

DEPARTMENT OF KINESIOLOGY

Paul Hwang, PhD, Chair

Mission: The mission of the Department of Kinesiology is to prepare students through personalized education in a Christ-centered, Spirit-empowered environment with the knowledge, skills, and ability to enter the professional field, or for further graduate study in kinesiology and allied health programs.

Purpose of the degree:

Kinesiology is an academic discipline which involves the study of physical activity and its impact on health, society, and quality of life. It includes, but is not limited to, such areas of study as exercise physiology, sports management, athletic training and sports medicine, socio-cultural analyses of sports, sport and exercise psychology, fitness leadership, physical education-teacher education, and pre-professional training for physical therapy, occupational therapy, medicine and other health related fields. The program prepares students for careers which involve the study of physical activity as well as prepares students to enter graduate level programs in kinesiology, health, and medical related fields. The program also prepares students for professional certifications from the ACSM, NSCA, and ISSN.

Programs

Major:

- Kinesiology B.S. with a Concentration in Health and Human Performance (<https://catalog.vanguard.edu/cas/kinesiology/kinesiology-bs-health-human-performance/>)
- Kinesiology B.S. with a Concentration in Pre-Health Professions (<https://catalog.vanguard.edu/cas/kinesiology/kinesiology-bs-prehealth/>)

Minor:

- Kinesiology Minor (<https://catalog.vanguard.edu/cas/kinesiology/kinesiology-minor/>)

Courses

KINE-119 Intercol.Athl: Dance 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree.

KINE-133C Musical Theatre Dance I 1 Credit

An introduction to dance for musical theatre. Dance styles covered will include tap, jazz, and musical theatre movement. This course is cross-listed with THEA-133C and fulfills the KINE-146C Activity Core Curriculum requirement.

KINE-135 Theatre Movement 2-3 Credits

An introduction to the study of stage movement. Includes exercises and techniques to insure flexibility, meaningful aesthetic stage movement and physicality utilizing the Laban and Alexander techniques.

KINE-145C Lifetime Fitness/Wellness Lect 1 Credit

This course is currently on teach out. Students will gain an understanding of physical conditioning and wellness pertaining to the five components of health-related fitness. Students will develop an understanding of lifestyle related diseases and behavior modification techniques. In addition, there will be opportunities to participate in a variety of movement experiences and assessment laboratories related to fitness. It is recommended to take both lecture and activity within the same academic year.

Terms Typically Offered: Fall and Spring.

KINE-146C Lifetime Fitness/Well Activity 1 Credit

Course may include any of the following topics: conditioning, exercise and nutrition, weight lifting, creative aerobics, badminton, beginning/intermediate tennis, racquetball, bowling, golf, bicycling, disk activities, volleyball, basketball, soccer, softball, baseball, beginning/advanced taekwondo, surfing, hip-hop/funk, swing dance, core strengthening, kickboxing or other special topics of physical activity. Activity course meets the core activity requirement. Activity course may also be repeated for elective credit. Lab fee for some courses.

KINE-148C Lifetime Fitness and Wellness Lecture 3 Credits

This course presents information and activities which emphasize wellness, fitness and exercise and their relationship to health. This course also explores how health, fitness and faith interconnect. Lectures and a variety of accompanying laboratory activities help students make informed decisions about fitness, exercise, and health and contribute to the development of self-directed physical activity and lifetime wellness. Regular participation in physical activity is a component of the course. A fitness tracker either wearable or with a phone app will be required. Terms Typically Offered: Fall and Spring.

KINE-150 Biophysical Foundations of Kinesiology 3 Credits

Biophysical Foundations of Kinesiology is intended for entry-level students with an interest in human movement and physical activity. It provides a rigorous introduction to the biophysical foundations of kinesiology including applications of basic science to professional and clinical settings. Students will become familiar with the field of kinesiology, and how this field may serve as preparation for a wide range of professional pursuits, including post-graduate occupations, professional programs of study in medicine and allied health fields, and as a basis for kinesiology research careers. Key concepts concerning the anatomical, mechanical, physiological, and neurological basis of human movement will be taught.

Co-Requisite: KINE-150L

Terms Typically Offered: Fall.

KINE-150L Biophysical Foundations of Kinesiology Lab 1 Credit

Biophysical Foundations of Kinesiology is intended for entry-level students with an interest in human movement and physical activity. The course focuses on laboratory experiences within each area; the anatomical; mechanical, physiological, and neurological basis of human movement. Lab Fee.

Co-Requisite: KINE-150

Terms Typically Offered: Fall.



KINE-160 Intercollegiate Athl: Baseball 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE-160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Spring.

KINE-161 Intercollegiate Athl: Basketball-Men 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Fall and Spring.

KINE-162 Intercollegiate Athl: Basketball-Women 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Fall and Spring.

KINE-163 Intercollegiate Athl: Soccer-Men 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Fall.

KINE-164 Intercollegiate Athl: Volleyball-Women 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Fall.

KINE-165 Intercollegiate Athl: Volleyball-Men 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Spring.

KINE-166 Intercollegiate Athl: Softball-Women 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Spring.

KINE-167 Intercollegiate Athl: Cross Country-Men 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Fall.

KINE-168 Intercollegiate Athl:cross Country-Women 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than 4 hours of KINE 160-178 can be counted toward the degree. Terms Typically Offered: Fall.

KINE-170 Intercollegiate Athl: Track-Men 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Spring.

KINE-171 Intercollegiate Athl: Track-Women 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Spring.

KINE-172 Intercollegiate Athl: Soccer-Women 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Fall.

KINE-176 Intercollegiate Athl:Champions/Character Character 1 Credit

This course is based upon the NAIA Champions of Character Program and is designed to assist the student-athlete in developing skills in the areas of academics, personal growth, career choice, and commitment to service. This course will help enhance the student-athlete's transition into Vanguard University Athletics and increase their understanding of the responsibilities of being a student-athlete. Enrollment is limited to members of athletic teams and is intended to be taken during the athlete's first semester at the University. Substitution of this class for the University's activity requirement is not permitted. Terms Typically Offered: Fall.

KINE-181 Intercollegiate Athl: Golf-Men 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE-160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Fall.

KINE-182 Intercollegiate Athl: Golf-Women 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE-160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Fall.



KINE-184 Intercollegiate Athl: Stunt 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Spring.

KINE-185 Psychological and Sociocultural Foundations of Kinesiology 3 Credits

This course is intended for entry level students with an interest in human movement and physical activity. The focus of this course is on exploring the sociological and psychological perspectives of participation in physical activity across the lifespan. Terms Typically Offered: Spring.

KINE-186 Intercollegiate Athl: Wrestling-Men 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Spring.

KINE-187 Intercol. Athl: Wrestling-Women 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree.

KINE-189 Intercollegiate Athl: Beach Vlybl-Women 1 Credit

This course provides college credit for participating in intercollegiate athletics and the responsibilities that come with being a Vanguard University student athlete. Substitution of this class for the University's activity requirement is not permitted. No more than four (4) hours of KINE 160-179; 181-182; 184; 186-189 can be counted toward the degree. Terms Typically Offered: Spring.

KINE-215 Responding to Emergencies 2 Credits

An advanced First Aid class with an in-depth introduction to responding to a variety of emergency situations. It will provide the student with a complete understanding and knowledge of not only the skills and actions in an emergency situation, but also the physiology, reasoning, and knowledge behind the skills. ARC certification is obtained with the completion of this course. Lab Fee. Terms Typically Offered: On Demand.

KINE-217 Outdoor/Recreational Experience 1 Credit

This course encourages the student to identify and demonstrate an understanding of the value, meaning, and benefits of outdoor recreation and to explore a variety of outdoor adventure experiences. Lab fee. Terms Typically Offered: On Demand.

KINE-218 Injury Recognition and Management 3 Credits

This course is lecture/lab based and will build on the student's background in human anatomy. Areas of focus include injury recognition, signs and symptoms of injuries specific to body parts, prevention and treatment of orthopedic injuries, wound management, splinting, and supportive taping techniques. Lab fee. Terms Typically Offered: Spring.

KINE-221 Movement Anatomy 3 Credits

This course is a study of the structure of the human body with particular emphasis on the skeletal and muscular systems and their function in the mechanics of human movement. Prerequisite: BIOL-204, BIOL-204L. Terms Typically Offered: Fall.

KINE-231 Global Games/Recreatn/Activit 3 Credits

This class will provide students with an exposure to games, sports, and recreational activities from cultures around the world. The student will also be exposed to a variety of teaching methodologies including peer instruction and demonstration, cooperative learning groups, and participation in activities. Terms Typically Offered: On Demand.

KINE-235 Medical Terminology 2 Credits

This course introduces the student to the basic rules for interpreting, constructing, and spelling medical terms. Topics include structure; recognition; analysis; definitions; spelling; pronunciation, and a combination of medical terms from prefixes, suffixes, roots, and combining forms. The course is organized by body systems with an emphasis on anatomy and physiology, pathological conditions, and diagnostic treatments and procedures. Terms Typically Offered: Fall and Spring.

KINE-242 Motor Behavior Across the Lifespan 3 Credits

This class will examine the basic principles of motor learning, motor control and motor development as they relate to human voluntary movement. Applications of principles through observations and assessment of motor behavior, from learning to performance, as well as motor development through the lifespan will be covered. Prerequisite: KINE-150, KINE-150L. Terms Typically Offered: Spring.

KINE-260 Principles of Therapeutic Rehabilitation 3 Credits

This class will examine how to assist a patient in healing from acute injuries by reducing swelling and pain, improving range of motion, strength and balance. Fundamentals of healing chronic injuries will also be incorporated. This course will include the physiological basis of using basic therapeutic modalities. This course will also include applied learning and techniques. Terms Typically Offered: Fall.

KINE-291 Special Topic: 1 Credit

Study of a special topic in kinesiology. May be repeated for credit. Terms Typically Offered: On Demand.

KINE-292 Special Topic: 2 Credits

Study of a special topic in kinesiology. May be repeated for credit. Terms Typically Offered: On Demand.

KINE-293 Special Topic: 3 Credits

Study of a special topic in kinesiology. May be repeated for credit. Terms Typically Offered: On Demand.



KINE-314A Upper Extremity Injury Assmt 2 Credits

This course is a combination of lecture and hands-on lab. It will build on the student's prior knowledge of anatomy and injury recognition. The focus of this course is to assist the student in developing a systematic, thorough method of injury assessment including the development of a medical history, palpation points, range of motion tests, manual muscle tests, neurological tests, and special tests. This course will focus on the assessment of the head, cervical and thoracic spine, shoulder, elbow, wrist, and hand.

Prerequisite: KINE-218

Terms Typically Offered: Fall.

KINE-314B Lower Extremity Injury Assmnt 2 Credits

This course is a combination of lecture and hands-on lab. It will build on the student's prior knowledge of anatomy and injury recognition. The focus of this course is to assist the student in developing a systematic, thorough method of injury assessment including the development of a medical history, palpation points, range of motion tests, manual muscle tests, neurological tests, and special tests. The area of focus is the development of a systematic method of injury assessment. This course will focus on the assessment of the lumbar spine, hip and pelvis, knee, lower leg, ankle, and foot.

Prerequisite: KINE-218

Terms Typically Offered: Spring.

KINE-321 Principles of Coaching 3 Credits

Analysis of the art of coaching, studying: motivation, communication, discipline, morale, and personality traits of individuals, and organizational and administrative procedures involved in scheduling, equipment purchasing and maintenance, and public relations.

Terms Typically Offered: On Demand.

KINE-323 Physiology of Exercise 4 Credits

A study of the effects of exercise upon the systems and organs of the body. Analysis of these systems and how maximum efficiency in physical performance is achieved. Lecture three hours, laboratory three hours. Lab fee.

Prerequisite: BIOL-304, BIOL-304L

Terms Typically Offered: Spring.

KINE-324 Physical and Health Education for K-8 Educators 3 Credits

This undergraduate course equips K-8 educators with essential knowledge and skills to effectively teach health education in primary and middle school settings. Participants will explore comprehensive health education frameworks, emphasizing age-appropriate strategies for fostering a positive and healthy learning environment. The curriculum covers key topics such as nutrition, physical activity, mental health, and personal hygiene, offering practical tools for integrating these concepts into daily classroom activities. Through interactive discussions, case studies, and hands-on activities, educators will develop instructional approaches that cater to diverse learning styles and address the unique health needs of students in the K-8 age range.

Terms Typically Offered: Fall, Spring, and Summer.

KINE-329 Fitness Assessment and Exercise Prescription 3 Credits

This course is designed to provide the student with the theoretical background and practical experience necessary for the safe and scientific evaluation of physical fitness, particularly as it relates to health and disease and the development of programs for remediation, maintenance and enhancement of motor and health related qualities. Lab fee.

Prerequisite: KINE-150, KINE-150L

Terms Typically Offered: Fall and Spring.

KINE-333 Principles of Nutrition and Metabolism 3 Credits

Introduction to metabolism of protein, fat and carbohydrate; the biological role of vitamins and minerals; nutrient requirements during the life cycle; assessment of dietary intake and nutritional status. The course also discusses the biochemical role of nutrients in maintaining health, and the effects of over- and under-nutrition on disease pathogenesis. The students will also gain an understanding of how nutrition is linked to physical activity and sport performance.

Prerequisite: BIOL-304

Terms Typically Offered: Fall.

KINE-343 Ldrshp/Mgt of Kinesiology Prog 3 Credits

This course focuses on the organization, administration, and management of programs within the field of Kinesiology (including physical education, intramural, interscholastic, intercollegiate athletics, athletic training, private sport and fitness, as well as recreation) programs/departments. Course content will emphasize (a) organization and leadership theory and practice, particularly as they relate to policy, politics, and power, (b) the practicalities of program development, management and supervision (i.e. communication, human resources, public relations, financial management, budgeting and purchasing, facilities, and equipment), and (c) issues of law, risk management, professionalism, ethics and philosophy as they relate to the field.

Terms Typically Offered: On Demand.

KINE-345 Sports Nutrition 3 Credits

This course is designed to address high level sport nutritional issues and, lend understanding to the physiological aspects and lifestyle practices of athletes involved in high-level human performance. Students will be introduced to the field of sports nutrition and the principles of ergogenic aids. The metabolism of nutrients will be emphasized as they pertain to athletic performance, and students will be familiarized with the nutritional practices that optimize athletic performance. In addition, body composition changes desirable to achieve optimal competitive efforts will be discussed.

Prerequisite: KINE-333

Terms Typically Offered: Spring.

KINE-350 Kinesiology Internship 1-5 Credits

This course provides the student with opportunities to demonstrate competencies developed in previous courses by working in an agency under the supervision of a qualified practitioner. For every 1 credit of KINE 350 registered, the student will engage in 45 hours of internship.

Terms Typically Offered: Fall, Spring, and Summer.



KINE-380 Rehabilitation Techniques 3 Credits

This course is designed to meet the needs of students pursuing careers in physical therapy and athletic training. It is a beginning rehabilitation course for the purpose of instruction in the functional stages of rehabilitation along with teaching the student a variety of rehabilitation techniques specific to each body segment. The course will include lab sessions in rehabilitation techniques.

Prerequisite: KINE-260

Terms Typically Offered: On Demand.

KINE-395 ECG and Exercise Testing 3 Credits

The course is designed to teach the students how to read and interpret an electrocardiogram as well as conduct and evaluate graded exercise tests. This course has great practical application for students who seek to pursue careers that involve exercise stress tests, especially cardiac rehabilitation. Lab fee.

Prerequisite: BIOL-304

Terms Typically Offered: Fall.

KINE-421 Biomechanics 3 Credits

Provide students with an understanding of mechanical principles of movement and their application to performance. Qualitative and quantitative analyses of movement will be utilized.

Prerequisite: KINE-221

Terms Typically Offered: Spring.

KINE-422 Ethics in Health Care 3 Credits

This course will introduce the student to the principles of medical ethics for the purpose of preparing the student for the difficult and controversial issues they will have to face in the allied health field. This class will enable the student to understand, consider, and place in the context the critical social, ethical, legal, and regulatory issues in the health care system.

Terms Typically Offered: Spring, even years.

KINE-430 Principles of Strength & Conditioning 3 Credits

This course takes a multi-faceted approach to the science of strength training. Topics to be covered include: exercise physiological concepts and applications, testing and evaluation, beginning and advanced flexibility and exercise techniques, program design, periodization, aerobic and anaerobic training considerations, nutrition, performance enhancing substances, exercise prescription for the athlete, and organization and administration of an exercise facility. This course will also provide an opportunity for the student to develop sport specific programs. Ultimately this course should prepare the student to successfully pass the National Strength and Conditioning Associations' exam for the Certified Strength and Conditioning Specialist credential (CSCS).

Prerequisite: KINE-323, KINE-329

Terms Typically Offered: Spring.

KINE-433 Phys Educ/Secondary Schools 3 Credits

Provides the student with instruction and experience in teaching physical education to the secondary student. Through observation, research, and class lecture/discussion, the students will be equipped to develop and teach physical education curriculum. This course introduces principles that focus on the development of physical, social, emotional, and mental skills for the secondary student.

Prerequisite: KINE-325, KINE-335

Terms Typically Offered: On Demand.

KINE-435 Physical Ed for Elem Schools 3 Credits

This course is designed to teach the student how to incorporate the components of movement, dance, fundamental movement patterns, fitness activities, and social skills into an educational movement program for children, specifically K-6.

Terms Typically Offered: Fall.

KINE-440 Research/Stats in Kinesiology 3 Credits

The students are introduced to research design and methods as well as basic statistical procedures for analyzing data. The concepts learned in class are integrated into a data-based kinesiology research project.

Prerequisite: MATH-265C

Terms Typically Offered: Fall.

KINE-443 Sport Psychology 3 Credits

This course is designed to introduce students to the psychological aspects of sport and physical activity. From the sport perspective, emphasis will be placed on mental preparation of teams and individuals for competition. From the exercise perspective, group dynamics, motivation and exercise adherence will be covered.

Prerequisite: PSYC-103C

Terms Typically Offered: On Demand.

KINE-450C Capstone Kinesiology Senior Project 3 Credits

This course is designed to integrate the student's faith with their profession. The student will have opportunities to engage other professionals within the field of Kinesiology through guest speakers, and will be given the opportunity to reflect on their own faith journey. Students will also be required to complete a senior research project on the topic of their choice with instructor guidance and permission

Terms Typically Offered: Spring.

KINE-451 Adapted Phys Activ, Rec & Sport 3 Credits

Principles and procedures in selecting and sequencing learning activities of school age children with disabilities that require special physical programs or adapted activities in the regular program.

Terms Typically Offered: On Demand.

KINE-455 Kinesiology Teaching Internship 1-3 Credits

The student will meet regular hours each week for classes and/or meetings that are established at the beginning of the semester with the supervising professor. The intern assists an instructor in planning and conducting a course and/or laboratory sessions. Course can be repeated for a maximum total of 3 units.

Terms Typically Offered: Fall and Spring.

KINE-470 Special Topic: 1-3 Credits

Study in a special topic in the field of kinesiology. May be repeated for credit.

Terms Typically Offered: On Demand.

KINE-480 Individual Studies 1-3 Credits

May be repeated for credit.

Terms Typically Offered: On Demand.

