

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.

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

Last Taught: Summer 2023

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: None

Repeatable for Credit: No

Last Taught: Fall 2018

KINES 112 – MAKE IT COUNT: MEASURING PHYSICAL ACTIVITY BEHAVIOR

3 credits.

Define exercise and physical activity behaviors and how to systematically measure them. Content will encompass the American College of Sports Medicine definition of physical activity and recommendations for exercise across different populations. Students will engage in a service learning opportunity with our adapted fitness program where they will practice measuring and addressing the difficulties in broadly defining physical activity.

Requisites: None

Repeatable for Credit: No

Last Taught: Fall 2022

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 2022

KINES 116 – FIRST AID AND BASIC LIFE SUPPORT

2 credits.

Techniques and procedures to deal effectively with common emergencies. Includes training in airway obstruction, cardiopulmonary resuscitation, automated external defibrillation, injuries, and medical emergencies.

Requisites: None

Repeatable for Credit: No

Last Taught: Spring 2023

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: None

Repeatable for Credit: No

Last Taught: Summer 2023

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.

Requisites: Classified as Pre-Physical Education

Repeatable for Credit: No

Last Taught: Fall 2022

KINES 123 – LIVING WELL: LIFESTYLE REDESIGN AND HEALTH PROMOTION FOR COLLEGE STUDENTS

2 credits.

Focuses on the application of biological, cultural and social theory and research to lifestyle change. There will be lectures by experts, experiential learning, and the application of course knowledge to student's lives through class assignments and activities. The transition to college requires students to construct a new lifestyle, take on new and greater personal responsibilities while at the same time meet rigorous academic challenges. This transition includes a loss of structured daily schedules, decreased family support for the day to day living, and greater responsibility for their finances and life choices. Students may have difficulty managing their time, exercise less, eat less healthy foods, engage in increased drinking of alcohol, and experience greater stress and depression when adjusting to college life. This life transition provides an opportunity for reexamination and an opportunity to make thoughtful choices about lifestyle.

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: Spring 2023

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: None

Repeatable for Credit: No

Last Taught: Spring 2023

KINES 127 – INTRODUCTION TO ATHLETIC HEALTHCARE

2 credits.

Issues and basic concepts of athletic healthcare including health care systems, interprofessional teams, and injuries and conditions common to active populations. Emphasis on the team approach to patient care with exposure to a variety of health science professions.

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:** Summer 2023**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 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:** Spring 2023**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:** Spring 2020**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 150 – FOUNDATIONS OF HEALTH BEHAVIOR AND HEALTH EQUITY**

3 credits.

Provides students with an overview of the personal, interpersonal and broader social factors that contribute to the health and well-being of individuals and populations in the United States. Examinations of contemporary approaches to health education and health behavior interventions including: Foundations of health education and health behavior programs, health indicators, social and structural determinants of health and health disparities, models of health education/health behavior that support interventions for individuals and communities.

Requisites: None**Course Designation:** Breadth - Social Science

Level - Elementary

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

Repeatable for Credit: No**Last Taught:** Summer 2023**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: Classified as Pre-Kinesiology or Pre-Physical Education**Repeatable for Credit:** No**Last Taught:** Spring 2020**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**Last Taught:** Summer 2023

KINES 225 – PRACTICUM IN PROMOTING ACTIVITY FOR DIVERSE ABILITIES

1 credit.

Focused and rooted on the application of biological, cultural, social, and research-based practices for professional development in promoting physical activity for everyone, especially those with a variety of disabling conditions. Work as individuals or teams to plan and implement specified physical activities for individuals with diverse abilities in a variety of settings, including the adapted fitness gym, recreational and competitive endeavors and the home-based exercise.

Requisites: None**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, for 10 number of completions**Last Taught:** Summer 2023**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: 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**Last Taught:** Spring 2023**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: Declared in Physical Education, Kinesiology, or classified as Pre-Physical Education**Repeatable for Credit:** No**Last Taught:** Spring 2015**KINES 250 – SEDENTARY BEHAVIOR IN THE U.S. AND ABROAD**

3 credits.

Examines sedentary behavior, physical activity, physical inactivity, and associations with health outcomes in the United States and across the world. Topics include the determinants and consequences of sedentary behavior in children, adults, and special populations. Research examining psychological outcomes of sedentary behavior and barriers to adopting a physically active lifestyle is covered. Emphasis placed on Portuguese socio-cultural context, economic systems, and healthcare structures contributing to health outcomes. Compares the U.S. and European health models and physical activity guidelines. Design a sedentary behavior intervention informed by theories of behavior change.

Requisites: None**Repeatable for Credit:** No**KINES 300 – PRACTICUM IN KINESIOLOGY**

1-3 credits.

Supervised experience in a specialized area of physical education.

Requisites: Declared in Kinesiology and KINES 314 or 427**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2023**KINES 301 – ADVANCED TECHNIQUES IN ATHLETIC TRAINING**

2 credits.

Provides future athletic training professionals 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: Declared in Athletic Training**Repeatable for Credit:** No**Last Taught:** Fall 2019**KINES 308 – BIOMECHANICS OF PHYSICAL ACTIVITY**

2 credits.

Provides a comprehensive study of biomechanical foundations and principles underlying physical activity. Topics include musculoskeletal determinants of human movement, analysis of sports skills, feedback, and cueing techniques. Includes descriptions and applications of biomechanical concepts related to skillful movement, physical activity, and fitness.

Requisites: MATH 112 and Classified as pre-Physical Education or declared in Physical Education**Repeatable for Credit:** No**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 2023**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: PHYSIOL 335, ANAT&PHY 335, or KINES 235**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:** Summer 2023

KINES 315 – ASSESSMENT AND RESEARCH IN PHYSICAL ACTIVITY PEDAGOGY

3 credits.

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: Satisfied Quantitative Reasoning (QR) A requirement and declared in Physical Education

Course Designation: Gen Ed - Quantitative Reasoning Part B

Repeatable for Credit: No

Last Taught: Spring 2023

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: KINES 328, 337, or ANAT&PHY 337

Repeatable for Credit: No

Last Taught: Spring 2023

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

Repeatable for Credit: No

Last Taught: Fall 2019

KINES 318 – BIOMECHANICS OF HUMAN MOVEMENT

3 credits.

Analysis of human action through the application of mechanical principles.

Requisites: (KINES 328, 329, KINES 337, 338, ANAT&PHY 337, or 338) and (MATH 112 or placement in MATH 113)

Repeatable for Credit: No

Last Taught: Summer 2023

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: Spring 2023

KINES 327 – CURRENT TOPICS IN OUTDOOR PURSUITS

1 credit.

Introduce students to several outdoor activities to enable the teaching of these topics.

Requisites: KINES 370

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2021

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 placement in MATH 113 and (STAT 371, 301, or PSYCH 210)

Repeatable for Credit: No

Last Taught: Spring 2023

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: None

Repeatable for Credit: No

Last Taught: Summer 2023

KINES 353 – HEALTH AND PHYSICAL EDUCATION IN A MULTICULTURAL SOCIETY

3 credits.

Explores aspects and perspectives of diversity and culture, the concepts and importance of culturally responsive teaching, health education, and the Act 31 requirement for teacher education students. Perform a cultural self-mapping to become knowledgeable of how cultural background influences personal attitudes and actions, and attend a cross-cultural event to experience life in "another person's shoes." Engage in a multicultural field experience.

Requisites: Declared in Physical Education or Health Promotion and Health Equity, junior standing, and Satisfied Communications A requirement

Course Designation: Gen Ed - Communication Part B
Level - Intermediate

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

Repeatable for Credit: No

Last Taught: Fall 2022

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.

Requisites: Declared in Kinesiology or Physical Education and Satisfied Communication A requirement

Course Designation: Gen Ed - Communication Part B

Repeatable for Credit: No

Last Taught: Spring 2023

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**Repeatable for Credit:** No**Last Taught:** Spring 2020**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 2020**KINES 360 – LIFESPAN MOTOR DEVELOPMENT**

3 credits.

Designed to introduce the student to major concepts and terminology in the field of human motor development. The content includes a description of how movement changes across the lifespan and the factors that influence and/or correlate with the changes. The Mountain of Motor Development model will help organize understanding of human motor development.

Requisites: Declared in Kinesiology, Athletic Training or Promoting Activity for Diverse Abilities certificate**Repeatable for Credit:** No**Last Taught:** Summer 2023**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: None**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:** Summer 2023**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 315 and 316**Repeatable for Credit:** No**Last Taught:** Fall 2022**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: None**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**KINES 370 – PLANNING, FACILITATING & ASSESSMENT IN MOVEMENT AND HEALTH PROFESSIONALS**

3 credits.

Builds a repertoire of instructional skills and strategies such as organizing, planning, implementing and assessing developmentally appropriate learning tasks that are aligned with local, state, and national standards to address the diverse needs of participants.

Requisites: Declared in Physical Education or Health Promotion and Health Equity**Course Designation:** Breadth - Social Science

Level - Intermediate

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

Repeatable for Credit: No**Last Taught:** Spring 2023**KINES 371 – METHODS AND PRACTICUM 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 participants. Students will also observe, practice, and assess the facilitation skills of health and physical activity professionals. In addition, students will apply the concepts presented in KINES 370.

Requisites: Declared in Physical Education and KINES 370 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 372 – METHODS AND PRACTICUM OF TEACHING PK-12 EDUCATIONAL GAMES AND FITNESS**

3 credits.

Methods of instruction in motor skills, educational games and fitness. Students will gain practice in planning, teaching, and assessing participants. Students will also observe, practice and assess the facilitation skills of health and physical activity professionals. In addition, students will apply the concepts presented in KINES 370.

Requisites: Declared in Physical Education and KINES 370 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Spring 2023

KINES 373 – METHODS AND PRACTICUM OF TEACHING 6-12 PHYSICAL EDUCATION

4 credits.

Practice in planning and teaching sport concepts and skills. Builds on the planning for learning and instruction foundation. Centered on the Tactical Games, Sport Education, Fitness Education, and Personalized Instruction models and focuses on students developing teaching competencies rather than learning specialized sports skills. Adapt instruction within tactically similar sports.

Requisites: KINES 372**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 375 – PRACTICUM IN PHYSICAL EDUCATION**

3 credits.

Provides 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. 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, 372, and 373**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2019**KINES 387 – THE YOUNG ATHLETE: CONSIDERATIONS FOR EXERCISE, MEDICINE, AND ACTIVITY**

2 credits.

Sports are a great way for children to stay physically active, but adults are changing sports in ways that impact children in negative ways. Focuses on how kids are different than adults in terms of their needs for exercise and physical activity. Topics include physical activity epidemiology, growth, maturation, and sport specialization. Additional focus on common orthopedic injuries in the adolescent and pediatric populations and how injuries in young athletes are treated.

Requisites: None**Repeatable for Credit:** No**Last Taught:** Summer 2023**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: Declared in Kinesiology**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 399 – INDEPENDENT STUDY**

1-3 credits.

Independent undergraduate study in beginning to intermediate area of study under direct guidance of kinesiology faculty.

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:** Spring 2023**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: Declared in Athletic Training**Repeatable for Credit:** No**Last Taught:** Spring 2020**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: Declared in Kinesiology or Physical Education**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 417 – ADVANCED CLINICAL ASSESSMENT TECHNIQUES IN ATHLETIC TRAINING**

2 credits.

Provides 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 2020**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: ANAT&PHY 335**Repeatable for Credit:** No**Last Taught:** Spring 2023

KINES 450 – CLINICAL FIELD EXPERIENCE IN ATHLETIC TRAINING

3 credits.

A clinical field placement 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:** Spring 2021**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: Declared in Athletic Training**Course Designation:** Gen Ed - Communication Part B**Repeatable for Credit:** No**Last Taught:** Spring 2021**KINES 475 – SEMINAR IN ATHLETIC TRAINING**

1 credit.

Research trends, evidence-based clinical practice, transition to practice, and current issues in the field of athletic training are emphasized.

Requisites: Declared in Athletic Training**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:** Spring 2021**KINES/CURRIC 478 – ELEMENTARY SCHOOL PHYSICAL EDUCATION STUDENT TEACHING**

2-8 credits.

Student teaching placement in elementary school setting.

Requisites: None**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES/CURRIC 479 – MIDDLE SCHOOL OR HIGH SCHOOL PHYSICAL EDUCATION STUDENT TEACHING**

2-8 credits.

Student teaching placement in secondary school setting.

Requisites: None**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 487 – ATHLETIC HEALTHCARE: CONTEMPORARY PERSPECTIVES**

3 credits.

Discussion of contemporary issues in Athletic Healthcare including acute and chronic medical issues that may affect athletic performance.

Requisites: KINES 127**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 501 – THEORY-BASED HEALTH EDUCATION AND HEALTH PROMOTION PROGRAMS**

3 credits.

Provides an overview of the behavioral, social and cultural factors related to individual and population health and health disparities. Social and behavioral science theories and strategies in health promotion/education will be discussed in relation to preventing disease and promoting health. Provides current knowledge and analysis of issues influencing people's health and well-being from a social and behavioral science perspective. Theoretical frameworks that draw on major health behavior theories provide a better understanding of how individuals, families, peers, schools, neighborhoods, and the larger community influence risk and protective factors. Ethical considerations intrinsic to social and behavioral science efforts designed to produce health-related behavior change will be discussed. Promotes intellectual and collaborative learning through course lectures, readings, class discussions, and individual and group work.

Requisites: Junior standing and declared in Kinesiology, Health Promotion Health Equity, or Physical Education program**Course Designation:** Level - Advanced

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

Repeatable for Credit: No**Last Taught:** Spring 2023**KINES 508 – WORKSHOP IN KINESIOLOGY**

1-3 credits.

Designed to explore topics in kinesiology and/or occupational therapy. Topics may change each semester.

Requisites: None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**KINES 516 – PHYSICAL ACTIVITY FOR DIVERSE ABILITIES**

3 credits.

Develop knowledge of diverse populations and the ability to promote physical activity and well-being for a lifetime. Apply knowledge of barriers and the use of inclusive techniques to develop meaningful experiences and programs.

Requisites: Declared in Kinesiology or Promoting Activities for Diverse Abilities certificate**Repeatable for Credit:** No**Last Taught:** Spring 2023

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: Declared in Kinesiology and KINES 314**Course Designation:** Gen Ed - Communication Part B

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Spring 2023**KINES/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: Declared in Kinesiology and KINES 314**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES/NUTR SCI 525 – NUTRITION IN PHYSICAL ACTIVITY AND HEALTH**

3 credits.

Provides both scientific knowledge and application of nutrition related to exercise, health, and sports.

Requisites: ANAT&PHY 335**Repeatable for Credit:** No**Last Taught:** Spring 2023**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: KINES 427**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 528 – SEMINAR IN STRENGTH AND CONDITIONING**

1 credit.

Provides scientific knowledge and opportunity to practice the application of strength and conditioning practices.

Requisites: KINES 527 or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 3 number of completions**Last Taught:** Spring 2023**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: None**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 2023**KINES 540 – DIVERSITY IN HEALTH AND PHYSICAL ACTIVITY SETTINGS**

3 credits.

Issues related to promoting equal learning opportunities in the classroom and other community settings, including effective approaches to encouraging collaboration among colleagues, staff, parents, and students who are culturally, ethnically and socio-economically diverse are examined. In addition, effective instructional and coaching methods for an inclusive sport environment, athletic programs, and health professions as they relate to diverse individuals are addressed. Theoretical and practical paradigm of cultural differences are introduced. The focus is on diversity issues as they relate to race, ethnicity, gender, social class, sexuality, and racial considerations, development and ability differences, variations in learning styles and a variety of physical, mental, and emotional disabilities.

Requisites: Junior standing**Course Designation:** Gen Ed - Communication Part B

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:** Summer 2021**KINES 547 – SKILLS FOR HEALTH: METHODS AND PRACTICUM OF TEACHING HEALTH**

3 credits.

Centered on the components (social, emotional, spiritual, environmental, occupational, intellectual, and physical) and skills (influence analysis, interpersonal communication, health-enhancing behaviors, accessing valid information, goal-setting, decision-making and advocacy) of wellness. Gain competence by planning for, learning, and practicing teaching skills in educational settings. Through this approach, highly competent teachers will be developed who can adapt health instruction to a wide variety of audiences and topics.

Requisites: None**Repeatable for Credit:** No**Last Taught:** Fall 2022

KINES 555 – SPORTS SCIENCE & ATHLETE MONITORING

3 credits.

In-depth look at how technology is changing the way we assess physical activity, help people return from injury, and increase physical performance. Topics include field-based testing, athlete monitoring, and movement screenings. Exposure to the most popular technologies in the field of human performance. Upper level elective in Kinesiology that builds on concepts acquired in the Kinesiology core curriculum. Offers real-world application of these concepts to students.

Requisites: None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 566 – PROMOTING HEALTH IN THE COMMUNITY**

3 credits.

Introduces theories and application of health promotion and health education, specifically, health education specialties and philosophical foundations. Addresses professional issues relating to the history, philosophy, ethics, practice, settings and competence of health education. Includes a focus on skills and techniques in writing, developing health educational materials, public speaking and group dynamics as they relate to community health promotion and health education programs.

Requisites: KINES 370**Course Designation:** Breadth - Social Science

Level - Advanced

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

Repeatable for Credit: No**Last Taught:** Spring 2023**KINES 568 – STUDENT TEACHING IN HEALTH EDUCATION**

2 credits.

Provides the opportunity for the student teacher to put theory into practice under the guidance of a licensed teacher and a university supervisor, allowing the gradual induction into the role of a professional teacher. Feedback and assessment are given in terms of growth in the understandings and abilities needed to assume the responsibilities of a beginning teacher. Emphasis is placed on helping the student teacher become a reflective professional. Cooperation among the classroom teacher, university supervisor, and administrators is encouraged.

Requisites: KINES 547**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 570 – ANATOMICAL FOUNDATIONS IN ATHLETIC TRAINING**

3 credits.

Structure, regions and function of the neurological and musculoskeletal systems are presented with the purpose of providing insight into the anatomical foundations of common injuries and conditions.

Requisites: Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2023**KINES 571 – EMERGENCY PROCEDURES FOR ATHLETIC TRAINERS**

2 credits.

Provides future athletic training professionals with knowledge and skills to respond to emergency situations common to the athletic training environment. Emphasis on hands-on applications and interprofessional relationships with other emergency care providers and agencies.

Requisites: Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2023**KINES 572 – FOUNDATIONAL SKILLS IN ATHLETIC TRAINING**

1 credit.

Introduces foundational skills used by athletic training professionals in the evaluation and prevention of injuries and conditions common to active populations.

Requisites: Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2023**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/professional standing or declared in Kinesiology**Course Designation:** Gen Ed - Communication Part B**Repeatable for Credit:** No**Last Taught:** Spring 2023**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: Declared in Kinesiology, Physical Education, or Athletic Training, and KINES 314 or graduate/professional standing**Repeatable for Credit:** No**Last Taught:** Spring 2020**KINES 615 – LABORATORY TECHNIQUES IN EXERCISE PHYSIOLOGY**

2 credits.

Laboratory procedures and skills commonly used in exercise physiology.

Requisites: Declared in Kinesiology, Physical Education, or Athletic Training, and KINES 314 or graduate/professional standing**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 2019

KINES 618 – BIOMECHANICS

2-3 credits.

Biomechanics of human movement and skill with emphasis on kinematics and kinetics.

Requisites: Declared in Kinesiology, KINES 318 and (KINES 328, 337 or ANAT&PHY 337) or graduate/professional standing

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 2022

KINES 620 – CLINICAL PRACTICUM IN ATHLETIC TRAINING I

2 credits.

Clinical practicum that provides practical and skills-oriented instruction under the supervision of a skilled clinical preceptor. Provides an opportunity for exposure will be to a large volume and variety of clinical experiences to facilitate learning in authentic clinical settings.

Requisites: Declared Athletic Training MS

Course Designation: Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Summer 2022

KINES 621 – CLINICAL PRACTICUM IN ATHLETIC TRAINING II

3 credits.

Clinical practicum that provides practical and skills-oriented instruction under the supervision of a skilled clinical preceptor. Exposure to a large volume and variety of clinical experiences to facilitate learning in authentic clinical settings.

Requisites: KINES 620

Course Designation: Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2022

KINES 622 – CLINICAL FIELD EXPERIENCE IN ATHLETIC TRAINING I

3 credits.

Provides a clinical field experience allowing for practical and skills-oriented instruction under the supervision of a skilled clinical preceptor. Exposure to a large volume and variety of athletic training clinical experiences to facilitate learning in authentic clinical settings. Increased patient interactions concurrent with skill acquisition and Athletic Training program progression.

Requisites: KINES 621

Course Designation: Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2023

KINES 623 – CLINICAL FIELD EXPERIENCE IN ATHLETIC TRAINING II

3 credits.

Clinical field experience that provides practical and skills-oriented instruction under the supervision of a skilled clinical preceptor. Exposure to a large volume and variety of clinical experiences, learning in authentic clinical settings in an office based/clinic based general medicine setting. Increased patient encounters concurrent with skill acquisition and Athletic Training program progression.

Requisites: KINES 622

Course Designation: Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Summer 2023

KINES 624 – ATHLETIC TRAINING PRECEPTORSHIP I

6 credits.

Provides extensive patient encounters and advanced skills-oriented instruction under the supervision of a skilled clinical preceptor, working towards independent athletic training practice. Immersive experience provides exposure to a large volume and variety of patient encounters in authentic clinical settings. Provides extensive opportunities for supervised autonomy to develop clinical decision-making skills progressing toward independent clinical-decision making.

Requisites: KINES 623

Course Designation: Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2022

KINES 625 – ATHLETIC TRAINING PRECEPTORSHIP II

7 credits.

Provides extensive patient encounters and advanced skills-oriented instruction under the supervision of a skilled clinical preceptor, working towards independent athletic training practice. Final immersive clinical experience will provide exposure to a large volume and variety of patient encounters in authentic clinical settings. Provides extensive opportunities for supervised autonomy moving to independent clinical decision-making.

Requisites: KINES 624

Course Designation: Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2023

KINES 650 – FOUNDATIONS OF PROFESSIONAL PRACTICE IN ATHLETIC TRAINING

1 credit.

Addresses foundational concepts and skills required for contemporary athletic training practice including: an introduction to evidence-based practice, disablement models and patient reported outcomes, team approach to healthcare, legal and ethical considerations, primacy of the patient, effective communication, concepts of professionalism and cultural competence.

Requisites: Declared Athletic Training MS

Course Designation: Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, for 2 number of completions

Last Taught: Spring 2023

KINES 651 – PUBLIC HEALTH, POLICY, AND PRACTICE

3 credits.

Addresses the intersection of athletic training and public health by exploring population-based approaches to injury prevention and challenges students to explore how population-level problems impact individual health. Introduces and explores specific policies (e.g. concussion, athletic pre-participation, catastrophic injury) that impact the provision of effective patient-centered care and introduces skills required for management of these conditions.

Requisites: Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 652 – EVALUATION AND THERAPEUTIC INTERVENTIONS I**

4 credits.

Provides evaluation techniques, theory and practice in the use of therapeutic exercise for the rehabilitation of athletic injuries. Provides the appropriate knowledge and skills needed to evaluate and apply therapeutic strategies in the treatment of athletic injuries. Focuses on lower extremity and closed head injuries.

Requisites: Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 653 – EVALUATION AND THERAPEUTIC INTERVENTIONS II**

4 credits.

Provides Athletic Trainers with the knowledge, physical exam skills, and therapeutic interventions to diagnose and address common injuries and conditions. Scientific rationale for appropriate exercise design, implementation, and progression of care are emphasized.

Requisites: KINES 652**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 654 – CLINICAL MEDICINE IN ATHLETIC TRAINING I**

3 credits.

Examines acute and chronic medical problems encountered by athletic trainers. Includes examination and clinical skills, interventions, and requirements for referral as part of collaborative care. Emphasis on cardiopulmonary, respiratory, gastrointestinal, genitourinary, gynecological, neurological, and systemic issues.

Requisites: Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 655 – CLINICAL MEDICINE IN ATHLETIC TRAINING II**

3 credits.

Examines acute and chronic medical problems encountered by athletic trainers. Includes examination and clinical skills, interventions, and requirements for referral as part of collaborative care. Emphasis on drug testing, illicit drug use, mental and behavioral health, sexual health, dermatology, wound care and closure, diabetes, and infectious disease.

Requisites: KINES 654**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 656 – SCIENTIFIC INQUIRY IN ATHLETIC TRAINING**

3 credits.

Addresses the role of evidence in supporting Athletic Training practice. Presents the concepts, methods, and strategies related to evidence-based practice and the development of critical reading and scientific writing skills.

Requisites: KINES 650**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 657 – ROLE TRANSITION AND PROFESSIONAL PRACTICE IN ATHLETIC TRAINING**

1 credit.

Addresses role transition and professional practice issues facing athletic trainers. Emphasis on identifying gaps in skills and expertise, recognizing communication needs, and role socialization skills for future development during final preceptorship placements and entrance into the healthcare workforce. Board of Certification preparation strategies are explored.

Requisites: KINES 623**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 658 – SEMINAR IN ATHLETIC TRAINING**

1 credit.

Provides a forum for athletic training students, faculty and staff to present and discuss research and current issues related to the field of athletic training.

Requisites: Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No

KINES 670 – ENHANCING PERFORMANCE AND WELLNESS

1 credit.

Explores concepts related to promoting and implementing specialized programs focused on addressing health and performance in patients. Topics include strength and conditioning, nutrition, and wellness.

Requisites: Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 671 – DIAGNOSTIC IMAGING IN ATHLETIC TRAINING**

1 credit.

Addresses diagnostic imaging tools used in sports medicine and orthopedics, interpretation of results, and implementation into clinical practice as part of a comprehensive evaluation.

Requisites: KINES 652**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 672 – PRINCIPLES OF PHARMACOLOGY FOR ATHLETIC TRAINERS**

1 credit.

Pharmacological and toxicological actions and therapeutic use of medications commonly encountered in the practice of athletic training. Includes categories of drugs, use, effects and precautions for common drugs and drug-interactions. Implications for physical activity and legal issues are examined.

Requisites: KINES 654**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2023**KINES 673 – HEALTHCARE INFORMATICS AND QUALITY IMPROVEMENT IN ATHLETIC TRAINING**

1 credit.

Explores the principles of health informatics and quality improvement for applications in contemporary athletic training practice. Content includes ethical use of data, technology, healthcare information management, fundamentals of quality improvement, measuring improvement, cost and value models, and the history of quality improvement in healthcare.

Requisites: Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 674 – PRACTICE BASED RESEARCH IN ATHLETIC TRAINING**

1 credit.

Develops understanding of practice-based athletic training research. Designed as a companion to an immersive clinical experience that allows examination of the elements of a practice-based research network. Emphasis on understanding how patient care is improved through the ongoing use of injury surveillance, clinical outcomes, comparative treatment effectiveness, and fiscal analyses.

Requisites: KINES 656**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**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 2023**KINES 699 – INDEPENDENT STUDY**

1-3 credits.

Independent undergraduate work in advanced area of study under direct guidance of kinesiology faculty.

Requisites: Consent of instructor**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:** Summer 2023**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: Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

KINES 713 – NEURAL BASIS OF NORMAL AND PATHOLOGICAL MOVEMENT

3 credits.

In-depth look at anatomic, neurophysiological, 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/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**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: Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**KINES 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: Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**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: Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 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/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**KINES 785 – HUMAN OCCUPATION AND HEALTH**

2-3 credits.

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/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**KINES/POP HLTH 791 – PHYSICAL ACTIVITY EPIDEMIOLOGY**

3 credits.

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.

Requisites: Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**KINES 800 – SEMINAR-EXERCISE PSYCHOLOGY**

2 credits.

Research oriented developments in exercise psychology.

Requisites: Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**KINES 861 – PRINCIPLES OF MOTOR CONTROL AND LEARNING**

3 credits.

Theories and experimental findings in motor control, acquisition and retention of motor behavior. Topics: attention, models of motor control, kinesthesia, learning, information processing, memory, transfer, feedback, age and gender differences.

Requisites: Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

KINES 885 – SEMINAR IN OCCUPATION AND HEALTH

1 credit.

Current theoretical and methodological issues and problems within the study of human occupation and health.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2022

KINES 900 – SEMINAR IN KINESIOLOGY

1 credit.

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.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2023

KINES 951 – SEMINAR-BIOMECHANICS

2 credits.

Seminar topics in field of biomechanics.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2022

KINES 953 – HUMAN BIODYNAMICS SEMINAR

1 credit.

Seminar topics in field of human biodynamics.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2022

KINES/POP HLTH 955 – SEMINAR - PHYSICAL ACTIVITY EPIDEMIOLOGY

1 credit.

Current research developments in physical activity epidemiology.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2022

KINES 961 – SEMINAR IN MOTOR CONTROL AND LEARNING

2 credits.

Seminar topics in field of motor control and learning.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2022

KINES 990 – RESEARCH OR THESIS

1-12 credits.

Independent research and writing for graduate students under the supervision of kinesiology faculty member.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Summer 2023

KINES 991 – RESEARCH IN PHYSICAL ACTIVITY- THEORY AND DESIGN

3 credits.

Basic principles of scientific inquiry and their application to the study of physical activity.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2022

KINES 999 – INDEPENDENT READING

1-4 credits.

Directed study projects for graduate students as arranged with kinesiology faculty member.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2023