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 2025
Learning Outcomes: 1. Identify and explain the scientific principles and concepts of physical activity, nutrition, and positive health behaviors on health outcomes.
Audience: Undergraduate

2. Understand the physiological and psychological benefits of regular physical activity and nutrition.
Audience: Undergraduate

3. Evaluate health and fitness information to differentiate between research-based information and trends.
Audience: Undergraduate

4. Apply course concepts to make informed decisions about personal health and wellness.
Audience: Undergraduate

5. Design and implement personal wellness programs using exercise, dietary, and health behavior guidelines and assessments.
Audience: Undergraduate

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
Learning Outcomes: 1. Develop the ability to properly sequence skills and ensure safety within the block plan.
Audience: Undergraduate

2. Develop the ability to create lesson plans that include safety and skill components, as well as demonstrate understanding of motor development and motor learning principles.
Audience: Undergraduate

3. Develop understanding of hydrodynamic principles as seen in the block plans, lesson plans and personal swimming skills.
Audience: Undergraduate

4. Demonstrate the ability to assess quality lessons and skills.
Audience: Undergraduate

5. Demonstrate improvement in personal swimming skills through assessments.
Audience: Undergraduate

6. Demonstrate the ability to assess swimming skills
Audience: Undergraduate

KINES 111 – THRIVE: ENHANCING YOUR WELLNESS ON CAMPUS AND HEALTH FOR LIFE
3 credits.

Explore personal wellness by examining five dimensions of wellness (physical, emotional, social, intellectual and occupational) to understand how each dimension contributes to overall health, wellbeing, and quality of life. Discover and utilize on-campus resources that support each dimension and build a resource network to proactively support wellness as a college student. Develop and apply practical skills grounded in theory to implement meaningful behavior change to achieve growth across all dimensions. Engage in critical reflection regarding challenges and barriers faced in achieving desired health outcomes and cultivate strategies to overcome these obstacles to support sustainable wellness practices today and across the lifespan. Enhance dimensions of personal wellness as a method to explore the field of health promotion.
Requisites: None
Repeatable for Credit: No
Learning Outcomes: 1. Describe the dimensions of wellness and their impact on health, wellbeing, and quality of life
Audience: Undergraduate

2. Identify on-campus resources and understand how to use them to support individual wellness
Audience: Undergraduate

3. Demonstrate methods to enhance individual wellness across all dimensions
Audience: Undergraduate

4. Develop and apply skills to make meaningful behavior changes grounded in theory
Audience: Undergraduate

5. Apply strategies to overcome challenges and barriers to achieve desired health outcomes across the dimensions of wellness, during college and beyond
Audience: Undergraduate

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 2024
Learning Outcomes: 1. Apply their knowledge of science to address global health concerns related to physical activity and sedentary time.
Audience: Undergraduate

2. Quantify a behavior and examine relationships of that quantification with different types of behavioral measurements.
Audience: Undergraduate

3. Use their knowledge of kinesiology to construct a flexible definition of physical activity to include a variety of behaviors.
Audience: Undergraduate

4. Demonstrate an understanding of the importance of physical activity behaviors across gender, ethnicity, and illness.
Audience: Undergraduate

5. Create an assessment plan to quantify a variety of physical activity behaviors.
Audience: Undergraduate

6. Identify challenges to exercise prescription in the field of kinesiology.
Audience: Undergraduate

KINES 113 – MEDICAL MIRACLES AND BARBIE MAKEOVER SURGERIES: BIOETHICS AND NEW MEDICAL TECHNOLOGIES
3 credits.

Introduction to the ethical implications and impacts of emerging medical technologies. Will explore the ethical, social, and cultural questions raised by these medical developments in cross cultural settings. While most medical technologies have originated in the so-called developed countries, medical innovations are being increasingly globalized, raising important questions at home and abroad about the distribution of risks and benefits and broader health disparities.
Requisites: None
Repeatable for Credit: No
Learning Outcomes: 1. Identify ethical, social, and cultural issues raised by emerging global medical technologies
Audience: Undergraduate

2. Apply a social justice or equity approach to understand how the benefits and risks of these technologies might be distributed
Audience: Undergraduate

3. Evaluate key medical technology and its ethical and sociocultural implications
Audience: Undergraduate

KINES 114 – EXERCISE AS MEDICINE
3 credits.

Explore the powerful connection between exercise and health, examining how exercise serves as both a preventive and therapeutic tool. Learn about the positive effects of exercise on mental health, sleep, cognitive function, and overall well-being. Participate in diverse physical activities that enhance fitness and contribute to a balanced lifestyle. Collaborate on a physical activity initiative addressing barriers to exercise. Benefit from practical experiences that promote a healthier lifestyle and academic success.
Requisites: None
Repeatable for Credit: No
Learning Outcomes: 1. Explain the relationship between exercise and physical health, mental health, and cognitive health
Audience: Undergraduate

2. Analyze the impact of exercise on stress, anxiety, sleep quality, and academic performance among college students
Audience: Undergraduate

3. Collaborate with peers to lead a physical activity initiative that identifies and addresses barriers to exercise
Audience: Undergraduate

4. Apply strategies to sustain a physically active lifestyle during academic years and beyond, emphasizing long-term health and success
Audience: Undergraduate

5. Explain the importance of exercise for academic success and health
Audience: Undergraduate

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 2024
Learning Outcomes: 1. Develop effective strategies for solving problems in science, including some strategies for finding information to help solve the problem.
Audience: Undergraduate

2. Develop an appreciation for the role that limiting factors play in human physiology and an ability to identify limiting factors in a variety of physiological processes
Audience: Undergraduate

3. Have an appreciation for the relationships between a variety of different subjects related to human physiology and understand how an effective approach to understanding human performance requires an integrated approach from a number of disciplines.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Identify the signs and symptoms of breathing emergencies and cardiac emergencies and demonstrate how to provide care for each.
Audience: Undergraduate

2. Differentiate the signs and symptoms of various soft tissue and musculoskeletal injuries, and demonstrate how to care for them.
Audience: Undergraduate

3. Organize the signs and symptoms of medical emergencies, including sudden illnesses, poisoning, bites and stings, and heat and cold emergencies, and illustrate how to care for them.
Audience: Undergraduate

4. Analyze the causes of and solutions for the sustainability challenge of caring for shock.
Audience: Undergraduate

5. Analyze sustainability issues and practices using a systems-based approach for providing emergency care.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Define the broad integrative nature of the field of Kinesiology.
Audience: Undergraduate

2. Identify the nature and demands of professional occupations, the career options available to students graduating from departments of kinesiology, and the qualifications associated with each.
Audience: Undergraduate

3. Explain the importance of physical activity in daily life and the implications of this for the discipline of kinesiology.
Audience: Undergraduate

4. Demonstrate an ability to honestly self-assess personal strengths, interests, values and goals as they relate to career selection.
Audience: Undergraduate

5. Demonstrate a recognition and appreciation for the many careers within the field.
Audience: Undergraduate

6. Examine the questions and problems currently being explored in the field of kinesiology.
Audience: Undergraduate

7. Transfer skills/knowledge to new situations/contexts in a meaningful approach.
Audience: Undergraduate

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 2024
Learning Outcomes: 1. Describe the relationship between the major educational philosophies and their application to physical education, and the development of physical education through a historical perspective.
Audience: Undergraduate

2. Explain the goals and objectives of physical education and the characteristics of a quality physical education program, and illustrate the application of standards to physical education instruction.
Audience: Undergraduate

3. Demonstrate movement concepts, locomotor skills, nonlocomotor skills, manipulative skills, and rhythmic activities.
Audience: Undergraduate

4. Analyze the causes of and solutions for the sustainability challenge of addressing social health issues through physical education.
Audience: Undergraduate

5. Apply sustainability principles and/or frameworks to addressing the challenge of teaching an educational movement theme.
Audience: Undergraduate

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: Fall 2024
Learning Outcomes: 1. Describe research in multiple disciplines including occupational science, family studies, biology, psychology, and sociology that explains how colleges students' participation in daily activities relates to their health and well-being.
Audience: Undergraduate

2. Understand the intricacies of daily routines, and the dynamics of creating life change within everyday routines to create health and occupational balance.
Audience: Undergraduate

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 2025

KINES 127 – INTRODUCTION TO ATHLETIC HEALTHCARE
2 credits.

Issues and basic concepts of athletic healthcare including health care systems, interprofessonal 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 2025
Learning Outcomes: 1. Define athletic healthcare
Audience: Undergraduate

2. Identify components of the health care system commonly used in athletic healthcare.
Audience: Undergraduate

3. Interpret the role of public health in addressing issues in athletic healthcare.
Audience: Undergraduate

4. Demonstrate their knowledge of common injuries and conditions in active populations.
Audience: Undergraduate

5. Differentiate the roles of specific health science professions that make up a comprehensive athletic healthcare team.
Audience: Undergraduate

6. Assess the relationship of policy to practice in athletic healthcare.
Audience: Undergraduate

7. Identify the nature and demands of a variety of athletic healthcare employment settings.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Detail scientific rationale behind resistance training program design variables.
Audience: Undergraduate

2. Design a resistance training program.
Audience: Undergraduate

3. Differentiate resistance training programs based on desired training outcomes.
Audience: Undergraduate

4. Evaluate efficacy and safety of resistance training program.
Audience: Undergraduate

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
Learning Outcomes: 1. Describe the benefits of physical activity and how much physical activity is needed to achieve health benefits.
Audience: Undergraduate

2. Develop a physical activity program at a level to achieve health benefits.
Audience: Undergraduate

3. Understand the challenges of sustaining a physical activity program.
Audience: Undergraduate

4. Develop skills to be able to sustain a physical activity program after the course has ended.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Describe the differences between health and wellness.
Audience: Undergraduate

2. Identify the most common health problems observed in the United States.
Audience: Undergraduate

3. Identify the impact of ethnicity and race, education, age, income and geography and disability on physical and mental health.
Audience: Undergraduate

4. Describe intra and interpersonal determinants of health behaviors.
Audience: Undergraduate

5. Describe the cultural, social, economic environmental and policy factors that influence health behaviors.
Audience: Undergraduate

6. Review health education strategies designed to influence individual and public health.
Audience: Undergraduate

7. Evaluate health information to determine accuracy and effectiveness.
Audience: Undergraduate

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
Learning Outcomes: 1. Demonstrate ability to apply various common taping techniques used in the care of active individuals.
Audience: Undergraduate

2. Demonstrate ability to apply superficial modalities.
Audience: Undergraduate

3. Attend various competitions on campus for clinical observation of athletic training professionals in the work setting.
Audience: Undergraduate

4. Demonstrate application of commonly used orthopedic appliances.
Audience: Undergraduate

5. Demonstrate ability to apply commonly used orthopedic pre-cut pads.
Audience: Undergraduate

6. Demonstrate the ability to take a patient history and measure pulse rate and respiration rates and body temperature.
Audience: Undergraduate

7. Demonstrate ability to utilize universal precautions and provide wound care.
Audience: Undergraduate

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
Learning Outcomes: 1. Describe the basic organization and function of the human nervous system.
Audience: Undergraduate

2. Summarize the neural circuits and mechanisms that govern how we sense, move, feel and think.
Audience: Undergraduate

3. Explain how sensory information is encoded in neural signals used in the generation of motor behavior.
Audience: Undergraduate

4. Explain the nature of information processing important for human motor behavior.
Audience: Undergraduate

5. Discuss how experience modifies brain circuitry.
Audience: Undergraduate

6. Apply the basic knowledge and neuroscientific concepts that are taught in the course to human health, wellness and disease.
Audience: Undergraduate

KINES 214 – CULTURE AND ENVIRONMENT IN EXERCISE PHYSIOLOGY ABROAD
3 credits.

Examines physiological responses and adaptations to exercise and physical activity, with particular focus on the role that both the physical environment (temperature, altitude, etc.) and the cultural environment (cultural history, norms, etc.) play in these exercise responses. Topics include acute responses to exercise in normal environments and then in extreme environmental conditions (heat and cold, high altitude, and space environments). Consider exercise adaptations in athletes. Examine health consequences of low-levels of physical activity and consider the socio-cultural barriers to health promotion activities among the indigenous Maori in New Zealand, and compare them to at risk populations in United States. Requires completion of ANAT&PHY 235 or 335 and a valid passport that does not expire at least 6 months past the travel dates.
Requisites: Consent of instructor
Repeatable for Credit: No
Learning Outcomes: 1. Describe the physiological challenges and responses during exercise in the extremes of the physical environment (temperature and altitude extremes)
Audience: Undergraduate

2. Identify the role that "cultural environments" play in our view of the physiological effects of exercise and our view of exercise as a healthy activity
Audience: Undergraduate

3. Recognize benefits and barriers to exercise in New Zealand's native Maori population
Audience: Undergraduate

4. Identify the similarities and differences in extreme health that built environments produce and how culturally responsive physical activity can be used to promote health in indigenous populations
Audience: Undergraduate

KINES 225 – INTRODUCTION TO PHYSICAL ACTIVITY PROGRAMMING FOR DIVERSE ABILITIES
2 credits.

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: No
Last Taught: Summer 2025
Learning Outcomes: 1. Develop knowledge of various inherited and acquired disabilities across diverse populations.
Audience: Undergraduate

2. Identify socioecological health disparities and the barriers and facilitators of physical activity for the health and well-being of individuals with disabilities and diverse abilities.
Audience: Undergraduate

3. Demonstrate understanding of the dynamics of creating behavioral change in challenging daily routines for persons with diverse needs by conducting motivational interviewing and other behavioral change techniques used in exercise counseling.
Audience: Undergraduate

4. Program and facilitate exercise and physical activities for persons with diverse abilities to improve their health and wellness, performance of activities of daily living, and participation in leisure, recreational and sports activities, as measured by assessments used in fitness and clinical settings.

Audience: Undergraduate

5. Develop practical skills and knowledge to modify and or adapt activities to minimize the effects of disabling conditions and maximize safety and healthy movement opportunities.
Audience: Undergraduate

6. Learn how to take basic vitals, conduct fitness assessments, measure physical activity and track progress for individuals with disabilities.
Audience: Undergraduate

7. Review evidence-based practices, community resources and current trends in health, fitness and exercise for a client-centered professional development project.
Audience: Undergraduate

8. Develop skills in inter-disciplinary collaboration and teamwork.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Define basic knowledge of the musculoskeletal system (bones, muscles, connective tissue and various articulations).
Audience: Undergraduate

2. Interpret evolutionary influences on our musculoskeletal system.
Audience: Undergraduate

3. Illustrate the relationships between anatomical structure and function.
Audience: Undergraduate

4. Explain how anatomy serves as a cornerstone of knowledge for future study in Kinesiology.
Audience: Undergraduate

5. Identify the anatomical consequence of injury and inactivity.
Audience: Undergraduate

6. Summrize key historical events in the study of human anatomy.
Audience: Undergraduate

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
Learning Outcomes: 1. Critically evaluate definitions of sedentary behavior (SB) and physical activity (PA) and how they are measured.
Audience: Undergraduate

2. Identify and define psychological variables that relate to participation (antecedents) in SB and PA and those that are impacted by these behaviors (consequences).
Audience: Undergraduate

3. Communicate National and International recommendations and guidelines for SB and PA.
Audience: Undergraduate

4. Formulate behavior change interventions for sedentary individuals with a consideration of the social determinants of health, cultural influences, and expected changes in health outcomes.
Audience: Undergraduate

5. Demonstrate awareness of variables influenced by sociocultural meanings and histories that are related to global perspectives of SB and PA.
Audience: Undergraduate

6. Synthesize connections between out of the classroom experiences and dialogue with perspectives reflecting cultural beliefs related to health behavior within Portugal.
Audience: Undergraduate

KINES 260 – INCLUSIVE PHYSICAL ACTIVITY, SPORT & REHABILITATION IN IRELAND
3 credits.

Focus on applying models, research, and best practices in motor control and motor learning to inclusive physical activity, sports, and rehabilitation for individuals with disabilities. Participate in training seminars and site visits led by content experts in physical activity, sport, and rehabilitation. Explore and participate in sports, recreation, and physical activities through the lens of a tourist/participant with disabilities. Must have sophomore standing and a valid passport.
Requisites: Consent of instructor
Repeatable for Credit: No
Learning Outcomes: 1. Operationalize the concepts of culture, cultural humility, and cultural safety in relation to healthcare for individuals with diverse abilities in Ireland, as well as health education for their participation in adapted physical activity
Audience: Undergraduate

2. Identify and compare theoretical models of motor control and models of practice in occupational performance and physical therapy used by allied health professionals and health educators in Ireland and the U.S. to facilitate culturally competent care for individuals with diverse abilities
Audience: Undergraduate

3. Explore evidenced-based practices and interventions used by Irish healthcare providers and researchers to improve motor control and occupational performance in individuals with diverse abilities
Audience: Undergraduate

4. Examine the connection between improved motor control, occupational performance, and accessibility to inclusive and adapted physical activity settings for individuals with diverse abilities
Audience: Undergraduate

5. Describe issues of accessibility to healthcare services and access to physical activity and sports in Ireland as compared to similar services in the U.S.
Audience: Undergraduate

6. Appraise the ways that culture, advocacy, and public policy can be a driving force for occupational and physical activity participation, and how these issues affect climate and environmental justice for individuals with disabilities
Audience: Undergraduate

KINES 280 – HEALTH COACHING PRINCIPLES AND METHODS
3 credits.

Provides knowledge/skills needed to assess a client's wellness-related priorities and support them through development of wellness goals and the process of behavior change. Discussion of behavior change models and theories will provide a foundational understanding of health coaching. Covers principles and practice of motivational interviewing. Provides didactic and experiential training in mindfulness. Defines health coaching as a profession through discussion of scope of practice, the business of health coaching, professional conduct, and ethical considerations. Introduces lifestyle medicine through discussion of stress management, nutrition, physical activity, and other lifestyle factors, in addition to chronic disease and comorbid conditions. Uses elements of the American Council on Exercise (ACE) Health Coach University Curriculum.
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2024
Learning Outcomes: 1. Demonstrate understanding of ACE Health Coach certification exam requirements and eligibility.
Audience: Undergraduate

2. Describe and apply behavior change models and theories used in the practice of health coaching.
Audience: Undergraduate

3. Apply the core features of motivational interviewing in health coaching practice.
Audience: Undergraduate

4. Describe the health coach's role and scope of practice, the business of health coaching, and ethical commitments and considerations in health coaching.
Audience: Undergraduate

5. Understand and apply mindfulness in the context of health coaching
Audience: Undergraduate

6. Summarize fundamental concepts of lifestyle medicine and chronic disease.
Audience: Undergraduate

7. Apply the principles and methods of health coaching through coaching practice.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Understand the scientific concepts that are related to the specific practicum focus.
Audience: Undergraduate

2. Demonstrate the ability to apply scientific knowledge to the field setting. Depending upon the setting, this would include demonstrating ways to modify activities and treatments, conducting assessment procedures and screening processes, understanding and implementing research procedures, and designing exercise prescriptions for clients.
Audience: Undergraduate

3. Develop effective personal communication skills with clients and staff.
Audience: Undergraduate

4. Demonstrate professional characteristics, including punctuality, confidentiality, flexibility, cooperation, enthusiasm, and responsibility.
Audience: Undergraduate

5. Reflect on learning experiences of the practicum, through journal submissions and a summary report.
Audience: Undergraduate

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
Learning Outcomes: 1. Demonstrate knowledge of emergency care related to sudden cardiac death, head trauma/spinal injuries, exertional heat illness and environmental conditions.
Audience: Undergraduate

2. Document and present emergency action plans for specific assigned venues related to athletic events.
Audience: Undergraduate

3. Create and implement custom padding as well as demonstrate appropriate splinting techniques of various injuries.
Audience: Undergraduate

4. Understand proper athletic equipment fitting and rules related to athletic equipment prior to activity as well as removal of equipment in emergency situations.
Audience: Undergraduate

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
Last Taught: Fall 2024
Learning Outcomes: 1. Demonstrate and apply fundamental principles from physics and mechanics to human movement.
Audience: Undergraduate

2. Describe and apply biomechanical concepts related to skillful movement, physical activity, and fitness.
Audience: Undergraduate

3. Gain the skills necessary to assess both proper and improper movement strategies and provide teaching cues based on biomechanical principles to facilitate movement mastery.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Demonstrate knowledge of computer basics and terminology.
Audience: Undergraduate

2. Demonstrate knowledge of ethical uses of technology.
Audience: Undergraduate

3. Recognize the importance of, and plan for, professional development.
Audience: Undergraduate

4. Apply the need for technological skills in health and physical activity.
Audience: Undergraduate

5. Apply technological skills to improve performance and learning.
Audience: Undergraduate

6. Acquire knowledge of current technological innovations and tools specific to health and physical activity to enhance wellness.
Audience: Undergraduate

7. Evaluate system specifications relative to value.
Audience: Undergraduate

8. Demonstrate ability to locate and critique information.
Audience: Undergraduate

9. Demonstrate proficiency with software and hardware.
Audience: Undergraduate

10. Demonstrate proficiency in acquiring and working with digital images and video.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Describe the primary muscular, metabolic, cardiovascular, and respiratory adaptations to exercise training.
Audience: Undergraduate

2. Explain the biochemical changes that are caused by muscle contraction and how these change with the repeated muscle contractions.
Audience: Undergraduate

3. Explain the cardiorespiratory response when moving from rest to exercise to maximal exercise.
Audience: Undergraduate

4. Compare different modes of exercise and explain the metabolic and cardiovascular adjustments as well as adaptations in exercise-trained adults.
Audience: Undergraduate

5. Discuss how environmental conditions influence the cardiovascular and metabolic response to exercise.
Audience: Undergraduate

6. Design and conduct an experiment in exercise physiology, analyze the data collected, and discuss the strengths and limitations of the experimental approach.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Summarize the concept of assessment and identify the criteria for a good assessment instrument.
Audience: Undergraduate

2. Recall the concept of research, various research designs, and the importance of research in physical education.
Audience: Undergraduate

3. Develop skills in quantitative reasoning, including: manipulate quantitative information to create models, and devise solutions to problems using multi-step arguments using quantitative information, evaluate models and arguments using quantitative information, and express and interpret in context models, solutions and arguments using verbal, numerical, and computational techniques.
Audience: Undergraduate

4. Apply the sustainability principles and/or frameworks to addressing the challenge of producing assessment instruments in the psychomotor, cognitive, and affective domains, focusing on the five national standards.
Audience: Undergraduate

5. Describe the social, economic, and environmental dimensions of conducting a research project, including writing methods, analyzing data, discussing results, drawing conclusions, and presenting findings, and identify potential trade-offs and interrelationships among these dimensions at a level appropriate to the course.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Explain educational and civil rights of individuals with disabilities and to help promote a community of learners. To explain the rights and responsibilities of individuals, parents, teachers and other professional staff regarding advocacy and collaboration for individuals with disabilities.
Audience: Undergraduate

2. Demonstrate knowledge about the safety and planning aspects (self-reflection, including developmentally appropriate formal and informal assessment, collaboration of services, strategies and resources, IEP writing, goal and objective formulation, and activity selection) of physical education programming for individuals with disabilities.
Audience: Undergraduate

3. Demonstrate knowledge of the influence of selected diseases, conditions, and disabilities on the learning and performance of physical activities.
Audience: Undergraduate

4. Demonstrate knowledge of a range of individual characteristics regarding communication, language acquisition, critical elements for motor skills, literacy development, and alternative means of communication, as well as collaborate with appropriate resources/services to facilitate communication.
Audience: Undergraduate

5. Demonstrate use of technology, including assistive technology, through the collection of resources that enhance language, literacy, communication, understanding, and learning when working with individuals with disabilities.
Audience: Undergraduate

6. Demonstrate knowledge in lesson planning and instruction to meet the multiple needs and learning styles of individuals with disabilities. This will include adapting activity/equipment, using instructional tasks, cues, and prompts, implementing managerial and instructional routines; identifying signs of learner distress and designing strategies for safe reflective teaching of physical education.
Audience: Undergraduate

7. Apply knowledge of research- or evidence-based strategies, including utilizing universal design principles, for teaching and working effectively and inclusively with all students.
Audience: Undergraduate

8. Apply knowledge of research- or evidence-based strategies for teaching and working effectively and inclusively with students from various social and economic circumstances and students with diverse family and living arrangements (e.g., students who are homeless; students who are in foster care; students with interrupted, limited, or no formal education).
Audience: Undergraduate

9. Identify teacher responsibilities and requirements in working with students with disabilities and other special learning needs, including providing increasingly intensive supports and interventions through response to intervention (RTI) and positive behavioral interventions and supports (PBIS) to support struggling learners and ensure appropriate

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: Spring 2025
Learning Outcomes: 1. Identify, quantify, and describe mechanical aspects of human activities.
Audience: Undergraduate

2. Determine forces within and external to the human body that are necessary to achieve desired behaviors.
Audience: Undergraduate

3. Determine movements that result from muscle activity and external forces.
Audience: Undergraduate

4. Demonstrate use of instruments to measure forces, muscle activity, and motion.
Audience: Undergraduate

5. Interpret quantitative measurements of force, muscle activity, and motion.
Audience: Undergraduate

6. Evaluate the validity of biomechanical claims related to exercise techniques, exercise devices, and assistive devices.
Audience: Undergraduate

7. Become independent in self-guided continuation of learning and application of biomechanical principles beyond this course.
Audience: Undergraduate

8. Demonstrate awareness of individual behaviors as they impact group dynamics.
Audience: Undergraduate

9. Develop metacognitive skills for problem solving in biomechanics.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Apply knowledge related to movement and physical activity techniques and approaches in clinical and applied settings to enhance human health and quality of life.
Audience: Undergraduate

2. Develop appropriate styles of written and oral communication to use both within and outside the scientific community.
Audience: Undergraduate

3. Identify, develop and deliver messages using a variety of communication strategies, methods, and techniques.
Audience: Undergraduate

4. Discuss biases/prejudices and barriers to diversity.
Audience: Undergraduate

5. Understand the perspective of a person from a different cultural background.
Audience: Undergraduate

6. Demonstrate practical skills of working toward becoming a culturally responsive facilitator.
Audience: Undergraduate

7. Address health characteristics of individuals from a different cultural background.
Audience: Undergraduate

8. Analyze relationships among behavioral, environmental, and other factors that influence health and identify and analyze factors that influence health behaviors.
Audience: Undergraduate

9. Assess social, environmental, political, and other factors that may impact health education/promotion.
Audience: Undergraduate

10. Analyze an organization's culture to determine the extent to which it supports health education/promotion and apply principles of cultural competence in selecting and/or designing strategies/interventions.
Audience: Undergraduate

11. Demonstrate leadership, employ conflict resolution techniques, and develop skills in facilitating team development.
Audience: Undergraduate

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 2025

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 2025
Learning Outcomes: 1. Demonstrate knowledge of the research process and different research methods
Audience: Undergraduate

2. Utilize common research tools and resources
Audience: Undergraduate

3. Retrieve, read, and evaluate primary and secondary sources of information
Audience: Undergraduate

4. Communicate key elements of study design and analysis
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Discuss historical and current physical activity issues based on various perspectives with a specific emphasis on the psychological and psychobiological perspectives.
Audience: Undergraduate

2. Recall information concerning the historical roots of Sport and Exercise Psychology.
Audience: Undergraduate

3. Explain the relationship between bioscience and psychological concepts as they relate to physical activity and sport.
Audience: Undergraduate

4. Apply basic tools to critically evaluate evidence in general and specific to exercise and sport psychology topics.
Audience: Undergraduate

5. Describe the differences and similarities of Sport and Exercise Psychology.
Audience: Undergraduate

6. Design exercise psychology experiments using the Gold Standard.
Audience: Undergraduate

7. Apply knowledge in an integrated fashion.
Audience: Undergraduate

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 2024
Learning Outcomes: 1. Define multicultural education, interpret biases/prejudices of teachers, and explain the importance of multicultural assessment.
Audience: Undergraduate

2. Integrate Act 31 content into their teaching.
Audience: Undergraduate

3. Develop advanced communication skills in: critical reading, logical thinking and the use of evidence; the use of appropriate style and disciplinary convention in writing and speaking; the productive use of core library resources specific to the discipline.
Audience: Undergraduate

4. Explain the social, economic, and/or environmental dimensions of the sustainability challenge of culturally responsive teaching.
Audience: Undergraduate

5. Analyze the causes of and solutions for the sustainability challenge of the impact of one’s attitudes and actions, from a cultural perspective, on other individuals.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Summarize the various philosophies of physical activity/education.
Audience: Undergraduate

2. Differeniate the role of physical activity/education and sport throughout history from ancient times to today.
Audience: Undergraduate

3. Analyze how physical activity is a reflection of society and the culture in which it exists.
Audience: Undergraduate

4. Develop advanced communication skills in critical reading, logical thinking, and the use of evidence; the use of appropriate style and disciplinary conventions in writing and speaking; the productive use of core library resources specific to the discipline.
Audience: Undergraduate

5. Analyze the causes of and solutions for the sustainability challenge regarding a current issue in physical activity.
Audience: Undergraduate

6. Describe the social, economic, and environmental dimensions of increasing physical activity for children and adolescents and identify potential trade-offs and interrelationships among these dimensions at a level appropriate to the course.
Audience: Undergraduate

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: Spring 2025
Learning Outcomes: 1. Know and apply terminology and concepts from the field of human motor development through assignments, exams and observations.
Audience: Undergraduate

2. Know and identify how human lifespan motor development changes within each of the four domains of; cognitive, social, physical and motor through assignments, exams, movement experiences and observations.
Audience: Undergraduate

3. Understand and analyze the impact of various factors on human motor development across the lifespan through assignments and exams.
Audience: Undergraduate

4. Appreciate human motor development terminology, concepts and content through application to movement experiences, observations and future life and career settings.
Audience: Undergraduate

5. Synthesize current motor development research and its influence on health and well-being through assignments, exams and final research paper.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Articulate the scientific methods used for studying motor performance and learning.
Audience: Undergraduate

2. Describe how the sensory information is used in movement production.
Audience: Undergraduate

3. Describe how cognitive factors such as attention and memory affect skill acquisition and performance.
Audience: Undergraduate

4. Articulate current theories of motor skill performance and acquisition.
Audience: Undergraduate

5. Explain how practice can be structured to optimize motor skill acquisition.
Audience: Undergraduate

6. Demonstrate mastery of the above knowledge in a laboratory setting.
Audience: Undergraduate

KINES 362 – ADAPTED PHYSICAL EDUCATION COMMUNITY ENGAGEMENT
1 credit.

A community-based experience in the Adapted Physical Education. Assist, lead, and teach participants in a physical activity program, community recreation activity, or other events that are specific to individuals with disability. Emphasis placed on the adaptation of physical education and physical activities to the needs of individuals with physical, intellectual, emotional, or sensory disabilities.
Requisites: KINES 316
Repeatable for Credit: No
Last Taught: Fall 2024
Learning Outcomes: 1. Identify Universal Design for Learning through reading, discussion, and reflection as a learning framework at the outset of the course to better support and coach those with diverse abilities.
Audience: Undergraduate

2. Identify activities and plans that will support the activity leader in providing quality physical activities for individuals with diverse abilities
Audience: Undergraduate

3. Implement Universal Design for Learning principles when getting opportunities to work with community-based participants in a in community-based physical activity and/or sport activity setting.
Audience: Undergraduate

4. Engage in a variety of activities with individuals with disabilities in a community-based physical activity and/or sport activity setting.
Audience: Undergraduate

5. Identify ways collaborations occurred with Adapted Physical Education teachers, other professionals and parents throughout the community-based experience.
Audience: Undergraduate

6. Explain and describe weekly experiences, activities, and events in the community-based experience to provide knowledge in teaching, instructing, and coaching individuals with disability.
Audience: Undergraduate

7. Develop a reflective summary of the community-based experience and apply these toward application in the role as a future Adapted Physical Education teacher.
Audience: Undergraduate

KINES 363 – MANAGEMENT STRATEGIES IN ADAPTED PHYSICAL EDUCATION
2 credits.

Provides comprehensive understanding of behavior management strategies for working with diverse populations in schools, including individuals with disabilities. Explore various topics such as preventative strategies, applied behavior analysis principles, behavior management strategies, developing positive behavioral interventions and support (PBIS), and specific approaches for different conditions, including emotional behavioral disabilities, ADHD, autism, and students in crisis. Learn how to assess behaviors and develop effective behavior intervention plans. Incorporates real-life case studies and presentations to enhance practical application.
Requisites: KINES 316
Repeatable for Credit: No
Last Taught: Fall 2024
Learning Outcomes: 1. Identify and describe the different types of behavioral approaches when working with children in schools.
Audience: Undergraduate

2. Select and implement the least intensive behavioral intervention consistent with the needs of individuals with exceptionalities in a final case study or using field practicum examples.
Audience: Undergraduate

3. Identify and describe how to assess and create a positive learning environment in schools.
Audience: Undergraduate

4. Plan and create a Behavioral Management Plan during class learning assignments
Audience: Undergraduate

5. Describe how to organize an effective classroom management system for all students, particularly those with exceptional learning needs (e.g., schedules, procedures, routines, signals, physical set-up of room, rules and consequences, monitoring, transitions, etc.).
Audience: Undergraduate

6. Know and describe the types of reinforcement used in behavior management.
Audience: Undergraduate

7. Identify and describe two systems of Behavioral Intervention – Positive Behavioral Support (PBS) and the Response to Intervention: Behavior (RTI:B), which are based on student needs.
Audience: Undergraduate

8. Design a positive behavior intervention plan (BIP) that supports a system for classroom and non-classroom environments that includes a data collection system for evaluating individual student behavior.
Audience: Undergraduate

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

Learn and practice assessment strategies in Adapted Physical Education. Experiences in the gymnasium and pool.
Requisites: KINES 315 and 362
Repeatable for Credit: No
Last Taught: Fall 2024
Learning Outcomes: 1. Identify a developmental approach to teaching individuals with disabilities
Audience: Undergraduate

2. Identify activities and skills used to include individuals with disabilities in physical education based on evaluation and assessment of their needs
Audience: Undergraduate

3. Implement appropriate assessment tools for individuals with disabilities in a classroom and gym activity session
Audience: Undergraduate

4. Analyze appropriate adapted physical education assessments at the end of the course based on knowledge of an individual with a specific disability
Audience: Undergraduate

5. Identify ways the physical education teacher is a part of the collaborative partnership team when considering a student with an IEP by the end of the course
Audience: Undergraduate

6. Synthesize and design the process for providing an appropriate assessment for a student with a disability (case study) by using the most appropriate assessment tool learned in the course while including concepts, terms, and philosophies needed based on the person's condition

Audience: Undergraduate

7. Engage in conference planning/presentations, attending conferences/seminars, or school professional development sessions to gain more experience in programming and instruction for students with a disability
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Describe and explain Adapted Physical Education and concepts relative to teaching, planning, or assessing children with disabilities in writing.
Audience: Undergraduate

2. Participate in active engagement in daily lesson plans by the cooperating teacher and developing lesson plans for teaching at least one lesson.
Audience: Undergraduate

3. Analyze the process of learning practical teaching skills in school-based settings by recognizing instructional strategies, behavior management, and applications the cooperating teacher uses in the classroom with all students but especially those with disabilities.
Audience: Undergraduate

4. Observe in school-based interactions and practical teaching experiences with children with disabilities in Adapted Physical Education/ Physical Education classes.
Audience: Undergraduate

5. Reflect on teaching practice through observation of teaching lessons in schools with children.
Audience: Undergraduate

6. Utilize assessment tools to determine skills tasks that student needs modifications/adaptations for students to be successful within an adapted physical education.
Audience: Undergraduate

7. Discuss and develop present levels of performance for developing the final IEP Case Study with the Cooperating Teacher during the lessons throughout the semester.
Audience: Undergraduate

8. Synthesize and design the process for providing an IEP based on assessment data, teacher input, and observations of student in schools that is comprehensive and provides for specific details for future goals and objectives for a particular student
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Design and implement short- and long-term plans that meet program and educational goals, as well as a variety of participants needs.
Audience: Undergraduate

2. Develop a program plan that leads to appropriate and valuable content in movement and health.
Audience: Undergraduate

3. Select and implement instructional strategies based on developmental levels, learning styles, special and diverse learning needs, and safety issues.
Audience: Undergraduate

4. Identify and use appropriate services and resources to meet special and diverse learning needs.
Audience: Undergraduate

5. Use effective demonstrations and explanations to link movement and health concepts to appropriate learning experiences.
Audience: Undergraduate

6. Develop and practice a wide variety of facilitation skills to lead and guide others to increased health and physical activity.
Audience: Undergraduate

7. Select and utilize varied roles in the instructional process based on the content, purpose of instruction, and the needs of participants (model, assessor, monitor and facilitator).
Audience: Undergraduate

8. Use standards to guide instruction and develop assessment plans.
Audience: Undergraduate

9. Evaluate the benefits and disadvantages of a wide variety of assessment tools.
Audience: Undergraduate

10. Demonstrate the ability to connect planning, facilitation, and assessment skills.
Audience: Undergraduate

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
Learning Outcomes: 1. Demonstrate knowledge of movement concepts and locomotor, manipulative, games, dance, and gymnastics skills.
Audience: Undergraduate

2. Identify the developmental progression of movement concepts and skills.
Audience: Undergraduate

3. Identify, select and/or create learning tasks that are appropriate, inclusive, and engaging.
Audience: Undergraduate

4. Demonstrate an understanding and appropriate use of curriculum models in planning, teaching, and assessing.
Audience: Undergraduate

5. Demonstrate an ability to use appropriate management responses to student behaviors.
Audience: Undergraduate

6. Demonstrate an understanding of quality teaching skills by reviewing videotape and critically analyzing performance.
Audience: Undergraduate

KINES 372 – METHODS AND PRACTICUM OF TEACHING PK-5 PHYSICAL EDUCATION
4 credits.

Address methods of instruction in movement concepts, locomotor and nonlocomotor skills, games, and educational dance and gymnastics. Explores curriculum models such as Developmental Movement, Skills-Theme, and Teaching Personal and Social Responsibility (TPSR). Gain practice in planning, teaching, and assessing teaching skills. Develop teaching competencies (planning, teaching, and assessing) through teaching in a variety of settings. Apply concepts and skills addressed in previous classes.
Requisites: Declared in Physical Education
Repeatable for Credit: No
Last Taught: Spring 2025
Learning Outcomes: 1. Demonstrate knowledge of movement concepts and locomotor, manipulative, games, dance and gymnastics skills.
Audience: Undergraduate

2. Identify the developmental progression of movement concepts and skills.
Audience: Undergraduate

3. Identify, select and/or create learning tasks that are appropriate, inclusive, and engaging.
Audience: Undergraduate

4. Demonstrate an understanding of quality teaching skills by reviewing videotape and critically analyzing performance.
Audience: Undergraduate

5. Demonstrate an understanding and appropriate use of curriculum models including, skill theme, developmental movement, and TPSR in planning, teaching, and assessing.
Audience: Undergraduate

6. Demonstrate an ability to use appropriate management responses to student behaviors.
Audience: Undergraduate

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 2024
Learning Outcomes: 1. Master sport content, tactical concepts, and sport skills.
Audience: Undergraduate

2. Identify the development skill acquisition process for motor skills.
Audience: Undergraduate

3. Analyze skills by critical phases for use in teaching.
Audience: Undergraduate

4. Effectively organize content for presentation to students.
Audience: Undergraduate

5. Identify, select, and/or create learning activities that are appropriate, inclusive, and engaging.
Audience: Undergraduate

6. Demonstrate their understanding of quality teaching skills by reviewing videotape and analyzing teacher performance.
Audience: Undergraduate

7. Demonstrate an understanding of professional policies and practices related to negligence and liability.
Audience: Undergraduate

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
Learning Outcomes: 1. Understand and demonstrate the pedagogical aspects of teaching physical education to include learning environment, instructional delivery, factors influencing student learning, teacher effectiveness, teaching strategies, content development, teacher and student assessment
Audience: Undergraduate

2. Value student learning as a primary purpose of teaching
Audience: Undergraduate

3. Demonstrate knowledge on teaching as a professional endeavor (reflective teaching, professional development, continuous learning, characteristics of an effective teacher, advocacy)
Audience: Undergraduate

4. Utilize technology to analyze behavior and content development
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Describe how sport and physical activity are related. As well as the pros and cons to sport participation.
Audience: Undergraduate

2. Identify common sport-related injuries in children and common treatments for those injuries.
Audience: Undergraduate

3. Identify sport participation recommendations and apply these recommendations to determine appropriate sport participation levels in children.
Audience: Undergraduate

4. Understand the complex interaction between growth, maturation, and sport participation and how this impacts talent development in young athletes.
Audience: Undergraduate

5. Identify key members of the pediatric care team as it relates to athletic healthcare.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Know the principles of health and skill related fitness.
Audience: Undergraduate

2. Understand obesity issues and how to adapt exercises for those individuals.
Audience: Undergraduate

3. Manage group fitness activities with individuals who are senior citizens or have special health issues.
Audience: Undergraduate

4. Demonstrate knowledge about the different types of fitness programs that are being offered.
Audience: Undergraduate

5. Set up and teach lessons in group fitness that is appropriate for the age group.
Audience: Undergraduate

6. Demonstrate knowledge on adapting different activities that encompass cardiovascular endurance, muscular strength/endurance, neuromotor, step, yoga and other fitness activities available to the general public.
Audience: Undergraduate

7. Know how to use the various fitness equipment available in a fitness setting.
Audience: Undergraduate

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 2025

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
Learning Outcomes: 1. Learn about different organizational methods as they apply to physical education.
Audience: Undergraduate

2. Demonstrate a knowledge of how to promote physical education.
Audience: Undergraduate

3. Understand safety/liability as it relates to physical education.
Audience: Undergraduate

4. Demonstrate knowledge about financial and purchasing management through a budget process.
Audience: Undergraduate

5. Demonstrate knowledge about the newest materials to use in the design of a new physical education facility/fieldhouse.
Audience: Undergraduate

6. Demonstrate an understanding of Title IX and how it relates to physical education and sport.
Audience: Undergraduate

7. Demonstrate a knowledge of the latest technology used in physical education.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Identify the components of a needs analysis and their application to appropriate exercise testing and prescription
Audience: Undergraduate

2. Demonstrate knowledge of performing a fitness testing battery
Audience: Undergraduate

3. Administer, calculate, and interpret scores from various fitness assessments
Audience: Undergraduate

4. Develop exercise programs based upon scores of fitness evaluations
Audience: Undergraduate

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/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 2025

KINES 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 2025

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: Summer 2025
Learning Outcomes: 1. Understand the pre-participation evaluation process as well as factors that contribute to sudden unexpected cardiac death.
Audience: Undergraduate

2. Recognize illicit drug use among athletic populations, cite drug testing procedures, and identify educational resources related for drug intervention.
Audience: Undergraduate

3. Apply basic physical exam skills.
Audience: Undergraduate

4. Understand common medical issues in athletic populations including concussions, respiratory illness and infectious disease, respiratory illnesses and exercise induced asthma.
Audience: Undergraduate

5. Describe and understand general medications commonly found in athletic environments.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Apply theories and models within the field of Health Education/Promotion.
Audience: Undergraduate

2. Explain the role of social and behavioral sciences in public health.
Audience: Undergraduate

3. Describe the role of ethical issues in social and behavioral sciences research and practice.
Audience: Undergraduate

4. Evaluate the literature concerning individual and social influences on health behavior.
Audience: Undergraduate

5. Apply the steps to conducting a community needs and asset assessments.
Audience: Undergraduate

6. Research and develop informational materials within the field of Health Education/Promotion.
Audience: Undergraduate

7. Apply the steps and procedures for the planning, implementation, and evaluation of public health interventions, programs, and policies from a social and behavioral sciences perspective.
Audience: Undergraduate

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: Summer 2025

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 Promoting Activity for Diverse Abilities Certificate and KINES 225
Repeatable for Credit: No
Last Taught: Spring 2025
Learning Outcomes: 1. Develop knowledge of the history, legislation and models that have impacted diverse populations.
Audience: Undergraduate

2. Develop knowledge and understanding of diverse populations.
Audience: Undergraduate

3. Understand the barriers that impact physical activity and well-being for diverse populations and the strategies to positively change barriers.
Audience: Undergraduate

4. Understand and apply techniques that result in more inclusive experiences and programs.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Explain the various measures of physical activity and their use in epidemiology/biomedical research
Audience: Both Grad & Undergrad

2. Explain the various study designs used to assess relationships between physical activity and health, and their strengths and weaknesses
Audience: Both Grad & Undergrad

3. Identify the currently recommended amount of activity for health benefits
Audience: Both Grad & Undergrad

4. Develop an accurate understanding of the relationships between physical activity and health outcomes including cardiovascular and metabolic disorders, obesity, musculoskeletal health, cancers and mental health
Audience: Both Grad & Undergrad

5. Critically evaluate the literature on physical activity and health topics
Audience: Graduate

KINES 523 – CLINICAL EXERCISE TESTING AND PRESCRIPTION FOR HEALTH PROFESSIONALS
3 credits.

Explore how exercise prevents, manages, and treats chronic health conditions. Develop skills in basic ECG interpretation, understand medications' effect on exercise, and design exercise prescriptions for various chronic diseases including obesity, hypertension, cardiovascular disease, diabetes, cancer, pulmonary disease, skeletal and joint disease, and more. Acquire the expertise to elevate health outcomes and enhance quality of life through exercise.
Requisites: ANAT&PHY 235, 335 or 435
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2025
Learning Outcomes: 1. Administer pre-exercise screening and safely conduct exercise testing
Audience: Both Grad & Undergrad

2. Identify commonly used medications for chronic diseases and their effects on exercise
Audience: Both Grad & Undergrad

3. Identify exercise limitations and contraindications to exercise associated with the chronic diseases
Audience: Both Grad & Undergrad

4. Apply concepts of exercise prescription to the development of comprehensive exercise training programs for individuals with chronic diseases
Audience: Both Grad & Undergrad

5. Apply knowledge related to movement and physical activity to a clinical population to enhance human health and quality of life
Audience: Both Grad & Undergrad

6. Demonstrate effective collaboration skills by working collaboratively with peers on group projects and discussion
Audience: Both Grad & Undergrad

7. Critically evaluate current research literature to inform decision-making in clinical exercise programming for individuals with chronic diseases
Audience: Graduate

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 2025
Learning Outcomes: 1. Identify how nutritional and hydration demands vary by physical activity frequency, intensity, type, and time
Audience: Undergraduate

2. Outline dietary assessment techniques and common dietary strategies for both the healthy population and populations with additional dietary needs
Audience: Undergraduate

3. Apply the potential benefits of nutrient timing strategies to optimize performance and to promote tissue growth, recovery, and repair
Audience: Undergraduate

4. Synthesize and discuss nutrition research related physical activity and health
Audience: Undergraduate

5. Evaluate the safety and efficacy of common nutritional strategies, supplements, and ergogenic aids
Audience: Undergraduate

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 2024
Learning Outcomes: 1. Demonstrate knowledge of proper exercise selection and technique
Audience: Undergraduate

2. Evaluate the safety and effectiveness of various training methods. modalities, equipment, and environments
Audience: Undergraduate

3. Design strength and conditioning programs intended for improvement in strength, power, speed, and/or endurance
Audience: Undergraduate

4. Convey how contemporary scientific principles and training methodologies are being used to improve athletic performance
Audience: Undergraduate

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
Learning Outcomes: 1. Demonstrate an awareness and understanding of strength and conditioning research and practices.
Audience: Both Grad & Undergrad

2. Demonstrate an understanding of the basic concepts of strength and conditioning.
Audience: Both Grad & Undergrad

3. Critically evaluate current research and practices related to strength and conditioning, including study/practice design, strength and conditioning guidelines, and implementation of the information.
Audience: Both Grad & Undergrad

4. Provide presentations and lead discussions on journal articles and current practices in the field of strength and conditioning.
Audience: Both Grad & Undergrad

5. Discuss methods of implementing research into practice with clients or patients.
Audience: Graduate

6. Compare research and clinician expertise to determine best practices.
Audience: Graduate

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 2025
Learning Outcomes: 1. Describe the basic organization and function of the human sensorimotor system.
Audience: Undergraduate

2. Summarize the neural circuits and mechanisms that govern how we sense, move, feel, and think.
Audience: Undergraduate

3. Explain how sensory information is encoded in neural signals used in the generation of motor behavior.
Audience: Undergraduate

4. Explain the nature of information processing important for human motor behavior.
Audience: Undergraduate

5. Explain how experience modifies neural circuitry.
Audience: Undergraduate

6. Apply the basic knowledge and neuroscientific concepts to human health, wellness and disease.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Provide an overview of diversity, including a definition of diversity and diversity management, and discuss the various reasons for the emphasis on diversity.
Audience: Both Grad & Undergrad

2. Demonstrate knowledge of prevalent attitudes regarding equity, fairness, and diversity.
Audience: Both Grad & Undergrad

3. Demonstrate knowledge about varying beliefs about health, disease and treatment that influence health care practice in oral presentations and written communication using outlining, drafting and revision.
Audience: Both Grad & Undergrad

4. Address issues of racism, bias, and prejudice and explain how these issues affect the experience of individuals and groups.
Audience: Both Grad & Undergrad

5. Demonstrate culturally sensitive verbal and non-verbal communication skills with respect to age, disability, gender, sexual orientation, socioeconomic status, race, ethnicity, nationality and religion.
Audience: Both Grad & Undergrad

6. Critically evaluate the literature on physical activity and health topics using relevant, reliable, and high-quality research sources.
Audience: Both Grad & Undergrad

7. Demonstrate an understanding of how race, ethnicity, gender, social class, sexuality, and diverse abilities (e.g. physical, cognitive) currently impact opportunities and experiences in physical activities and sports.
Audience: Both Grad & Undergrad

8. Demonstrate an understanding of teaching, coaching, and communication techniques that may enhance your ability to work with diverse populations in order to promote healthy lifestyles.
Audience: Both Grad & Undergrad

9. Demonstrate the ability to make recommendations regarding the design, implementation, and evaluation of curricular and instructional practices that fully includes learners' diverse needs.
Audience: Graduate

10. Demonstrate knowledge of models and theories impacting on equity, fairness, or diversity.

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 2024
Learning Outcomes: 1. Comprehend concepts and skills related to health promotion and disease prevention.
Audience: Undergraduate

2. Analyze and organize content for teaching.
Audience: Undergraduate

3. Effectively organize content for presentation to students.
Audience: Undergraduate

4. Identify, select, and/or create learning activities that are appropriate, inclusive and engaging.
Audience: Undergraduate

5. Demonstrate their understanding of quality teaching skills by reviewing videotape and analyzing teacher performance.
Audience: Undergraduate

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: Summer 2025
Learning Outcomes: 1. Understand the principles behind athletic monitoring and human performance testing.
Audience: Both Grad & Undergrad

2. Implement field-based monitoring systems.
Audience: Both Grad & Undergrad

3. Develop an assessment for the injured athlete and learn about the role monitoring plays in the progression to return-to-sport after injury.
Audience: Both Grad & Undergrad

4. Collect performance data for analysis, interpretation, and visualization.
Audience: Both Grad & Undergrad

5. Create useful tools for dissemination of testing results.
Audience: Both Grad & Undergrad

6. Apply principles behind athletic monitoring to field-based sports.
Audience: Graduate

7. Develop return-to-play protocols and understand how they can mitigate injury risk.
Audience: Graduate

KINES 560 – SENIOR RESEARCH WRITING IN KINESIOLOGY
3 credits.

Develop skills in reading, reporting, and evaluating research in Kinesiology. Discuss and critically analyze peer-reviewed research articles in Kinesiology. Apply knowledge of scientific writing by preparing a scholarly research project such as a scientific literature review, systematic review, senior research thesis, original manuscript, or clinical case report.
Requisites: KINES 330 and declared in Kinesiology BS
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Spring 2025
Learning Outcomes: 1. Design a scholarly research writing project that will serve as the foundation for an advanced learning experience
Audience: Undergraduate

2. Apply critical thinking skills to evaluate scientific literature
Audience: Undergraduate

3. Develop peer review and revision skills through collaborative feedback sessions
Audience: Undergraduate

4. Compose a written paper that demonstrates knowledge and understanding of research projects
Audience: Undergraduate

5. Create an oral presentation to effectively communicate research findings and analyses
Audience: Undergraduate

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 2025
Learning Outcomes: 1. List responsibilities and competencies an entry-level health educator should possess.
Audience: Undergraduate

2. Define health terminology and identify one's role in the health education/promotion profession.
Audience: Undergraduate

3. Identify the physical, mental, and social characteristics affecting health in specific populations.
Audience: Undergraduate

4. Describe the role and importance of networking in the school and community health profession.
Audience: Undergraduate

5. Demonstrate effective methodologies of teaching health.
Audience: Undergraduate

6. Create a comfortable, safe environment for educating others about health topics.
Audience: Undergraduate

7. Write behavioral objectives for any health topic based upon target audience development and need.
Audience: Undergraduate

8. Incorporate National Health Education standards into health lesson plans.
Audience: Undergraduate

9. Practice skills planning and assessing their own classroom or community health-related presentations.
Audience: Undergraduate

10. Assess their own attitudes, beliefs, and values concerning these topics and the possible effects they may have on their professional work educating others.
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Observe teachers in their various roles as they work with students, meet with parents, confer with support staff and administrators, and collaborate with colleagues
Audience: Undergraduate

2. Practice various teaching methods (including technology) in relevant curricular areas
Audience: Undergraduate

3. Develop and implement appropriate unit and lesson plans in relevant curricular areas for optimal teaching and learning.
Audience: Undergraduate

4. Develop an awareness of one's preferred teaching style
Audience: Undergraduate

5. Practice various documentation and assessment tools
Audience: Undergraduate

6. Demonstrate classroom management principles that promote responsibility and self-discipline (help students learn conflict negotiation strategies)
Audience: Undergraduate

7. Recognize and understand individual and group needs, especially in terms of inclusive education (multicultural, gender-fair, disability aware)
Audience: Undergraduate

8. Demonstrate professional characteristics, including punctuality, confidentiality, flexibility, cooperation, enthusiasm, and responsibility
Audience: Undergraduate

9. Demonstrate oral and written communication skills at a level at which ideas are conveyed clearly and effectively.
Audience: Undergraduate

10. Teach with full responsibility for a minimum of six weeks
Audience: Undergraduate

11. Practice reflective teaching by communicating weekly with the University Supervisor through dialogue and reflective journaling to describe and ask questions regarding observations and perceptions
Audience: Undergraduate

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 2025
Learning Outcomes: 1. Locate anatomical structures of the musculoskeletal, articular, nervous, and vascular system.
Audience: Graduate

2. Demonstrate the functional application of these anatomical structures in identifying specific musculoskeletal, articular, nervous, and vascular injuries and conditions.
Audience: Graduate

3. Apply injury classification principles to specific tissues to understand injury severity.
Audience: Graduate

4. Recognize the role of these anatomical structures as they relate to athletic injury mechanism, evaluation, and rehabilitation.
Audience: Graduate

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 2025
Learning Outcomes: 1. Demonstrate proficient skills in CPR and AED use
Audience: Graduate

2. Demonstrate knowledge of emergency care related to sudden cardiac death, head trauma/spinal injuries, exertional heat illness and environmental conditions.
Audience: Graduate

3. Design and create emergency action plans for specific assigned venues related to athletic events.
Audience: Graduate

4. Show proper athletic equipment fitting and describe rules related to athletic equipment prior to activity as well as removal of equipment in emergency situations.
Audience: Graduate

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 2025
Learning Outcomes: 1. Demonstrate history taking, components of a physical exam, and components of preparticipation exam.
Audience: Graduate

2. Discuss basic injury terminology.
Audience: Graduate

3. Establish standards of basic patient interaction and HIPPA compliance.
Audience: Graduate

4. Create and implement custom padding, demonstrate appropriate splinting and taping techniques, and apply orthopedic appliances for various injuries.
Audience: Graduate

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 2025
Learning Outcomes: 1. Demonstrate competence in the scientific research process which includes the ability to consume, analyze, interpret, and critically review the scientific literature.
Audience: Undergraduate

2. Develop appropriate styles of written and oral communication to use both within and outside the scientific community.
Audience: Undergraduate

3. Actively develop disciplinary knowledge, logical/critical thinking skills, active listening skills, and awareness of the relevant scientific literature.
Audience: Undergraduate

4. Be able to efficiently search the literature (research and investigation skills) in response to an exercise psychology-related question, and be able to synthesize (critical thinking skills) the research to formulate succinct and evidence-based responses (communication skills).
Audience: Undergraduate

KINES 614 – BIOLOGICAL FACTORS INFLUENCING EXERCISE PERFORMANCE
3 credits.

Explore the physiological, biochemical, and molecular mechanisms of the body's response to both acute and chronic exercise. Examine the body's physiological responses to environmental stressors such as heat, cold, and hypoxia. Gain an in-depth understanding of advanced exercise physiology concepts through the analysis of research publications.
Requisites: KINES 314 or graduate/professional standing
Course Designation: Gen Ed - Communication Part B
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2025
Learning Outcomes: 1. Analyze the body's acute and chronic physiological responses to exercise
Audience: Both Grad & Undergrad

2. Evaluate key concepts of environmental factors affecting exercise performance
Audience: Both Grad & Undergrad

3. Demonstrate advanced information literacy skills within the context of exercise physiology
Audience: Both Grad & Undergrad

4. Compose a comprehensive written evaluation of the scientific literature pertaining to exercise physiology
Audience: Both Grad & Undergrad

5. Develop oral communication skills tailored for effective engagement within the exercise physiology scientific community
Audience: Both Grad & Undergrad

6. Demonstrate practical application of theoretical knowledge in the field of exercise physiology
Audience: Graduate

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
Learning Outcomes: 1. Define questions of physiologic relevance and apply methods to test those questions.
Audience: Both Grad & Undergrad

2. Summarize and consistently report on the methods and findings in brief reports.
Audience: Graduate

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 2024
Learning Outcomes: 1. Identify, quantify and describe mechanical aspects of human activities.
Audience: Both Grad & Undergrad

2. Determine forces within and eternal to the human body that are necessary to achieve desired behaviors.
Audience: Both Grad & Undergrad

3. Determine movements and forces that result from muscle activity and external forces.
Audience: Both Grad & Undergrad

4. Use mechanical principles to simulate standing.
Audience: Both Grad & Undergrad

5. Use mechanical simulation of standing to investigate neural control of balance.
Audience: Graduate

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 2025
Learning Outcomes: 1. Apply and integrate foundational athletic training skills (e.g. patient history, bracing and taping), in a clinical athletic training setting.
Audience: Graduate

2. Demonstrate relevant interpersonal skills needed in a patient-centered clinical environment.
Audience: Graduate

3. Identify common operational policies (e.g. clinical hours, facility standards, hygiene) and practices (e.g. emergency plans, medical documentation) found in athletic training clinical settings.
Audience: Graduate

4. Demonstrate adherence to appropriate ethical behaviors and professional boundaries.
Audience: Graduate

5. Use documentation techniques to record clinical patient encounters
Audience: Graduate

6. Demonstrate appropriate patient interactions under the direction of a clinical preceptor in the provision of patient care for various conditions (e.g. acute, chronic and emergent).
Audience: Graduate

7. Develop strategies for future patient interactions through observation, preceptor feedback, and written reflection of patient encounters.
Audience: Graduate

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 2024
Learning Outcomes: 1. Apply and integrate foundational athletic training skills (e.g. objective measures, evaluation of range of motion, manual muscle testing and special testing), in a clinical athletic training setting.
Audience: Graduate

2. Apply interpersonal, clinical exam skills and therapeutic interventions in patient encounters as directed by clinical preceptor for various conditions (e.g. acute, chronic and emergent).
Audience: Graduate

3. Identify operational policies (e.g. clinical hours, facility standards, hygiene) and practices (e.g. emergency plans, documentation) for your assigned clinical setting.
Audience: Graduate

4. Apply athletic training skills from previous coursework (e.g. taping, patient history, objective measures) and new skills as acquired in concurrent courses.
Audience: Graduate

5. Develop strategies for future patient interactions through observation, clinical experience, preceptor feedback, and written reflection of patient encounters.
Audience: Graduate

6. Interpret information gained from patient encounters and preceptor feedback to develop clinical decision-making skills.
Audience: Graduate

7. Demonstrate adherence to appropriate ethical behaviors and professional boundaries.
Audience: Graduate

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 2025
Learning Outcomes: 1. Apply athletic training skills from previous coursework (e.g. posture, gait, objective measures) and new skills as acquired in concurrent courses.
Audience: Graduate

2. Apply interpersonal, clinical exam skills, including differential diagnoses, and therapeutic interventions in patient encounters as directed by clinical preceptor for various conditions (e.g. acute, chronic and emergent).
Audience: Graduate

3. Identify operational policies (e.g. clinical hours, facility standards, hygiene) and practices (e.g. emergency plans, documentation) for your assigned clinical setting.
Audience: Graduate

4. Demonstrate adherence to appropriate ethical behaviors and professional boundaries.
Audience: Graduate

5. Develop strategies for future patient interactions through hands-on clinical experience, preceptor feedback, and written reflection of patient encounters.
Audience: Graduate

6. Interpret information gained from patient encounters and preceptor feedback to practice clinical decision-making skills.
Audience: Graduate

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 as a precursor to clinical immersion placement. Provides exposure to a large volume and variety of clinical experiences in authentic clinical settings. Increased patient encounters concurrent with skill acquisition.
Requisites: KINES 622
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2025
Learning Outcomes: 1. Apply athletic training skills from previous coursework and new skills as acquired in concurrent courses.
Audience: Graduate

2. Demonstrate adherence to appropriate ethical behaviors and professional boundaries.
Audience: Graduate

3. Interpret information from patient encounters and preceptor feedback to develop clinical decision-making skills.
Audience: Graduate

4. Identify operational policies (e.g. clinical hours, facility standards, hygiene) and practices (e.g. emergency plans, documentation) for your assigned clinical setting.
Audience: Graduate

5. Apply interpersonal, clinical exam skills, and therapeutic interventions in patient encounters as directed by the clinical preceptor for various conditions (e.g., acute, chronic, and emergent).
Audience: Graduate

6. Develop strategies for future patient interactions through observation, clinical experience, preceptor feedback, and written reflection of patient encounters.
Audience: Graduate

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 2024
Learning Outcomes: 1. Apply athletic training skills from all previous coursework (e.g. patient intake, physical examination, differential diagnosis, intervention planning, and execution of treatment plans) and new skills as acquired in concurrent courses.
Audience: Graduate

2. Apply interpersonal, clinical exam skills, including differential diagnoses, and therapeutic interventions in patient encounters as directed by clinical preceptor for various conditions (e.g. acute, chronic and emergent).
Audience: Graduate

3. Identify operational policies (e.g. clinical hours, facility standards, hygiene) and practices (e.g. emergency plans, documentation) for your assigned clinical setting.
Audience: Graduate

4. Demonstrate adherence to appropriate ethical behaviors and professional boundaries.
Audience: Graduate

5. Develop strategies for future patient interactions through hands-on clinical experience, preceptor feedback, and written reflection of patient encounters.
Audience: Graduate

6. Interpret information gained from patient encounters and preceptor feedback to practice clinical decision-making skills in a progressively autonomous fashion.
Audience: Graduate

7. Appraise student documented patient-encounter information to assess specific learner needs in the interest of progressing to autonomous practice.
Audience: Graduate

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 2025
Learning Outcomes: 1. Apply athletic training skills from all previous coursework (e.g. patient intake, physical examination, differential diagnosis, intervention planning, and execution of treatment plans) and new skills as acquired in concurrent courses.
Audience: Graduate

2. Apply interpersonal, clinical exam skills, including differential diagnoses, and therapeutic interventions in patient encounters as directed by clinical preceptor for various conditions (e.g. acute, chronic and emergent).
Audience: Graduate

3. Identify operational policies (e.g. clinical hours, facility standards, hygiene) and practices (e.g. emergency plans, documentation) for assigned clinical setting.
Audience: Graduate

4. Demonstrate adherence to appropriate ethical behaviors and professional boundaries.
Audience: Graduate

5. Develop strategies for future patient interactions through hands-on clinical experience, preceptor feedback, and written reflection of patient encounters.
Audience: Graduate

6. Interpret information gained from patient encounters and preceptor feedback to practice clinical decision-making skills in a progressively autonomous fashion.
Audience: Graduate

7. Appraise student documented patient-encounter information to assess specific learner needs in the interest of progressing to autonomous practice.
Audience: Graduate

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 2025
Learning Outcomes: 1. Recognize the role of evidence based practice in clinical decision in athletic training
Audience: Graduate

2. Demonstrate the role of disablement models and patient reported outcomes in the provision of patient-centered care.
Audience: Graduate

3. Describe legal and ethical concepts that influence athletic training practice.
Audience: Graduate

4. Identify components of professionalism and cultural competence in athletic training.
Audience: Graduate

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 2024
Learning Outcomes: 1. Define public health and differentiate public health/population health from personal health.
Audience: Graduate

2. Recognize the goals of public health, to improve health and eliminate health disparities, and how athletic training intersects with these goals.
Audience: Graduate

3. Summarize the methods used to measure the health of populations, find causes, and develop interventions specific to athletic training settings.

Audience: Graduate

4. Appraise specific policies (e.g. concussion, athletic pre-participation, catastrophic injury) that impact the provision of effective patient-centered care.
Audience: Graduate

5. Apply clinical skills required for management of injuries and conditions impacted by policy.
Audience: Graduate

6. Identify agencies, statutes, and standards of care that establish policies that impact athletic training practice.
Audience: Graduate

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 2024
Learning Outcomes: 1. Demonstrate advanced knowledge and skills in the assessment of injuries in order to apply therapeutic strategies to active populations.
Audience: Graduate

2. Use problem-solving skills to apply therapeutic strategies to common lower extremity and closed head injuries seen in active populations.
Audience: Graduate

3. Apply clinical and physiological knowledge for the implementation of manual therapeutic strategies
Audience: Graduate

4. Demonstrate the skills, knowledge, and clinical abilities to conduct a thorough clinical examination of injuries common to active populations.
Audience: Graduate

5. Demonstrate the skills, knowledge, and physiological framework for the safe use of therapeutic modalities and therapeutic exercise for athletic injury management.
Audience: Graduate

6. Demonstrate the appropriate knowledge and skills in the areas of problem solving, program design, documentation, and a variety of therapeutic interventions needed to treat injuries common to athletes and physically active populations.
Audience: Graduate

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 2025
Learning Outcomes: 1. Implement program design and instruct patients in therapeutic exercises
Audience: Graduate

2. Utilize clinical skills in order to establish differential diagnoses and defend rationale for final diagnosis
Audience: Graduate

3. Apply clinical and physiological knowledge for the implementation of manual therapeutic strategies
Audience: Graduate

4. Demonstrate the skills, knowledge, and clinical abilities to conduct a thorough clinical examination of injuries common to active populations
Audience: Graduate

5. Demonstrate the skills, knowledge, and physiological framework for the safe use of therapeutic modalities and therapeutic exercise for athletic injury management.
Audience: Graduate

6. Demonstrate the appropriate knowledge and skills in the areas of problem solving, program design, documentation, and a variety of therapeutic interventions needed to treat injuries common to athletes and physically active populations
Audience: Graduate

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 2024
Learning Outcomes: 1. Recognize and appropriately manage common medical conditions, including cardiovascular, pulmonary, respiratory, gastrointestinal, genitourinary, otolaryngological, ophthalmological, dental, and hematological conditions.
Audience: Graduate

2. Differentiate best practices for appropriate laboratory and diagnostic testing of common medical conditions.
Audience: Graduate

3. Summarize best practices for evaluating and treating patients across the lifespan and genders.
Audience: Graduate

4. Establish best practices for the management of patients with chronic medical conditions (e.g., high blood pressure, arthritis, IBD).
Audience: Graduate

5. Recognize and provide evidence-based health promotion and risk factors/disease prevention guidance as well as patient education and counseling.
Audience: Graduate

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 2025
Learning Outcomes: 1. Demonstrate the skills, knowledge, and clinical abilities to conduct a thorough clinical examination of illnesses common to active populations.
Audience: Graduate

2. Identify and appropriately manage common medical conditions, including endocrine, dermatological, genitourinary, otolaryngological, psychological, environmental, nutritional and hematological conditions.
Audience: Graduate

3. Recognize and appropriately manage common behavioral health conditions and work with the appropriate mental health providers.
Audience: Graduate

4. Establish best practices for the management of patients with chronic medical conditions (e.g., diabetes).
Audience: Graduate

5. Recognize and provide evidence-based health promotion and risk factors/disease prevention guidance as well as patient education and counseling.
Audience: Graduate

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 2025
Learning Outcomes: 1. Demonstrate the importance of evidence and evidence guided practice in athletic training.
Audience: Graduate

2. Use library resources to identify scientific articles about injuries specific to their clinical rotation.
Audience: Graduate

3. Apply the levels of evidence in the literature and how to identify and make clinical recommendations related to common clinical questions.
Audience: Graduate

4. Apply the literature evaluation process learned in this course to determine the level of evidence for common physical medicine interventions.
Audience: Graduate

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 2024
Learning Outcomes: 1. Appraise issues facing newly credentialed athletic trainers as they transition to professional practice.
Audience: Graduate

2. Discuss strategies for successful socialization to various athletic training employment settings.
Audience: Graduate

3. Identify gaps in professional knowledge, skills, and abilities using preceptorship evaluations, self-assessment examinations, and self-reflection activities.
Audience: Graduate

4. Design an individual professional development plan to address gaps in professional knowledge, skills, and abilities to address in future preceptorship placements.
Audience: Graduate

5. Develop an individualized Board of Certification exam preparation plan.
Audience: Graduate

6. Identify current issues in athletic training for the purpose of professional advocacy and engagement.
Audience: Graduate

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
Learning Outcomes: 1. Explore contemporary issues in the professional practice of athletic training.
Audience: Graduate

2. Assess published athletic training and sports medicine research.
Audience: Graduate

3. Present student led discussion of published research and professional issues in athletic training.
Audience: Graduate

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 2024
Learning Outcomes: 1. Identify and implement performance tests for assessing sport-specific fitness and athleticism to determine: physical status in order to identify athlete readiness to train & compete, performance development, strengths and weaknesses, and effectively interpret results for exercise prescription.
Audience: Graduate

2. Optimize potential objectives of weight loss and weight gain in sport for performance and develop ability to advise athlete's effectively regarding nutrition, hydration, and ergogenic aids.
Audience: Graduate

3. Apply training principles and exercise prescription in primary areas of strength and conditioning in order to optimize individual outcomes of performance, development and injury resistance.
Audience: Graduate

4. Apply sport-specific training (i.e. physiological and neuromechanical) principles to optimize training relative to the athlete's needs during return to play spectrum.
Audience: Graduate

5. Understand the use of ergogenic aids, and the ability to advise athletes regarding their use (positive and negative) in order to create awareness among the athletes.
Audience: Graduate

6. Explain governance over ergogenic aids.
Audience: Graduate

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 2025
Learning Outcomes: 1. Identify imagining modalities used in the diagnosis of musculoskeletal injuries and conditions.
Audience: Graduate

2. Summarize appropriate imagining selection patterns based on target tissue, clinical practice, and diagnostic accuracy.
Audience: Graduate

3. Explain the safety considerations for patients referred for musculoskeletal imaging including indications and contraindications (e.g radiographs, magnetic resonance imaging, computer tomography).
Audience: Graduate

4. Assess the role of musculoskeletal imaging in the development of therapeutic protocols and surgical planning.
Audience: Graduate

5. Appraise common clinical prediction rules in determining referral for diagnostic imaging.
Audience: Graduate

6. Examine the use of diagnostic ultrasound by non-radiologist in clinical practice settings
Audience: Graduate

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 2025
Learning Outcomes: 1. Identify the general concepts and differences in the legal regulation of non-prescription, prescription, and classified pharmaceuticals.
Audience: Graduate

2. Define the pharmacological concepts of dissolution, bioavailability, and bioequivalence.
Audience: Graduate

3. Summarize the pharmacodynamic principles of receptor theory, dose-response relationship, placebo effect, potency, and drug interactions as they relate to the mechanism of drug action and therapeutic effectiveness.
Audience: Graduate

4. Describe how common pharmacological agents influence pain and healing and their influence on various therapeutic interventions.
Audience: Graduate

5. Assess the general indications, contraindications, and adverse reactions of prescription and nonprescription medications commonly encountered in the practice of athletic training (e.g. steroidal and nonsteroidal anti-inflammatory medications, analgesics, antibiotics) as identified in the course syllabus.
Audience: Graduate

6. Explain the central role the prescribing provider plays in the selection, prescription, and clinical supervision of the athlete's clinical treatment program.
Audience: Graduate

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 2024
Learning Outcomes: 1. Assess health related data in athletic training and analyze its role in evidence-based practice, revenue models, practice management, and patient outcomes.
Audience: Graduate

2. Compare and contrast the advantages and disadvantages of various clinical information systems used in professional practice.
Audience: Graduate

3. Demonstrate the value of an athletic trainer in a healthcare system through analysis of clinical and administrative data.
Audience: Graduate

4. Apply the principles of quality improvement to address a specific issue in an athletic training health care setting.
Audience: Graduate

5. Create a proposal for the adoption of a health-related technology, application, or system for clinical practice across an organization.
Audience: Graduate

KINES 674 – CLINICAL SCHOLARSHIP IN ATHLETIC TRAINING
1 credit.

Develops understanding of the athletic trainer as an evidence-guided clinical scholar. Designed as a companion to an immersive clinical experience that allows examination of the elements of clinical scholarship in the practice of athletic training. Emphasis on understanding how patient-centered care is improved through best practices and the utilization of practice-based research tools.
Requisites: KINES 656
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2025
Learning Outcomes: 1. Identify the unique roles of clinicians and patients in the collection of practice-based information for the purpose of patient-centered care and shared decision-making.
Audience: Graduate

2. Develop appropriate clinical questions that can be best addressed at the point of care using PICO (Patient, Intervention, Comparison, Outcome) style questions.
Audience: Graduate

3. Assess an athletic training clinical environment for the purpose of developing data collection strategies during normal point-of-care encounters to improve best practices.
Audience: Graduate

4. Assess clinical practices that require unlearning strategies in the interest of up-to-date patient-centered care.
Audience: Graduate

5. Understand how participation in practice-based research networks can advance athletic training research and patient care efforts.
Audience: Graduate

6. Appraise point-of-care technology (e.g., electronic medical records) to enhance the collection of practice-based data.
Audience: Graduate

KINES 690 – INTERNSHIP IN KINESIOLOGY
1-6 credits.

Provides an experiential learning experience to integrate theoretical concepts learned in the classroom into field experience. Through supervised practical experiences, gain valuable insights into the diverse applications of exercise science in various settings. Assume responsibilities that are consistent with 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 2025
Learning Outcomes: 1. Demonstrate the ability to integrate theoretical knowledge of kinesiology into practical applications within a professional setting.
Audience: Graduate

2. Research and obtain information which can be used as a basis for making choices regarding future career paths, areas of specialization, and/or further study in exercise science.
Audience: Graduate

3. Cultivate effective interpersonal skills and demonstrate an understanding of diverse perspectives.
Audience: Graduate

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: Spring 2025

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 2024

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 2024

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 2023

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 2023

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 2025

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 2024

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: Spring 2024

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 2025
Learning Outcomes: 1. Identify the strengths and weaknesses of epidemiological study designs and critical issues in the analysis of physical activity-related research.
Audience: Graduate

2. Compare and contrast the specific measurement tools used in physical activity surveillance and research and identify the errors associated with these tools.
Audience: Graduate

3. Identify current public health recommendations for physical activity and describe how they have evolved.
Audience: Graduate

4. Describe the contemporary trends in physical activity in the United States and know how they have been measured.
Audience: Graduate

5. Identify the relationships between physical activity and various health conditions/diseases.
Audience: Graduate

6. Review and analyze the epidemiologic evidence for a link between physical activity and a specified outcome of interest (e.g. physical activity and depression), and present a review of the evidence
Audience: Graduate

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, kinesthesis, 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 2025

KINES 862 – ADVANCED RESEARCH ETHICS & RESPONSIBLE CONDUCT OF RESEARCH
3 credits.

Explore the ethical dilemmas faced by researchers across biomedical and nonbiomedical research and consider how to best support scientific integrity and public trust. Fulfill NIH training requirements for the responsible conduct of research. Identify the regulatory guidelines and ethical frameworks and principles guiding research ethics and responsible research conduct. Develop the skills to make ethically informed decisions in relation to their research and training.
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Learning Outcomes: 1. Identify key U.S. policies and regulations related to the responsible conduct of research (RCR) and explain their significance in adhering to ethical research standards.
Audience: Graduate

2. Describe the historical context behind the need for human subject protection in research and summarize how responsible research conduct guidelines and regulations have evolved.
Audience: Graduate

3. Apply ethical principles to analyze and address challenges related to the protection of human subjects and adherence to RCR standards.
Audience: Graduate

4. Evaluate ethical issues by critically examining dilemmas encountered in human subject protection and RCR practices, using examples from the field of kinesiology and occupational therapy.
Audience: Graduate

5. Evaluate ethical issues in the protection of human subjects and RCR, demonstrating an in-depth understanding within the fields of kinesiology and occupational therapy.
Audience: Graduate

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 2025

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 2025

KINES 950 – PROFESSIONAL SKILLS AND RESEARCH IN KINESIOLOGY
3 credits.

Foundational skills to succeed in both academic and applied settings within the field of kinesiology. Search, analyze, and critique scientific literature on exercise and health while developing critical thinking, research methodologies, and evidence-based decision-making. Refine oral and written communication and create professional materials including CV and cover letter for career development.
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, for 3 number of completions
Learning Outcomes: 1. Understand the methods used to search for, analyze, and critique scientific literature.
Audience: Graduate

2. Develop proficiency in formulating research questions, locating relevant literature, appraising studies, synthesizing findings, and applying conclusions across diverse contexts.
Audience: Graduate

3. Perform thoughtful critiques of your peers' work by providing constructive feedback.
Audience: Graduate

4. Refine oral and written communication skills for presenting information clearly and effectively.
Audience: Graduate

5. Develop professional materials that showcase qualifications for future job opportunities.
Audience: Graduate

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: Spring 2025

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: Spring 2024

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
Learning Outcomes: 1. Name and explain the basic concepts of physical activity epidemiology, including study designs, public health guidelines, surveillance, and physical activity measures
Audience: Graduate

2. Critically evaluate current research on physical activity and health topics
Audience: Graduate

3. Prepare a presentation and lead a group in an in-depth discussion of the methods, interpretation, and implications of recent scientific articles
Audience: Graduate

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
Learning Outcomes: 1. Demonstrate an understanding of the major current and past theories, research findings, methodologies and techniques related to the specific topic for the course
Audience: Graduate

2. Retrieve and examine scientific literature, evaluate evidence for and against hypotheses, and be able to discuss strengths and weaknesses in the existing literature with respect to the specific topic
Audience: Graduate

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 2025

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 2024

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 2025