) and (KINE 441^C or 441^{XS}) and (KINE 404^C)).

^C Requires minimum grade of C.

^{XS} Requires minimum grade of XS.

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

Schedule Type: Internship

Grading:

This course is graded on the Satisfactory/No Credit scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

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 School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May be repeated within the degree for a maximum 3 credits.

Schedule Type: Independent Study

Grading:

This course is graded on the Undergraduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

500 Level Courses

KINE 500: Special Topics. 1-6 credits.

Studies selected topics in the field of Kinesiology. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May be repeated within the degree for a maximum 6 credits.

Specialized Designation: Topic Varies

Recommended Prerequisite: Admission to the Kinesiology MS graduate program or approval of course instructor.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may **not** enroll.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 501: *Independent Study*. 1-3 credits.

Studies problem areas in Kinesiology research, theory, or practice under direction of faculty member. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May be repeated within the term for a maximum 6 credits.

Specialized Designation: Topic Varies

Recommended Prerequisite: Admission to the Kinesiology MS graduate program or approval of course instructor.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may **not** enroll.

Schedule Type: Independent Study

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 506: *Exercise Psychology*. 3 credits.

Covers psychological and social-psychological antecedents and consequences of exercise, physical activity, and sports participation. Emphasizes theory and research on personality, motivation, arousal, cognition, attributions, attitudes, self-efficacy, leadership effectiveness, and group dynamics. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment is limited to students with a major in Kinesiology.

Enrollment limited to students in a Master of Science degree.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

600 Level Courses

KINE 600: *Scientific Foundation of Applied Kinesiology*. 3 credits.

Examines the sub-fields of Kinesiology and the scientific practice of studying current issues related to physical activity, movement and health. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 601: *Advanced Exercise Physiology*. 3 credits.

Explores in-depth topics on the effects of physical activity on physiological function. Includes the examination of exercise physiology concepts through analysis of research publications. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 602: *Movement and Fitness Assessment*. 3 credits.

Covers common movement and fitness assessments that can be used to develop an individualized exercise program for various populations across the lifespan and ability level. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Enrollment is limited to students with a major in Kinesiology.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 603: *Applied Biomechanics*. 3 credits.

Examines biomechanical theory and the application of mechanics to understand human movement across the lifespan and ability level. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 604: *Motor Control and Learning*. 3 credits.

Appraisal of motor learning theory and the neuromuscular system as it relates to human movement across the lifespan. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Enrollment is limited to students with a major in Kinesiology.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 605: *Research Methods in Kinesiology*. 3 credits.

Introduces research methodology utilized in the field of Kinesiology to address important health issues related to physical activity across the lifespan. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Enrollment is limited to students with a major in Kinesiology.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 606: *Applied Sport and Exercise Nutrition*. 3 credits.

Advanced study of nutrition's relation to physical activity, exercise, and sports. Reviews biochemical, physiological, and behavioral aspects of nutrition in promoting health, fitness, and sports performance. Focuses on nutrient needs during life cycle stages. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Enrollment is limited to students with a major in Kinesiology.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 607: *Exercise Programming: Movement Selection and Progression*. 3 credits.

Explores how to develop individualized exercise programs based on fitness assessment data, lifestyle, client goals and preferences. Emphasizes movement selection and progression with regards to the individual's movement capabilities. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Enrollment is limited to students with a major in Kinesiology.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 608: *Data Science in Kinesiology*. 3 credits.

Introduction to practical and applied aspects of both descriptive and inferential statistics in kinesiology. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Enrollment is limited to students with a major in Kinesiology.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 609: *Applied Strength and Conditioning Programming*. 3 credits.

Analyzes exercise techniques, training program designs, organization and administration, and testing and evaluation using scientific principles of strength and conditioning. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Enrollment is limited to students with a major in Kinesiology.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 610: *Corrective and Preventative Exercise Techniques*. 3 credits.

Explores evidence-based exercise interventions to correct and prevent common movement dysfunctions and/or injuries in a variety of populations. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Enrollment is limited to students with a major in Kinesiology.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 615: *Advanced Technology to Measure Human Movement*. 3 credits.

Explores common methods of measuring human movement and performance in Kinesiology. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

Enrollment is limited to students with a major in Kinesiology.

Schedule Type: Lecture

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

700 Level Courses

KINE 790: *Field Practicum*. 3 credits.

Emphasizes developing advanced professional skills, applying knowledge to provide exercise interventions to clients at the practicum site and delivering educational content. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Enrollment is limited to students with a major in Kinesiology.

Students in a Non-Degree Undergraduate degree may **not** enroll.

Schedule Type: Internship

Grading:

This course is graded on the Graduate Special scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 798: *Directed Inquiry*. 3 credits.

Studies problem areas in Kinesiology research, theory, or practice under direction of faculty member. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May be repeated within the degree for a maximum 6 credits.

Registration Restrictions:

Enrollment is limited to students with a major in Kinesiology.

Enrollment limited to students in a Master of Science degree.

Schedule Type: Thesis

Grading:

This course is graded on the Satisfactory/No Credit scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 799: *Thesis*. 1-6 credits.

Explores a problem in the field of Kinesiology using appropriate research methodology and under the supervision of graduate faculty member. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May be repeated within the degree for a maximum 6 credits.

Recommended Prerequisite: Completion of all coursework.

Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may **not** enroll.

Schedule Type: Thesis

Grading:

This course is graded on the Satisfactory/No Credit scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

800 Level Courses

KINE 890: *Research Experience I*. 6 credits.

Engages student in advanced literature review development, research design, evaluation methods and statistical applications in Kinesiology. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment is limited to students with a major in Kinesiology.

Enrollment limited to students in a Doctor of Philosophy degree.

Schedule Type: Research

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 891: *Research Experience II*. 3 credits.

Engages student in advanced data collection, management, analysis and interpretation to develop a scholarly product. Prepares students for dissertation proposal in Kinesiology. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May not be repeated for credit.

Registration Restrictions:

Enrollment is limited to students with a major in Kinesiology.

Enrollment limited to students in a Doctor of Philosophy degree.

Schedule Type: Research

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 897: *Independent Study*. 3,6 credits.

Structured learning experience to extend and develop skills and knowledge relative to the field of Kinesiology. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May be repeated within the term for a maximum 9 credits.

Specialized Designation: Topic Varies

Registration Restrictions:

Enrollment is limited to students with a major in Kinesiology.

Enrollment limited to students in a Doctor of Philosophy degree.

Schedule Type: Independent Study

Grading:

This course is graded on the Graduate Regular scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

900 Level Courses

KINE 998: *Doctoral Dissertation Proposal*. 1-6 credits.

Provides information and support for students as they develop their dissertation proposal. Note: May be repeated, but no more than 6 credits of KINE 998 may satisfy doctoral degree requirements. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May be repeated within the degree for a maximum 12 credits.

Recommended Prerequisite: Admission to candidacy in PhD program and successful completion of doctoral qualifying exam.

Registration Restrictions:

Enrollment is limited to students with a major in Kinesiology.

Enrollment limited to students in a Doctor of Philosophy degree.

Schedule Type: Dissertation

Grading:

This course is graded on the Satisfactory/No Credit scale. (<http://catalog.gmu.edu/policies/academic/grading/>)

KINE 999: *Doctoral Dissertation Research*. 1-12 credits.

Focuses on doctoral dissertation research under direction of dissertation chair and committee members and initiation of projects stemming from student research. Offered by School of Kinesiology (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-kinesiology/>). May be repeated within the degree.

Recommended Prerequisite: Faculty approval of dissertation proposal.

Registration Restrictions:

Required Prerequisite: KINE 998.

Enrollment limited to students with a class of Advanced to Candidacy.

Enrollment is limited to students with a major in Kinesiology.

Enrollment limited to students in a Doctor of Philosophy degree.

Schedule Type: Dissertation

Grading:

This course is graded on the Satisfactory/No Credit scale. (<http://catalog.gmu.edu/policies/academic/grading/>)