# Kinesiology (KINES)

## KINES 100 — Exercise, Nutrition, and Health
2 credits.

Guidelines and assessment methods for fitness and nutrition. Motivation, adherence and stress-reduction techniques discussed. Lecture-demonstration concerning effects of exercise and nutrition on health and well-being. Team-taught by faculty and staff with expertise in exercise physiology, nutrition, and psychology.

**Requisites:** Open to Fr

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

**Level - Elementary**

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

## KINES 104 — Aquatics
1 credit.

Attainment and maintenance of a high degree of personal efficiency in swimming strokes and proficiency in fundamental aquatic skills, and an understanding of the fundamental physiological, mechanical and kinesiological principles as they relate to aquatic performance.

**Requisites:** Swimming I or cons inst

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

## KINES 115 — Physiology of Human Performance
3 credits.

Humans are capable of achieving astonishing performances in athletics, in work and in other extraordinary situations. These extraordinary performances often provide important insights into physiological processes and their limits. This course integrates information from biology, chemistry, psychology, mechanics, etc., to understand the factors that determine and limit human performance from the molecular level all the way up to whole body movement. The emphasis in the class is on using case studies to investigate physiological processes underlying movement, exercise, and performance.

**Requisites:** None

**Course Designation:** Level - Elementary

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

## KINES 119 — Introduction to Kinesiology
2 credits.

Introduces students to the field of kinesiology and the Department of Kinesiology at the University of Wisconsin-Madison. Introductory material about physical activity and health will be provided, and career opportunities in kinesiology will be discussed.

**Requisites:** Open to All Undergrads

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

## KINES 121 — Foundations of Physical Education
2 credits.

Introduction to physical education teaching, movement education, and an operational understanding of the scientific study of human movement. Lecture and lab. Open to Freshmen

**Requisites:** PEC, PED or consent of instructor.

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

## KINES 123 — Living Well: Lifestyle Balance and Health Promotion for College Students
2 credits.

This course is designed to promote student’s wellness as they manage college life and its demands. It examines health and well being related to college students’ time-use patterns; balance among daily activities; daily routines and habits; circadian rhythms, energy cycles and sleep; self-care activities; and stress management. Students in this course apply course material to their own lives by participating in a self-analysis of their lifestyle, participating in mindfulness and other wellness activities, and engaging in a lifestyle balance project.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

## KINES 125 — Adapted Fitness and Personal Training
1 credit.

Fitness class for developing individualized personal goals. Accommodates persons having temporary or permanent disability. Alternative to dropping from other program classes due to injury or other medical reason.

**Requisites:** Open to Freshmen

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

## KINES 126 — Gymnastics for Teaching
2 credits.

Teaching progressions, spotting, and safety in men's and women's gymnastics events and equipment.

**Requisites:** KINES 121

**Repeatable for Credit:** No

**Last Taught:** Fall 2013
KINES 127 — INTRODUCTION TO ATHLETIC TRAINING
2 credits.

An introductory course covering issues and basic concepts regarding prevention, management, and treatment of athletic injuries. The role of the athletic trainer in the sports medicine field is emphasized.

Requisites: PKN or PED classification, or cons inst
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 129 — INTRODUCTION TO YOGA PRACTICE
1 credit.

An introduction to yoga practice, philosophy, history, and traditions.

Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2015

KINES 134 — MOVEMENT TECHNIQUES FOR STRESS MANAGEMENT
1 credit.

Use of movement strategies to develop skills for reducing tensions associated with stress. Strategies include neuromuscular relaxation, flexibility exercises and movement awareness techniques.

Requisites: Open to Freshmen
Repeatable for Credit: No
Last Taught: Fall 2015

KINES 140 — SCIENCE AND PRACTICE OF RESISTANCE TRAINING
2 credits.

Lectures and demonstrations on the principles of resistance training and associated physiological effects designed for practitioners who wish to gain a detailed understanding of the science of resistance training.

Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 141 — THE SCIENCE & PRACTICE OF MARATHON/DISTANCE RUNNING
2 credits.

Advanced running course. Principles of long distance/marathon running are discussed and applied; provides a foundation for high level aerobic fitness. Lecture/discussion in areas of biomechanics, nutrition, training principles and programs, physiology, and running performance. Tempo/endurance featured throughout course. This course is intended for students who run 15 + miles/week.

Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2016

KINES 145 — CHOOSING TO MOVE: CONSTRUCTING AN ACTIVE LIFESTYLE
2 credits.

Will promote physical activity at a level to achieve health benefits, particularly in students who currently are insufficiently active (less than 150 minutes each week of moderate intensity physical activity). Students will apply course materials (e.g., behavior change strategies) to their own lives by completing self-analysis of their physical activity levels and then developing a physical activity plan to increase current physical activity levels, as well as a plan to maintain the activity after the course has ended.

Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 147 — TAI CHI CH’UAN
1 credit.

Learn and practice 24-movement Yang Style Tai Chi Form and Animal Frolic Qi Gong Form.

Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2015

KINES 197 — TECHNIQUES IN ATHLETIC TRAINING
1 credit.

An applied clinical approach to basic skills commonly used in the field of athletic training. Designed for students interested in athletic training, and an appropriate elective for those who plan to teach or coach.

Requisites: PKN or PED classification, or cons inst
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 200 — INTRODUCTORY NEUROSCIENCE
4 credits.

Entry-level course provides a systematic introduction to the mammalian nervous system, with emphasis on the structure and function of the human brain. Topics include the function of nerve cells, sensory systems, control of movement, learning and memory, and diseases of the nervous system. The foundational knowledge covered in this course serves students interested in health sciences majors, as well as non-science students interested in neuroscience and its relation to human health, wellness, and disease.

Requisites: None
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Elementary
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
KINES 227 — INTRODUCTION TO CLINICAL ANATOMY OF HUMAN MOVEMENT
2 credits.

Designed to provide students with a foundational knowledge in musculoskeletal anatomy and anatomical considerations related to human movement and physical activity.
Requisites: Students must have completed Kinesiology 127 or be concurrently enrolled in Kinesiology 127.
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 235 — HUMAN PHYSIOLOGY AND HEALTH
4 credits.

In this introductory course students learn basic physiological concepts, apply them to understand human health and disease, and link them to broader core concepts in biology. Each student completes a project in which they apply their conceptual understanding of general biology and physiology to investigate and create informational materials for the public about a disease or health promotion strategy. The foundational knowledge covered in this course serves students interested in health sciences majors, as well as non-science students interested in life-long health.
Requisites: None
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 240 — METHODS OF TEACHING INVASION GAMES AND SPORTS
1 credit.

An examination of differences and similarities of various invasion games. Sequencing of skills and development of concepts to produce effective performance. Instruction in the teaching of invasion games to incorporate individuals of all ability levels.
Requisites: Enrollment limited to students with the KNS or PED Academic Program.
Repeatable for Credit: No
Last Taught: Spring 2017

KINES/E ASIAN 277 — KENDO: INTEGRATION OF MARTIAL ARTS AND LIBERAL ARTS
2 credits.

Kendo practice (martial art) supplemented by lecture describing its historical roots and philosophical background.
Requisites: None
Course Designation: Breadth - Social Science
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 300 — PRACTICUM IN KINESIOLOGY
1-3 credits.

Supervised experience in a specialized area of physical education.
Requisites: Jr st KINES 335 or 318 or 314, kines major or cons inst
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2017

KINES 301 — ADVANCED TECHNIQUES IN ATHLETIC TRAINING
2 credits.

A course to provide the future athletic training professional with a foundation in advanced athletic training techniques. Sample topics include: injury prevention, emergency care, orthopedic appliance applications, protective equipment, environmental considerations, and computer applications.
Requisites: KINES 127, 197, acceptance into athletic training clinical program, or cons inst
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 312 — TECHNOLOGY FOR PHYSICAL ACTIVITY AND HEALTH PROFESSIONALS
2 credits.

Designed to provide students with creative technology strategies in the fields of school wellness education, physical activity, and fitness management. Students will build skills for using widely available technology resources to enhance instruction, assessment, motivation, communication, and advocacy in health and fitness settings. Skill-specific units present experiential assignments that increase learner confidence. Each unit produces print or digital materials for practical professional use with an emphasis on innovation.
Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2017

KINES 314 — PHYSIOLOGY OF EXERCISE
4 credits.

Fundamental knowledge about, and appreciation for, the adaptability of human physiological systems in meeting a range of exercise demands.
Requisites: College chem physiol; major in kinesiology or cons inst
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Fall 2017
KINES 315 — ASSESSMENT AND RESEARCH IN PHYSICAL ACTIVITY PEDAGOGY
3 credits.

Course topics and laboratory experiences will focus on parameters that are measured in physical activity pedagogy; instruments for measuring physical activity, health related fitness, knowledge, and psychological characteristics; concepts of assessment and research, basic statistical methods; and action research.
Requisites: MATH 112 or exempt status; major in kinesiology or cons inst
Course Designation: Gen Ed - Quantitative Reasoning Part B
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 316 — ADAPTED PHYSICAL ACTIVITY
3 credits.

An understanding of foundations, assessment and pedagogy for individuals with disabilities in a variety of physical activity settings. Emphasis on individual differences, life-span, and self-actualization.
Requisites: Anat 329 or cons inst
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 317 — EVALUATION AND DIAGNOSIS OF ORTHOPEDIC CONDITIONS
4 credits.

The evaluative skills and knowledge needed for minimum competency in the recognition, evaluation, and diagnosis of orthopedic conditions common to active populations.
Requisites: Declared in Athletic Training program
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 318 — BIOMECHANICS OF HUMAN MOVEMENT
3 credits.

Analysis of human action through the application of mechanical principles.
Requisites: ANATOMY/KINES 328 329 and MATH 112; major in kinesiology, or cons inst
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 323 — PHYSICAL EDUCATION FOR ELEMENTARY SCHOOL CHILDREN
3 credits.

Introduction to program development in physical education for elementary education majors.
Requisites: El Ed majors or cons inst
Repeatable for Credit: No
Last Taught: Spring 2014

KINES 325 — GROUP DEVELOPMENT AND BEHAVIOR MANAGEMENT
3 credits.

Provide students with opportunities and experiences to learn and participate in the development of groups. Provide students with strategies and experiences in the management of behaviors and techniques to maintain a safe and productive teaching environment.
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 327 — CURRENT TOPICS IN OUTDOOR PURSUITS
1 credit.

Introduce students to several outdoor activities to enable the teaching of these topics.
Requisites: Kinesiology 370 or consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2017

KINES/ANATOMY 328 — HUMAN ANATOMY
3 credits.

Lectures. Structure of the human body.
Requisites: Admission to professional curric in nursing, pre-nursing, or pre-physician assistant program
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Elementary
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Summer 2017

KINES/ANATOMY 329 — HUMAN ANATOMY-KINESIOLOGY
2 credits.

Required for dance-related majors. Open to Fr
Requisites: Kinesiology major; kinesiology majors must take ANATOMY/KINES 328 prior to or concurrent with ANATOMY/KINES 329.
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 330 — RESEARCH IN KINESIOLOGY
2 credits.

The research process as applied in kinesiology, including hypothesis development, ethical issues, study design, measurement and statistical concepts, and presentation of results. Includes exposure to current research within the Department of Kinesiology.
Requisites: MATH 112 or exemption; Stats 371or PSYCH 210 or equivalent; kinesiology major or consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2017
KINES 332 — SPECIALIZED TEACHING EXPERIENCE
1 credit.

Requisites: KINES 361, Curric 378, PEC designation or cons inst; current CPR First Aid certification
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2013

KINES 335 — METHODS OF TEACHING ELEMENTARY PHYSICAL EDUCATION
3 credits.

Theory, organization, and teaching; small group teaching in elementary schools.
Requisites: KINES 360 Curric 378; PEC designation or consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2014

KINES 337 — HUMAN ANATOMY
3 credits.

Uses a regional approach to provide a foundation of knowledge in human anatomy. Units cover an introduction to anatomical systems; back and limbs; thorax, abdomen, and pelvis; and head and neck.
Requisites: Not open to first-year students
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 338 — HUMAN ANATOMY LABORATORY
2 credits.

Takes a regional approach to cover the gross anatomy of the human body in four units: introduction to anatomical systems; back and limbs; thorax, abdomen, and pelvis; and head and neck. A variety of tools, including interactive software, models, and specimens, will be used.
Requisites: KINES 337, ANATOMY/KINES/ANATOMY 328 or concurrent enrollment
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 350 — INTRODUCTION TO EXERCISE PSYCHOLOGY
3 credits.

Emphasis on the psychological foundations of exercise with motivational techniques, perception of effort, personality dynamics, and mental health serving as the focal points.
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 353 — HEALTH AND PHYSICAL EDUCATION IN A MULTICULTURAL SOCIETY
2 credits.

Familiarize students with perspectives of culture and diversity, the concepts and importance of culturally responsive teaching, and the Act 31 requirement for teacher education students within a health and physical education/activity context. Students will have opportunities to incorporate concepts from class into their Multicultural Field Experience.
Requisites: Junior standing and declared in Physical Education, Kinesiology or Athletic Training program
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 355 — SOCIO-CULTURAL ASPECTS OF PHYSICAL ACTIVITY
3 credits.

An introduction to the philosophy of physical activity/education, history of physical activity/education and sport, and sociology of sport. Successful completion of or exemption from Communication Part A requirement. Courses designated as satisfying the Part A requirement cannot be used to satisfy the Communication Part B requirement.
Requisites: Kinesiology major and Junior standing or consent of instructor.
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 357 — THERAPEUTIC STRATEGIES IN ATHLETIC TRAINING I
4 credits.

A study of therapeutic intervention strategies used by athletic trainers. Evidence guided principles and clinical applications of therapeutic exercise, use of physical agents, indications and contra-indications, program design, progression, and standard documentation.
Requisites: KINES 317 or cons inst
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 358 — THERAPEUTIC STRATEGIES IN ATHLETIC TRAINING II
4 credits.

A study of therapeutic intervention strategies used by athletic trainers. Evidence guided principles and clinical applications of therapeutic exercise, use of physical agents, indications and contra-indications, program design, progression, and standard documentation. A continuation of KINES 357.
Requisites: KINES 357
Repeatable for Credit: No
Last Taught: Fall 2017
KINES 360 — LIFESPAN MOTOR DEVELOPMENT
3 credits.

(For majors) Motor development in individuals at various points in the life span; use of such information as a framework for assessing levels of motor development. How to observe movement, interpreting and using such information as one important basis for planning what and how to teach.

Requisites: Major in kinesiology or cons inst
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 361 — MOTOR LEARNING AND PERFORMANCE
3 credits.

A basic and up-to-date view of the major processes and mechanisms underlying the performance and learning of motor skills. Principles in motor learning and control are systematically introduced to produce a meaningful conceptual framework.

Requisites: PSYCH 202 or ED PSYCH 331; major in kinesiology or cons inst
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 364 — ASSESSMENT AND PROGRAMMING IN ADAPTED PHYSICAL EDUCATION
3 credits.

Physical education methods, programs and assessment procedures related to individuals with a variety of disabilities.

Requisites: KINES 316 315 or equiv
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 365 — PRACTICUM: ADAPTED PHYSICAL EDUCATION
2 credits.

A practicum experience for individuals who are emphasizing the area of Physical Education/Special Populations. Six hours per week working with individuals who have disabling conditions.

Requisites: Cons inst
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2017

KINES 370 — PLANNING, TEACHING AND ASSESSMENT IN PHYSICAL EDUCATION
3 credits.

Prepare the kinesiology student in organizing, planning, assessing and implementing developmentally appropriate learning experiences aligned with local, state, and national standards to address the diverse needs of all students.

Requisites: KINES 360 or concurrent registration
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 371 — METHODS OF TEACHING PK-12 DANCE AND GYMNASTICS
3 credits.

Methods of instruction in movement concepts, educational dance and gymnastics. Students will gain practice in planning, teaching, and assessing home school students, as well as practice in assessing their own teaching. Students will apply concepts presented in KINES 370 Planning and Teaching Physical Education.

Requisites: Successful completion (or concurrent) of Kinesiology 370, DANCE 2, DANCE 205 Kinesiology major, or consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 372 — METHODS OF TEACHING PK-12 EDUCATIONAL GAMES AND FITNESS
3 credits.

Address methods of instruction in motor skills, educational games and fitness. Students will gain practice in planning, teaching, and assessing public school students, as well as practice in assessing their own teaching. Students will apply concepts presented in KINES 370 Planning and Teaching Physical Education.

Requisites: Successful completion of Kinesiology 370, Kinesiology major, or consent of instructor
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 373 — METHODS OF TEACHING SECONDARY SPORT CONCEPTS AND SKILLS
3 credits.

Addresses methods of instruction in sport tactical concepts and skills. Students will gain practice in planning, teaching, and assessing secondary school students, as well as practice in assessing their own teaching. The goal is for students to develop into proficient teachers. Students will apply concepts presented in Kinesiology 370 Planning and Teaching Physical Education.

Requisites: Successful completion of Kinesiology 370, Kinesiology major and junior standing, or consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2017
KINES 375 — PRACTICUM IN PHYSICAL EDUCATION
3 credits.

Provide opportunities for the physical education student to develop competencies in the teaching skills necessary to provide quality Physical Education to children and youth. Students will receive individualized feedback about their performance from the cooperating teacher and the university supervisor. The course will also provide a forum for students to learn from their peers through discussions, sharing their experiences and knowledge gained from their practicum placement.

Requisites: KINES 371, KINES 372, KINES 373
Course Designation: Workplace - Workplace Experience Course

Repeatable for Credit: No
Last Taught: Fall 2017

KINES 390 — PRINCIPLES OF EXERCISE LEADERSHIP
2 credits.

Introduction to the design of individual and group exercise programs utilized in fitness leadership roles. Supervised practical experience will be provided in class to assist the development of student leadership skills.

Requisites: KINES 314 Anat 329, kines major or cons inst
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 399 — INDEPENDENT STUDY
1-3 credits.

Requisites: Consent of instructor
Course Designation: Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2017

KINES 400 — ORGANIZATION AND ADMINISTRATION OF ATHLETIC TRAINING PROGRAMS
3 credits.

Principles of organizational theory and administrative practice as they apply to athletic training and sports medicine programs. Emphasis on developing knowledge and skills needed for entry-level professionals in the athletic training field.

Requisites: Students must have completed KINES 358.
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 412 — ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION
2 credits.

The presentation of materials and depth study of the organization and administration of a sound program of physical education, the knowledge of which is mandatory for all physical education teachers.

Requisites: Jr st or cons inst
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 417 — ADVANCED CLINICAL ASSESSMENT TECHNIQUES IN ATHLETIC TRAINING
2 credits.

Designed to provide students with knowledge and skills in advanced clinical assessment techniques used in the evaluation of injuries, illnesses, and conditions found in physically active populations.

Requisites: KINES 317
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 427 — FITNESS TESTING AND EXERCISE PRESCRIPTION
3 credits.

Fitness assessment and exercise prescription principles are applied to the health-related fitness components through discussion and lab activities.

Requisites: 762-335 Human Physiology
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 450 — CLINICAL FIELD EXPERIENCE IN ATHLETIC TRAINING
3 credits.

A clinical field placement course for students in the athletic training professional preparation program. Clinical placements under the direction of an AT Program Clinical Preceptor are offered in a variety of clinical settings including intercollegiate, secondary school, and private clinical settings.

Requisites: Declared in Athletic Training
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2017

KINES 457 — MEDICAL PROBLEMS OF EXERCISE AND SPORTS
3 credits.

Responses of the human body to exercise and sports with specific discussion of acute and chronic medical problems which may affect performance. Emphasis on cardiopulmonary, metabolic, nutritional, fluid-electrolyte, heat-temperature regulation.

Requisites: Athletic training area of conc or cons inst
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 462 — METHODS OF TEACHING SECONDARY PHYSICAL EDUCATION
3 credits.

Designed to help students understand teaching methods at the secondary level. There will be opportunities to visit middle and high schools for observation and practice teaching.

Requisites: KINES 318 or con reg; KINES 361; Curric 378; PEC classification or cons inst
Repeatable for Credit: No
Last Taught: Spring 2015
KINES 475 — SEMINAR IN ATHLETIC TRAINING
1 credit.

An advanced undergraduate seminar for students in the athletic training professional preparation program. Research trends, evidence-based clinical practice, transition to practice, and current issues in the field of athletic training are emphasized.

Requisites: Enrolled in the BS-Athletic Training program.
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, for 2 number of completions
Last Taught: Fall 2017

KINES/CURRIC 478 — ELEMENTARY SCHOOL PHYSICAL EDUCATION STUDENT TEACHING
2-8 credits.

Requisites: Adv reg in stdt tchg ofc, 109 Educ
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Spring 2017

KINES/CURRIC 479 — MIDDLE SCHOOL OR HIGH SCHOOL PHYSICAL EDUCATION STUDENT TEACHING
2-8 credits.

Requisites: Adv reg in stdt tchg ofc, 109 Educ
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 501 — HEALTH INFORMATION FOR TEACHERS
3 credits.

Basic scientific health knowledge and its application to the total school program.

Requisites: Junior standing or consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 508 — WORKSHOP IN KINESIOLOGY
1-3 credits.

Requisites: Grad st or cons inst
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2017

KINES 516 — PHYSICAL ACTIVITY FOR DIVERSE ABILITIES
3 credits.

Students will develop knowledge and skills necessary to provide meaningful and inclusive physical activity for diverse abilities across the life-span.

Requisites: ANATOMY/KINES 328, major in Kinesiology, or consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 521 — PHYSICAL ACTIVITY AND HEALTH
3 credits.

Research evidence regarding how physical activity and fitness are related to health (e.g., during pregnancy and aging) and disease, especially cardiovascular diseases, obesity, diabetes, osteoporosis, and cancer. Application and communication of knowledge in practical situations.

Requisites: KINES 314 or cons inst
Course Designation: Gen Ed - Communication Part B
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

KINES/MEDICINE/NURSING 523 — CLINICAL EXERCISE TESTING & TRAINING
3 credits.

Physiological basis and methods of human exercise testing and training. Topics: clinical exercise physiology, exercise testing protocols, cardiopulmonary monitoring, basic ECG interpretation, exercise prescription.

Requisites: KINES 314 or cons inst
Repeatable for Credit: No
Last Taught: Spring 2017

KINES/NUTR SCI 525 — NUTRITION IN PHYSICAL ACTIVITY AND HEALTH
3 credits.

The purpose of this course is to provide undergraduate and graduate students with both scientific knowledge and application of nutrition related to exercise, health, and sports.

Requisites: Admission to Kinesiology(Athletic Training, Exercise and Movement Science, or Physical Education Teacher Education) or Nutritional Science major and Physiology 335
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 527 — PRINCIPLES OF STRENGTH AND CONDITIONING
3 credits.

Present/discuss the scientific basis and current practices of strength and conditioning for athletic performance. Training program design and training methods, for performance enhancement, related to the areas of strength, power, speed, and endurance.

Requisites: Admission to Athletic Training, Exercise and Movement Science or Physical Education Teacher Preparation Program, 742-314 - or consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2017
KINES 531 — NEURAL CONTROL OF MOVEMENT
3 credits.
Intermediate course on neuronal circuits and neurophysiological mechanisms involved in the control of human motor behavior. Including discussion of: 1) sensorimotor integration, 2) interactions between spinal, brainstem, and cerebral cortical levels of control, and 3) how motor control knowledge is created and evaluated.
Requisites: College anatomy and physiology; major in kinesiology or cons inst
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Spring 2017

KINES/CURRIC/ELPA 541 — ORGANIZATION AND ADMINISTRATION OF SCHOOL HEALTH PROGRAMS
3 credits.
Theory, philosophy, patterns, and responsibilities.
Requisites: CURRIC/KINES 501; admission to certificate program in elementary or secondary education or consent of instructor
Repeatable for Credit: No
Last Taught: Spring 2016

KINES/CURRIC 542 — TEACHER EDUCATION ABOUT ALCOHOL AND OTHER DRUGS
3 credits.
Social and cultural factors which influence the use and abuse of alcohol and other selected psychoactive drugs. Emphasis on educational concepts and processes important for instructional planning, curriculum strategies, value clarification, evaluation of learning, and countermeasure research developments.
Requisites: CURRIC/KINES 501; admission to certificate program in elementary or secondary education or consent of instructor
Repeatable for Credit: No
Last Taught: Spring 2017

KINES/CURRIC 561 — TEACHER EDUCATION IN HUMAN SEXUALITY
3 credits.
Student teachers plan educational experiences through which children and youth can learn about human potential in sexuality.
Requisites: CURRIC/KINES 501; admission to certificate program in elementary or secondary education or consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2017

KINES/CURRIC 567 — ISSUES, MATERIALS AND METHODS IN HEALTH EDUCATION
3 credits.
Principles, materials, and methods.
Requisites: CURRIC/KINES 501, 541, 542, 561 or consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 590 — CURRENT TOPICS IN KINESIOLOGY
1-3 credits.
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2012

KINES 600 — ADVANCED EXERCISE PSYCHOLOGY
3 credits.
Exercise and performance examined from the standpoint of motivation, personality dynamics, psychophysics, mental health, social psychology, and behavioral medicine.
Requisites: Graduate standing
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 614 — BIOLOGICAL FACTORS INFLUENCING EXERCISE PERFORMANCE
3 credits.
Exploration of selected factors relative to performance and exercise physiology: e.g., ergogenic aids, nutritional factors, gender and age of the athlete, and long term competitive events.
Requisites: KINES 314, kines major or cons inst
Repeatable for Credit: No
Last Taught: Spring 2017

KINES 615 — LABORATORY TECHNIQUES IN EXERCISE PHYSIOLOGY
2 credits.
Laboratory procedures and skills commonly used in exercise physiology.
Requisites: KINES 314, kines major or cons inst
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

KINES 618 — BIOMECHANICS
2-3 credits.
Biomechanics of human movement and skill with emphasis on kinematics and kinetics.
Requisites: Kines 218, Anat 329, or cons inst
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016
KINES 690 — INTERNSHIP IN KINESIOLOGY
3-6 credits.
Integrated learning from didactic courses in an approved supervisor setting such as a research laboratory or a health and fitness facility. Students will assume responsibilities that are consistent with their level of professional development and learning experiences.
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, for 4 number of completions
Last Taught: Summer 2017

KINES 699 — INDEPENDENT STUDY
1-3 credits.
Requisites: Kines major Sr st cons inst
Course Designation: Level - Advanced
L&S Credit: Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2017

KINES 700 — PSYCHOLOGICAL EFFECTS OF EXERCISE
3 credits.
Consequences of involvement in acute and chronic exercise on selected psychological states such as anxiety, depression, hostility, and self-esteem.
Requisites: KINES 600 or cons inst
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

KINES 713 — NEURAL BASIS OF NORMAL AND PATHOLOGICAL MOVEMENT
3 credits.
In-depth look at anatomic, neuropsychological, behavioral, and clinical aspects of motor control under normal and pathological conditions. Movement disorders include sensory neuropathy, cerebral cortical or brain stem stroke, basal ganglia dysfunction, and cerebellar disease.
Requisites: Graduate or professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

KINES 721 — NEURAL BASIS FOR MOVEMENT
3 credits.
How the central nervous system organizes skilled human performance. Evolution of neuromuscular mechanisms, subserving skills, and the causes and limitations of movement at high speeds and high levels of force.
Requisites: Neuroanatomy or neuropsychology or physiological psychology
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

KINES/PHYSIOL 773 — CARDIORESPIRATORY ADAPTIONS TO ENVIRONMENT AND EXERCISE
3 credits.
Examination of the effects of acute and chronic exercise and exposure to hypo- and hyperbaric environments on physiological responses; mechanisms underlying these responses.
Requisites: Physiol 720 or cons inst
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

KINES 774 — METABOLIC RESPONSES TO EXERCISE AND ENVIRONMENTAL STRESS
2 credits.
Examination of the metabolic and biochemical responses to acute and chronic exercise and environmental stress. Emphasis placed on the mechanisms underlying these responses.
Requisites: Physiol 720 or cons inst
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017

KINES/NEUROL 779 — HUMAN MUSCLE FUNCTION IN HEALTH AND DISEASE
2 credits.
Multidisciplinary seminar on human muscle function in health and disease. The course is geared toward advanced undergraduate and graduate students in kinesiology, physical and occupational therapy, motor control and behavior, neurophysiology resident in neurology and other related allied health professionals.
Requisites: Graduate or professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

KINES 785 — HUMAN OCCUPATION AND HEALTH
2-3 credits.
This course focuses on the nature of human occupation (everyday purposeful activity) and its relationship to well-being and health. Theories of occupation and health are critically examined.
Requisites: Graduate or professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINES/POP HLTH 791 — PHYSICAL ACTIVITY EPIDEMIOLOGY</td>
<td>3 credits.</td>
<td>Recommendations for and surveillance of physical activity in the U.S., and associations with health and disease at the population level. Emphasis on measurement techniques, study design and research considerations.</td>
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<tr>
<td>KINES 800 — SEMINAR-EXERCISE PSYCHOLOGY</td>
<td>2 credits.</td>
<td>Research oriented developments in exercise psychology.</td>
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<tr>
<td>KINES 861 — PRINCIPLES OF MOTOR CONTROL AND LEARNING</td>
<td>3 credits.</td>
<td>Theories and experimental findings in motor control, acquisition and retention of motor behavior. Topics: attention, models of motor control, kinesthesis, learning, information processing, memory, transfer, feedback, age and gender differences.</td>
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<tr>
<td>KINES 885 — SEMINAR IN OCCUPATION AND HEALTH</td>
<td>1 credit.</td>
<td>This seminar will focus on current theoretical and methodological issues and problems within the study of human occupation and health.</td>
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<tr>
<td>KINES 900 — SEMINAR IN KINESIOLOGY</td>
<td>1 credit.</td>
<td>This course provides a forum for students, faculty and staff from the department of kinesiology to present and discuss research and current issues related to the field of kinesiology.</td>
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<tr>
<td>KINES 951 — SEMINAR-BIOMECHANICS</td>
<td>2 credits.</td>
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<tr>
<td>KINES 953 — HUMAN BIODYNAMICS SEMINAR</td>
<td>1 credit.</td>
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<tr>
<td>KINES/POP HLTH 955 — SEMINAR - PHYSICAL ACTIVITY EPIDEMIOLOGY</td>
<td>1 credit.</td>
<td>Current research developments in physical activity epidemiology.</td>
<td></td>
</tr>
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<td>KINES 961 — SEMINAR IN MOTOR CONTROL AND LEARNING</td>
<td>2 credits.</td>
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<tr>
<td>KINES 990 — RESEARCH OR THESIS</td>
<td>1-12 credits.</td>
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<tr>
<td>KINES 991 — RESEARCH IN PHYSICAL ACTIVITY- THEORY AND DESIGN</td>
<td>3 credits.</td>
<td>Basic principles of scientific inquiry and their application to the study of physical activity.</td>
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</tr>
</tbody>
</table>

**Requisites** for the above courses include:
- Graduate or professional standing
- Consent of instructor
- Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
- Repeatable for Credit: No or Yes, unlimited number of completions

**Last Taught** dates are as follows:
- Spring 2016
- Spring 2015
- Spring 2017
- Fall 2017
KINES 999 — INDEPENDENT READING
1-4 credits.

Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2017