

KINESIOLOGY AND PUBLIC HEALTH

Kinesiology Bldg. (43A), Room 458

Phone: 805.756.2545

Email: kinesiology@calpoly.edu, publichealth@calpoly.edu

<https://kinesiology.calpoly.edu>

<https://healthresearch.calpoly.edu>

Department Chair: Kris Jankovitz

Academic Programs

Program name	Program type
Exercise and Sport Studies	Minor
Kinesiology	BS
Public Health	BS

The Department of Kinesiology and Public Health offers undergraduate programs leading to the BS in Kinesiology, the BS in Public Health and the minor in Exercise and Sport Studies. The department also contributes to the education of all students by providing general education courses in health and wellbeing, sport sociology, psychology of injury, and elective courses in first aid/CRP/AED; physical activity, sport and fitness; and support courses for students intending to pursue careers in K-8 teaching. The programs are designed to meet the mission of preparing students to promote physical activity and health for all and to make an impact in the fields of exercise science, disease prevention and treatment, physical activity and sport, and public health.

The Department of Kinesiology and Public Health is home to the Center for Health Research. Initiated in 2007, the Center for Health Research is a university-wide, multidisciplinary, research center that provides students with unique opportunities to engage in research, community outreach and programs to improve health outcomes.

The Kinesiology and Recreation Center building complex provides laboratory, research and office space for the Department of Kinesiology and Public Health and provides access to quality physical activity and sport facilities for students, faculty and staff.

Undergraduate Programs

BS Kinesiology

The BS in Kinesiology provides training in the multiple sub-disciplines of kinesiology (biomechanics, exercise physiology, health promotion, motor behavior, and sport and exercise psychology/ sociology). The program offers a broad based curriculum incorporating the scientific and clinical knowledge of exercise science, health promotion, and sport science that is applicable to preventive and clinical exercise science, commercial fitness, sport instruction and educational settings. In addition to the core coursework for the kinesiology major, students choose a concentration to gain a deep and focused understanding of a specific subfield in kinesiology. The program provides students with the knowledge, skills and abilities they need to move into a variety of entry level positions in exercise and sport sciences, health promotion, or to pursue graduate education in kinesiology, or allied health professions. For students who are considering graduate programs in medicine or allied health professions (e.g., nursing, occupational therapy physical therapy,

physician assistant, etc.) additional coursework beyond the bachelor's degree will be required.

Concentrations

Exercise Science

Exercise science professionals lead and demonstrate safe and effective methods of exercise to clients in a variety of settings. Students who complete the Exercise Science Concentration will be prepared to work in a wide range of enterprises that include clinical exercise physiology, cardiac rehabilitation, and commercial fitness facilities or pursue graduate education in Kinesiology or Exercise Science. Completion of this concentration could also prepare students for certification exams for Certified Health and Fitness Specialist (ACSM), Clinical Exercise Specialist (ACSM), Certified Strength and Conditioning Specialist (NSCA) and Exercise Physiologist-Certified (ASEP). For students who are considering graduate programs in allied health professions (e.g., nursing, physical therapy, physician assistant, etc.) additional coursework will be required.

Health Promotion

Students who complete the Health Promotion Concentration will be prepared for a variety of health promotion related careers in various public/private settings, college/university settings, non-profit health promotion agencies and to pursue graduate study in Health Promotion/Health Education/Public Health. Possible job titles include Health Promotion Program Coordinator, Physical Activity and Public Health Specialist, Fitness and Wellness Coordinator, Personal Trainer, Health & Fitness Specialist. For students considering graduate programs in allied health professions (e.g., nursing, physical therapy, physician assistant, etc.), additional coursework will be required

Sport Science

Students who complete the BS in Kinesiology with the sport science concentration will be prepared for entry level leadership positions in competitive sport settings which include coaching at the youth, club/ interscholastic, college/university and international levels. They would also be prepared for advanced study in master's degree programs with an emphasis in coaching, or for employment as a personal trainer or group exercise instructor. Course content and learning experiences are focused on fundamentals of athletic and sport performance, psychological and sociological benefits of participating in sport and athletics and skill development in leadership and mentoring. Students who complete this concentration will also be well prepared to take the American College of Sports Medicine (ACSM) Certified Personal Trainer Exam and the ACSM Certified Group Instructor Exam. They will also be prepared to complete a wide variety of American Sport Education Program (ASEP) certification courses, request inclusion in the National Registry of Coaches (coordinated by ASEP) and pursue coaching certification from sport specific governing bodies (e.g., USA Track and Field, USA Swimming, USA Soccer, etc.).

BS Public Health

The BS in Public Health prepares students for professional positions in public health agencies, community-based organizations, health care, tribal health, international organizations, and/or for graduate study in public health or allied health professions. The curriculum aligns with the standards approved by the Association of Schools and Programs of Public Health and by the National Commission for Health Education Credentialing (NCHEC). Graduates of the program are eligible to take the national Certified Health Education Specialist (CHES) examination administered by NCHEC. Our program helps students to understand

health at the individual, community, and population levels emphasizing critical thinking, problem solving and teamwork through hands-on application, and project-based learning. Students have opportunities to participate in community outreach activities, internships, and undergraduate research. In addition to the core coursework for the public health major, students choose a concentration to gain a deep and focused understanding in a specific area of public health. For students who are considering graduate programs in medicine or allied health professions (e.g., nursing, occupational therapy, physical therapy, physician assistant, etc.) additional coursework beyond the bachelor's degree will be required.

Concentrations

Community and Public Health

Students who complete the Community and Public Health Concentration will be prepared for careers in local, state and federal public health departments; non-profit health agencies and coalitions; health insurance providers, hospital, clinical and research settings; and to pursue graduate study for the masters in public health and the MS in Health Care Administration, Community Health, Environmental Health, Health Education or Health Promotion. This concentration provides a foundation in concepts that are complementary for students who are planning to pursue graduate study in the allied health professions or medicine.

Culture and Society in Health

Students who complete the Culture and Society in Health Concentration will be prepared with a strong foundation in the social determinants of health. Graduates are prepared for careers in a variety of settings such as local, state and federal public health agencies, non-profit health agencies, hospital, clinical and research settings, and to pursue graduate study for the master's in public health. This concentration provides a foundation in concepts that are complementary for students who are planning to pursue graduate study in the allied health professions or medicine.

Physical Activity in Public Health

Students who complete the Physical Activity in Public Health Concentration will be prepared to work with organizations engaged in planning to promote physical activity and improve health outcomes. Graduates are prepared for careers in local, state, and federal public health agencies, non-profit health agencies and coalitions, local government agencies, corporate and commercial fitness settings. Students who pursue this concentration will also qualify for the ACSM/NPAS Physical Activity in Public Health Specialist (PAPHS) certification (ACSM.org). In addition, it prepares students to pursue graduate study for the master's in public health, the MS in Kinesiology, Health Promotion, or Health Education.

Worksite and University Health Promotion

Students who complete the Worksite and University Health Promotion Concentration are prepared for careers as health promotion/wellness specialists in various public/private worksites, college/university settings, non-profit health agencies, health insurance providers, and to pursue graduate study for the master's in public health, the MS in Community Health, Health Promotion, Health Education, or Occupational Health.

Exercise and Sport Studies Minor

Students who complete the minor in exercise and sport studies will be prepared for entry-level positions in coaching at the youth, club/ interscholastic or college/university levels. They will also be prepared to take the California Subject Examination (CSET) for physical education to enter a single subject credential program to teach physical education.

Students who complete this minor could also explore other career options related to exercise, physical activity, and sports and will be better prepared to apply for graduate programs in sport psychology and potentially become a Certified Mental Performance Consultant (CMPC) through the Association for Applied Sport Psychology (AASP).

Students interested in the minor should check course descriptions to ensure they have met prerequisites. In particular, KINE 366 Applied Sport Psychology requires PSY 201, PSY 202 or KINE 266.

HLTH Courses

HLTH 101. Orientation to Public Health. 1 unit

Term Typically Offered: F, W

CR/NC

Prerequisite: Public Health majors only.

Orientation to the public health discipline. Advising, introduction to the faculty, department and campus resources to facilitate student success; extracurricular and research opportunities, careers and current topics in public health. Credit/No Credit grading only. Course may be offered in classroom-based or online format. 1 lecture.

HLTH 201. Introductory Undergraduate Research. 1-2 units

Term Typically Offered: F, W, SP

Introduction to individual research, studies, or surveys of selected problems. Intended for students in Kinesiology and in Public Health. Total major credit limited to 4 units. Total credit limited to 6 units. Crosslisted as HLTH/KINE 201.

HLTH 250. Healthy Living. 4 units

Term Typically Offered: F, W, SP

2019-20 or later catalog: GE Area E

2017-19 or earlier catalog: GE Area D4

Personal health with emphasis on healthful behavioral practices including physical fitness, nutrition, psychosocial well-being, alcohol and other drugs, intentional and unintentional injury, reproductive health, infectious and non-infectious diseases. Not open to students with credit in HLTH/KINE 255. Course may be offered in classroom-based or online format. 4 lectures. Fulfills GE Area E (GE Area D4 for students on the 2017-19 or earlier catalogs).

HLTH 255. Personal Health: A Multicultural Approach. 4 units

Term Typically Offered: F, W, SP

2019-20 or later catalog: GE Area E

2017-19 or earlier catalog: GE Area D4

USCP

Personal health with special emphasis on multicultural practices. Not open to students with credit in HLTH/KINE 250. Course may be offered in a classroom-based or online format. 4 lectures. Fulfills GE Area E (GE Area D4 for students on the 2017-19 or earlier catalogs); and USCP.

HLTH 260. Women's Health Issues. 4 units

Term Typically Offered: F, W, SP

2019-20 or later catalog: GE Area E

2017-19 or earlier catalog: GE Area D4

USCP

Introduction to major health issues that affect women disproportionately or differently from men. Topics include female sexual health and reproduction, exercise and eating behaviors, substance abuse, mental health and stress, and violence against women. Course may be offered in classroom-based or online format. 4 lectures. Fulfills GE Area E (GE Area D4 for students on the 2017-19 or earlier catalogs); and USCP.

HLTH 265. Introduction to Community and Public Health. 3 units

Term Typically Offered: F, W, SP

Prerequisite: one of the following: HLTH/KINE 250, HLTH/KINE 255, or HLTH/KINE 260. Recommended: HLTH 101.

Introduction to community health and the core functions of public health. Social-ecological, behavioral, and policy influences on community and population health. Health promotion in community/public health settings. Course may be offered in classroom-based or online format. 3 lectures.

HLTH 280. Assessment Team for Health Promotion Activities. 1 unit

Term Typically Offered: TBD

CR/NC

Prerequisite: HLTH/KINE 250, HLTH/KINE 255, or HLTH/KINE 260.

Recommended: KINE 319 and STAT 218.

Introduction to multiple health and fitness assessment protocols through participation in community-based activities and/or as assistants on faculty-led research projects. Experiential and service learning. Total credit limited to 3 units. Credit/ No Credit grading only. 1 activity. Crosslisted as HLTH/KINE 280.

HLTH 281. Health Ambassadors. 1 unit

Term Typically Offered: TBD

CR/NC

Prerequisite: HLTH/KINE 250, HLTH/KINE 255, or HLTH/KINE 260.

Recommended: FSN 210 and HLTH/KINE 265.

Introduction to health education and promotion strategies through participation in community-based activities and/or as assistants on faculty-led projects. Experiential and service learning. Field trip required. Total credit limited to 3 units. Credit/No Credit grading only. 1 activity. Crosslisted as HLTH/KINE 281.

HLTH 297. Medical Terminology. 3 units

Term Typically Offered: F, W, SP

Prerequisite: Completion of GE Area B2.

Development of medical vocabulary used in health care occupations, through the study of root words, prefixes, suffixes, and case studies. Pronunciation, spelling, and use of medical terms and abbreviations related to diagnosis, clinical procedures, surgery, and anatomical and physiological systems. Course offered online only. 3 lectures.

HLTH 298. Introduction to Epidemiology. 4 units

Term Typically Offered: F, W

Prerequisite: HLTH/KINE 265; and STAT 217 or STAT 218. Recommended: MCRO 221 or MCRO 224.

Introduction to epidemiologic principles and methods for studying chronic and communicable diseases in the United States, including surveillance methods; epidemiologic study designs; and statistics used to describe occurrence of health-related conditions and associations of risk factors with health outcomes. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

HLTH 305. Drugs in Society. 4 units

Term Typically Offered: F, W

Prerequisite: BIO 231; and one of the following: HLTH/KINE 250, HLTH/KINE 255, HLTH/KINE 260, or HLTH/KINE 443. Recommended: BIO 232.

Social, biological, and psychological factors of the major drugs associated with therapeutic and recreational use and abuse in society. Topics include drug use as a social problem, theories and treatment of addiction, how drugs work, and the detrimental health effects of drug use. Includes both illegal and legal drugs. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

HLTH 310. Injury Prevention. 3 units

Term Typically Offered: W, SP

Prerequisite: BIO 231; BIO 232; and HLTH/KINE 265. Recommended: HLTH 298.

Injury prevention from a public health perspective. Examination of unintentional and intentional injuries in different populations. Theory and evidence-based approaches to injury prevention. Course may be offered in classroom-based or online format. 3 lectures.

HLTH 318. Applied Epidemiology. 4 units

Term Typically Offered: F, W, SP

Prerequisite: HLTH/KINE 298; and PSY 201 or PSY 202. Recommended: STAT 313.

Application of epidemiologic principles and methods to the study of distribution and determinants of disease outcomes, identifying sources of systematic and random error, causal inference, presentation and interpretation of epidemiologic data. Course may be offered in classroom-based, online, or hybrid format. Replaced HLTH 299. 3 lectures, 1 laboratory.

HLTH 320. Media and Technology in Health Promotion. 4 units

Term Typically Offered: W, SP

Prerequisite: Completion of GE Area A with grades of C- or better; KINE 180 or HLTH/KINE 265; and one of the following: HLTH/KINE 250, HLTH/KINE 255, or HLTH/KINE 260. Recommended: HLTH 299 or HLTH 318.

Applications of mass communication technologies in health promotion. Role of theoretical frameworks, ethics, challenges, development, implementation, and evaluation of technology-based health promotion programs. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 laboratory.

HLTH 334. Health Behavior Theory. 3 units

Term Typically Offered: F, W, SP

Prerequisite: HLTH/KINE 298. Recommended: HLTH 299; and PSY 201 or PSY 202.

Introduction to health behavior theories and models. Examination of effectiveness of theory-based interventions to facilitate behavior change to promote health and prevent disease. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

HLTH 337. Early Fieldwork Experience. 1-3 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Junior standing.

Practical work experience in related activities of kinesiology under qualified supervision. Total credit limited to 9 units. Credit/No Credit grading only. Minimum of 2 laboratory hours per week per unit. Crosslisted as HLTH/KINE 337. Formerly KINE 437.

HLTH 400. Special Problems for Advanced Undergraduates. 1-3 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing.

Individual investigation, research, studies, or surveys of selected problems. Total major credit limited to 4 units. Total credit limited to 6 units. Crosslisted as HLTH/KINE 400.

HLTH 402. Research Methods in Public Health Settings. 4 units

Term Typically Offered: F, W

Prerequisite: HLTH 299 or HLTH 318; HLTH 334; and STAT 313.

Quantitative and qualitative research approaches and methods in public health settings, with particular emphasis on social and behavioral sciences. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 laboratory.

HLTH 405. Stress, Health and Chronic Illness. 4 units

Term Typically Offered: F, SP

Prerequisite: BIO 231; BIO 232; HLTH 299 or KINE 304; and HLTH 334 or KINE 266.

Overview of stress physiology. Multifactorial causes and consequences of stress in chronic disease. Assessment of stress in health promotion settings. Evidence-based stress management practices and programs for disease prevention in public health settings. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 activity.

HLTH 410. Global Health. 4 units

Term Typically Offered: W, SP

Prerequisite: Junior standing; completion of GE Area D1; one course in GE Area D2 (or in GE Area D3 for students on the 2019-20 or earlier catalogs); and completion of GE Area E (GE Area D4 for students on the 2017-19 or earlier catalogs); and ANT 360, or HLTH 298 and HLTH 334.

Application of the social determinants of health to global health problems. Particular attention to disparities, national and international policies, health systems, and resource availability and utilization. Overview of the history of global health including the impact of colonization in the field - past, present, and future. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

HLTH 434. Health Promotion Program Planning. 4 units

Term Typically Offered: F, W

Prerequisite: HLTH/KINE 265; HLTH/KINE 298; and KINE 266 or HLTH 334.

Application of methods to facilitate behavior change to promote health and prevent morbidity and mortality. Concepts affecting health behavior, motivation, and decision making. Development of program planning skills in health education and promotion. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 laboratory.

HLTH 435. Health Promotion Program Implementation and Evaluation. 4 units

Term Typically Offered: W, SP

Prerequisite: HLTH/KINE 320; and HLTH/KINE 434.

Implementation and evaluation of health promotion programs in school, community, medical, public health, worksite, and college/university settings. Planning the intervention design, implementation and evaluation protocols including process, impact and outcome assessments. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 laboratory.

HLTH 440. Kinesiology/Public Health Practicum. 1 unit

Term Typically Offered: TBD

Prerequisite: Consent of instructor.

Supervised experience involving organizational and instructional responsibilities in activity, lecture and/or laboratory classes. Total credit limited to 3 units. Crosslisted as HLTH/KINE 440.

HLTH 443. Health Education for Teachers. 4 units

Term Typically Offered: F, W, SP

Prerequisite: Completion of GE Area B2; completion of GE Area E (GE Area D4 for students on the 2017-19 and earlier catalogs); and junior standing.

Health status, special concerns and national health objectives for school aged children; coordinated school health programs and Health Framework for CA public schools. Health literacy, nutrition, safety, alcohol, tobacco and other drugs, reproductive health, and chronic disease prevention. 4 lectures.

HLTH 450. Worksite and University Health Promotion Programs. 4 units

Term Typically Offered: SP

Prerequisite: one of the following: HLTH/KINE 250; HLTH/KINE 255; or HLTH/KINE 260; and KINE 266 or HLTH 334. Recommended: HLTH/KINE 320.

Planning, implementing, and evaluating comprehensive worksite/university health promotion (WHP) and campus wellbeing programs. Benefits of WHP for employers and employees. Educational, organizational, economic, and environmental supports for behaviors conducive to health. Course may be offered in classroom-based or online format. 4 lectures.

HLTH 453. Obesity Prevention and Treatment. 4 units

Term Typically Offered: F, W

Prerequisite: FSN 210 or KINE 451; and one of the following: HLTH/KINE 298, KINE 304, or FSN 310. Recommended: HLTH 405; and one of the following: KINE 266, HLTH 334, or FSN 415.

Overview of research on the causes and consequences of obesity. Evidence-based prevention and treatment interventions. Emphasis on skills for promoting weight control in multidisciplinary health promotion and public health settings. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 activity.

HLTH 460. Experiential Senior Project. 1 unit

Term Typically Offered: F, W, SP

Prerequisite: Senior standing; completion of GE Area A with grades of C- or better; and HLTH 402 or KINE 319.

Applied and project-based culminating experience in planning, implementing, and evaluating a campus, community, or worksite health promotion program under faculty supervision. Minimum 30 hours.

HLTH 461. Senior Project Report. 1 unit

Term Typically Offered: F, W, SP

Prerequisite: Senior standing; completion of GE Area A with grades of C- or better; and HLTH 402 or KINE 319.

A comprehensive synthesis of professional literature that integrates content from major courses resulting in a report. Topic must be approved by the instructor. Minimum 30 hours time commitment. 1 seminar.

HLTH 462. Research Senior Project. 1-4 units

Term Typically Offered: F, W, SP

Prerequisite: Senior standing; completion of GE Area A with grades of C- or better; and HLTH 402 or KINE 319.

Completion of an advanced research, or creative project. Results may be submitted for poster presentation or other public/ professional forum. Total credit limited to 4 units. 1 to 4 supervision.

HLTH 463. Public Health Internship. 1-3 units

Term Typically Offered: F, W, SP

CR/NC

Prerequisite: Senior standing; completion of graduation writing requirement; minimum GPA of 3.0; KINE 434; and KINE 435.

Practical experience at an approved agency that provides public health promotion programs. Students participate in program administration under the direct supervision of an approved on-site coordinator as a capstone experience. Total credit limited to 3 units. Credit/No Credit grading only. 1 to 3 supervision.

KINE Courses**KINE 100. Physical Activity for Students with Disabilities. 1 unit**

Term Typically Offered: TBD

CR/NC

Prerequisite: Consent of instructor.

Basic instruction in the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 108. Basketball. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 109. Bowling. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 110. Cycling. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes while engaging in cycling in outdoor settings. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 112. Intermediate Bowling. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Prerequisite: KINE 109.

Basic instruction and the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses nor more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 121. Golf. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 122. Golf, Int.-Adv.. 1 unit

Term Typically Offered: F, SP

CR/NC

Prerequisite: KINE 121.

Basic instruction and the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses nor more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 125. Jogging. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 129. Yoga/Pilates. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Practice of yoga/pilates to improve fitness, flexibility, core strength and endurance. Safe and effective training techniques are emphasized. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 131. Group Fitness Cardio/Strength. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Group fitness activities designed to improve all components of fitness. Concepts of aerobic endurance, muscular strength and agility are discussed to assist in the formulation of individual goals. Safe and effective training techniques are emphasized. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 132. Racquetball. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 134. Pickleball. 1 unit

Term Typically Offered: F, SP

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Fundamental pickleball skills, knowledge, and strategy such that beginning to intermediate levels of play are attained. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 137. Self-Defense. 1 unit

Term Typically Offered: TBD

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 138. Karate. 1 unit

Term Typically Offered: TBD

CR/NC

Basic instruction and the development of skill, knowledge of rules, background and analysis of techniques, and desirable attitudes toward physical fitness and participation in physical activities. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses nor more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 3 units. Credit/No Credit grading only. 1 laboratory.

KINE 139. Soccer. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 140. Ultimate Disc. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Introduction to Ultimate Disc including fundamental skills, rules of the game and active participation. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 141. Flag Football. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Fundamental flag football skills, knowledge, and strategy such that beginning to intermediate levels of play are attained. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 143. Swimming for Non-Swimmers. 1 unit

Term Typically Offered: TBD

CR/NC

Introduction to aquatic environments for adults for the pursuit of swimming and other aquatic exercise. Developing positive attitudes, good swimming habits and safe practices in and around the water. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 144. Beginning Swimming. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Development of swimming strokes for adults to improve confidence and endurance as novice swimmers. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 145. Intermediate Swimming. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Continuation of stroke refinement for adult swimmers who have basic beginning level swimming skills. Practice of swimming strokes and swimming drills for the enhancement of confidence and improvement of swimming effectiveness and endurance. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 147. Advanced Swimming and Conditioning. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Lap swimming for advanced swimmers. Organized structured swim workouts with emphasis on increasing fitness. Participants should have ability to swim three of the four competitive strokes: freestyle, backstroke, breaststroke, butterfly. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 148. Tennis. 1 unit

Term Typically Offered: F, SP
CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 151. Volleyball. 1 unit

Term Typically Offered: F, W, SP
CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 152. Beach Volleyball. 1 unit

Term Typically Offered: F, W, SP
CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes while engaging in Beach Volleyball. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 154. Weight Training. 1 unit

Term Typically Offered: F, W, SP
CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes in a weight room setting. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 176. Fitness Walking. 1 unit

Term Typically Offered: F, W, SP
CR/NC

Basic instruction in skill development, knowledge, and desirable attitudes toward physical activity. Enrollment is open to all students. Total limited to 12 units of credit earned in basic instructional KINE courses (KINE 100-176) for non-majors. The following restrictions apply to KINE 100-176: 1) no more than two different activity courses or more than one section of an individual activity course may be taken for credit in any one quarter, 2) a student may not enroll simultaneously in the same quarter for a beginning, intermediate and/or advanced activity course, and 3) any level of an activity course can be repeated only once for credit. Total credit limited to 2 units. Credit/No Credit grading only. 1 activity.

KINE 180. Orientation to Kinesiology. 2 units

Term Typically Offered: F, W
CR/NC

Prerequisite: Kinesiology majors only.

Disciplinary and professional perspectives in Kinesiology and the Kinesiology program at Cal Poly. Credit/No Credit grading only. 2 lectures.

KINE 181. Responding to Emergencies: Comprehensive First Aid, CPR, AED. 2 units

Term Typically Offered: F, W, SP
CR/NC

An American Red Cross certification course designed to help participants recognize and respond appropriately to cardiac, breathing, and first aid emergencies. Skills and knowledge necessary in the treatment of life-threatening emergencies, other injuries, and sudden illnesses. Red Cross First Aid/CPR/AED certifications issued upon successful completion of certification requirements. Credit/No Credit grading only. 1 lecture, 1 activity.

KINE 201. Introductory Undergraduate Research. 1-2 units

Term Typically Offered: F, W, SP

Introduction to individual research, studies, or surveys of selected problems. Intended for students in Kinesiology and in Public Health. Total major credit limited to 4 units. Total credit limited to 6 units. Crosslisted as HLTH/KINE 201.

KINE 240. Introductory Principles of Exercise Science and Sport. 4 units

Term Typically Offered: SP

Prerequisite: Completion of GE Area B2; completion of GE Area B4 with a grade of C- or better in one course (GE Area B1 for students on the 2019-20 or earlier catalogs); and completion of GE Area E (GE Area D4 for students on the 2017-19 or earlier catalogs). Recommended: MATH 119; and PHYS 121 or PHYS 141.

Introduction to scientific bases of exercise and sport including concepts associated with health-related components of fitness. 3 lectures, 1 laboratory.

KINE 266. Sport and Exercise Psychology. 4 units

Term Typically Offered: F, SP

Prerequisite: Completion of GE Area A with grades of C- or better.

Recommended: PSY 201 or PSY 202.

An introduction to the field of sport and exercise psychology. Psychological theories and research related to topics such as motivation to participate in sport and exercise, exercise and psychological well-being, teamwork and leadership, aggression, anxiety, psychological response to athletic injuries and exercise addiction. Course may be offered in classroom-based or online format. 4 lectures.

KINE 278. Introduction to Perspectives in Physical Activity. 4 units

Term Typically Offered: W

Prerequisite: Completion of GE Area A with grades of C- or better; and GE Area C2. Recommended: PHIL 230 or PHIL 231.

Current and historical trends in human movement from philosophical perspectives including Western and Eastern intellectual traditions; exploration of the effects of culture on the view of the human body and the understanding of the role of physical activity and sport in people's lives. 4 lectures.

KINE 280. Assessment Team for Health Promotion Activities. 1 unit

Term Typically Offered: TBD

CR/NC

Prerequisite: HLTH/KINE 250, HLTH/KINE 255, or HLTH/KINE 260.

Recommended: KINE 319 and STAT 218.

Introduction to multiple health and fitness assessment protocols through participation in community-based activities and/or as assistants on faculty-led research projects. Experiential and service learning. Total credit limited to 3 units. Credit/ No Credit grading only. 1 activity. Crosslisted as HLTH/KINE 280.

KINE 281. Health Ambassadors. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Prerequisite: HLTH/KINE 250, HLTH/KINE 255, or HLTH/KINE 260.

Recommended: FSN 210 and HLTH/KINE 265.

Introduction to health education and promotion strategies through participation in community-based activities and/or as assistants on faculty-led projects. Experiential and service learning. Field trip required. Total credit limited to 3 units. Credit/No Credit grading only. 1 activity. Crosslisted as HLTH/KINE 281.

KINE 290. Selected Topics. 1-4 units

Term Typically Offered: TBD

Prerequisite: Consent of instructor.

Directed group study of selected topics. The Class Schedule will list topic selected. Total credit limited to 8 units. 1 to 4 lectures.

KINE 301. Functional Anatomy. 3 units

Term Typically Offered: F, W, SP

Prerequisite: PHYS 121; and BIO 231 or BIO 409.

Functional organization of the human musculoskeletal system and articulations. Emphasis on the roles of muscles during activities of daily living, human performance settings, and the structure of freely movable joints. 3 lectures.

KINE 303. Physiology of Exercise. 4 units

Term Typically Offered: F, W, SP

Prerequisite: BIO 231; and BIO 232 or BIO 361. Recommended: CHEM 128.

Application of human physiology to exercise situations. 3 lectures, 1 laboratory.

KINE 304. Pathophysiology and Exercise. 3 units

Term Typically Offered: F, W, SP

Prerequisite: KINE 303.

Selected human diseases, their etiology, pathophysiology, symptoms, diagnosis, effects on health and physical performance, and as affected by preventive or therapeutic exercise. 3 lectures.

KINE 307. Adapted Physical Activity. 4 units

Term Typically Offered: W, SP

Prerequisite: Sophomore standing; completion of GE Area B2; and completion of GE Area B1 (GE Area B3 for students on the 2019-20 or earlier catalogs).

Major categories of disabling conditions with implications for the development of physical activity programs for specific disabilities. 3 lectures, 1 laboratory. Formerly KINE 407.

KINE 308. Motor Development. 3 units

Term Typically Offered: F, SP

Prerequisite: GE D4.

Motor development of individuals from birth to maturity. Emphasis on interrelationship between motor and cognitive characteristics and affective needs and interests. Course may be offered in classroom-based or online format. 3 lectures.

KINE 310. Concepts and Applications in Elementary Physical Education. 3 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing.

Movement as it relates to physical motor skill development, fitness, wellness, social development, cross-cultural understanding, and self-image. 2 lectures, 1 activity.

KINE 312. Motor Learning and Control. 4 units

Term Typically Offered: F, W

Prerequisite: STAT 217 or STAT 218.

Variables which control sensory-motor integration. Analysis of factors which affect the acquisition of motor skills as related to the learning process and the learning environment. 3 lectures, 1 activity. Formerly KINE 402.

KINE 319. Introduction to Research Methods in Kinesiology. 4 units

Term Typically Offered: F, W

Prerequisite: STAT 217 or STAT 218.

Principles of reading and conducting research including contemporary research perspectives in kinesiology. Basic and applied research. Quantitative, qualitative, and mixed methods. 3 lectures, 1 laboratory.

KINE 323. Sport and Gender. 4 units

Term Typically Offered: F, W, SP
 2020-21 or later: Upper-Div GE Area D
 2019-20 or earlier catalog: GE Area D5
 USCP

Prerequisite: Junior standing; completion of GE Area A with grades of C- or better; one course in GE Area B4 with a grade of C- or better (GE Area B1 for students on the 2019-20 or earlier catalogs); completion of GE Area D1; and one course in GE Area D2 (or in GE Area D3 for students on the 2019-20 or earlier catalogs) or in GE Area E (GE Area D4 for students on the 2017-19 or earlier catalogs).

Intersections between sport and gender in American society. Identification and discussion of the historical, sociological and psychological issues that affect the sport experiences of males and females, especially as they relate to class, race/ethnicity, sexuality, and political movements. Course may be offered in classroom-based or online format. 4 lectures. Fulfills GE Upper-Division D (GE Area D5 for students on the 2019-20 or earlier catalogs); and USCP.

KINE 324. Sports, Media and American Popular Culture. 4 units

Term Typically Offered: F, W, SP
 2020-21 or later: Upper-Div GE Area D
 2019-20 or earlier catalog: GE Area D5
 USCP

Prerequisite: Junior standing; completion of GE Area A with grades of C- or better; one course in GE Area B4 with a grade of C- or better (GE Area B1 for students on the 2019-20 or earlier catalogs); and one lower-division course in GE Area D.

Issues of class, race/ethnicity, gender, various forms of deviance, and other aspects of social life. Exploration of sociological manifestations and implications of how the aforementioned social issues are embedded in mediated forms of sports. 3 lectures, 1 activity. Fulfills GE Upper-Division D (GE Area D5 for students on the 2019-20 or earlier catalogs); and USCP.

KINE 330. Group Fitness Instruction. 2 units

Term Typically Offered: TBD
 Prerequisite: KINE 301.

Overview of basic components of group fitness classes in school, corporate and commercial fitness settings. Development of instructional competencies in the primary components of a group fitness class. Instructional techniques, professionalism, leadership styles conducive to promoting exercise adherence. Application of basic theory related to human anatomy, biomechanics, exercise physiology, training principles and use of relevant ACSM guidelines. 2 activities.

KINE 337. Early Fieldwork Experience. 1-3 units

Term Typically Offered: F, W, SP
 CR/NC
 Prerequisite: Junior standing.

Practical work experience in related activities of kinesiology under qualified supervision. Total credit limited to 9 units. Credit/No Credit grading only. Minimum of 2 laboratory hours per week per unit. Crosslisted as HLTH/KINE 337. Formerly KINE 437.

KINE 349. Exercise Testing and Prescription for Healthy Populations. 4 units

Term Typically Offered: F, W, SP
 Prerequisite: KINE 303. Recommended: KINE 301.

Selected areas of health/fitness screening and evaluation. Application of components relevant to the development and administration of exercise programs for healthy persons regardless of sex, age, or functional capacity. 3 lectures, 1 laboratory. Formerly KINE 452.

KINE 366. Applied Sport Psychology. 3 units

Term Typically Offered: SP
 Prerequisite: one of the following: PSY 201, PSY 202, or KINE 266.

Psychological considerations of the coach-athlete relationship and mental preparation of teams and individuals for competition and practice. Application of sport psychology principles to develop a psychological skills training program appropriate to enhance performance and well-being in sport or exercise contexts. Course offered in hybrid format with classroom-based and online learning. 3 lectures.

KINE 400. Special Problems for Advanced Undergraduates. 1-3 units

Term Typically Offered: F, W, SP
 Prerequisite: Junior standing.

Individual investigation, research, studies, or surveys of selected problems. Total major credit limited to 4 units. Total credit limited to 6 units. Crosslisted as HLTH/KINE 400.

KINE 401. Managing Exercise, Health, and Sport Programs. 3 units

Term Typically Offered: F, SP
 Prerequisite: One course in GE Area D2 (or in GE Area D3 for students on the 2019-20 or earlier catalogs); and completion of GE Area E (GE Area D4 for students on the 2017-19 or earlier catalogs).

Planning, organizing and controlling programs in public, commercial, private and clinical exercise, health and sport program settings. Emphasis on legal, ethical and budgetary considerations. 3 lectures.

KINE 403. Biomechanics. 4 units

Term Typically Offered: F, W, SP
 Prerequisite: KINE 301.

Fundamental biomechanical concepts and their application to human systems including examination of activities of daily living and performance settings. Examination of the effects of chronic and acute loading on the body. 3 lectures, 1 laboratory.

KINE 406. Neuroanatomy. 4 units

Term Typically Offered: SP
 Prerequisite: BIO 231 and BIO 232; or ZOO 331 and ZOO 332, or BIO 361.

Structure and function of the human nervous system. Afferent and efferent pathways involved in perception and action. Behavioral aspects of motor control and related neurological dysfunction and pathologies. Designed for allied health professions students. 4 lectures.

KINE 408. Exercise and Health Gerontology. 3 units

Term Typically Offered: W, SP
 Prerequisite: One of the following: KINE 250, KINE 255, or KINE 260; and KINE 304.

Special fitness, exercise, and health needs of elder adults. Theories of aging and age-related changes. Health and physical activity programs for elder adults. 3 lectures.

KINE 409. Interdisciplinary Study in Biomechanics. 4 units

Term Typically Offered: SP

Prerequisite: BMED 410 and CE 207 or CE 208; or KINE 403; or ME 326.

Examination of human motion biomechanics. Experimental and analytical methods in motion analysis based on rigid body dynamics. Protocols for protection of human subjects in research. Hypothesis-driven research in interdisciplinary teams, including written proposal development and written/oral communication of results to a scientific audience. 1 lecture, 3 activities. Crosslisted as BMED/KINE/ME 409.

KINE 412. Physical Activity and Public Health. 3 units

Term Typically Offered: SP

Prerequisite: CRP 214, HLTH 298, or KINE 319. Recommended: KINE 303.

Evaluation of scientific evidence supporting current physical activity guidelines for physical and mental well-being. Application of evidence-based strategies to promote physical activity at the individual, community, and policy levels. 3 lectures.

KINE 438. Adapted Physical Activity Fieldwork. 1-3 units

Term Typically Offered: F, W, SP

CR/NC

Prerequisite: KINE 307.

Practical experience in adapted physical activity programming. Students plan and conduct physical activity programs for people who are disabled. Total credit limited to 6 units. Credit/No Credit grading only.

KINE 440. Kinesiology/Public Health Practicum. 1 unit

Term Typically Offered: TBD

Prerequisite: Consent of instructor.

Supervised experience involving organizational and instructional responsibilities in activity, lecture and/or laboratory classes. Total credit limited to 3 units. Crosslisted as HLTH/KINE 440.

KINE 445. Electrocardiography. 4 units

Term Typically Offered: F, W

Prerequisite: KINE 303.

Basic principles of electrocardiography, including practical skills of the ECG technician. Recognition of normal ECG patterns and abnormal changes related to rhythm disturbances, conduction defects, myocardial ischemia/infarction, and exercise. 3 lectures, 1 laboratory.

KINE 446. Echocardiography. 4 units

Term Typically Offered: SP

Prerequisite: KINE 445.

Basic principles of echocardiography, including practical skills of the echocardiographer. Recognition of normal echocardiographic patterns and abnormalities, including those caused by pathology and exercise conditioning. 2 lectures, 2 laboratories.

KINE 449. Exercise Prescription for Diseased and Special Populations. 3 units

Term Typically Offered: W, SP

Prerequisite: KINE 304; KINE 349; and KINE 445. Recommended: KINE 459.

Use of medical history, physical examination, laboratory and exercise testing data for establishment of appropriate exercise programs for clinical and special populations. Course offered in hybrid format with classroom-based and online learning. 2 lectures, 1 laboratory.

KINE 451. Nutrition for Fitness and Sport. 4 units

Term Typically Offered: F, W, SP

Prerequisite: one of the following: KINE 250, KINE 255 or KINE 260; KINE 303; and KINE 319. Recommended: FSN 210 and CHEM 313.

Application of nutritional and metabolic facts to selected aspects of physical training, diet manipulation and modification in sport, nutritional supplementation and special dietary considerations for the young and old, male and female athletes. Course may be offered in classroom-based or online format. 4 lectures.

KINE 454. Exercise Metabolism. 4 units

Term Typically Offered: F, W

Prerequisite: KINE 303; KINE 319; and CHEM 216 or CHEM 312.

Recommended: CHEM 313.

Advanced understanding of metabolic and endocrine responses to exercise. How exercise impacts storage, delivery, and fuel use required for energy conversion. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

KINE 459. Personal and Group Fitness Instruction. 3 units

Term Typically Offered: F, W, SP

Prerequisite: KINE 301; KINE 303; KINE 312.

Instructional competencies in the primary components of a group fitness class and individually tailored personal fitness programs. Instructional techniques, professionalism, leadership styles conducive to promoting exercise adherence. Application of basic theory related to human anatomy, motor learning, exercise physiology, training principles and relevant ACSM guidelines. 1 lecture, 2 activities.

KINE 460. Experiential Senior Project. 1 unit

Term Typically Offered: F, W, SP

CR/NC

Prerequisite: HLTH 402 or KINE 319; completion of GE Area A with grades of C- or better; and senior standing.

A comprehensive applied capstone experience that integrates content from Kinesiology courses under faculty supervision. Projects must be approved by the supervising faculty member. Minimum 30 hours. Credit/No Credit grading only.

KINE 461. Senior Project Report. 1 unit

Term Typically Offered: F, W, SP

Prerequisite: HLTH 402 or KINE 319; and completion of GE Area A with grades of C- or better.

A comprehensive synthesis of professional literature that integrates content from kinesiology courses resulting in a report. Topic must be approved by the instructor. Course may be offered in classroom-based or online format. 1 seminar.

KINE 462. Research Honors Senior Project. 1-2 units

Term Typically Offered: F, W, SP

Prerequisite: HLTH 402 or KINE 319; completion of GE Area A with grades of C- or better; and consent of instructor.

Completion of an advanced research, or creative project. Intended for students taking a significant or leadership role in a professional area. Results may be submitted for poster presentation or other public/professional forum. Total credit limited to 4 units.

KINE 463. Exercise Science and Health Promotion Fieldwork. 1-3 units

Term Typically Offered: F, W, SP

CR/NC

Prerequisite: Junior or senior standing and minimum GPA of 2.0.

Practical experience at an approved agency that provides exercise/fitness/health promotion programs. Students participate in program administration under the direct supervision of an approved on-site coordinator. Credit/No Credit grading only. Total credit limited to 3 units.

KINE 470. Selected Advanced Topics. 1-4 units

Term Typically Offered: TBD

Prerequisite: Consent of instructor.

Directed group study of selected topics for advanced students. The Class Schedule will list topic selected. Total credit limited to 8 units. 1 to 4 lectures.

KINE 471. Selected Advanced Laboratory. 1-4 units

Term Typically Offered: TBD

Prerequisite: Consent of instructor.

Directed group laboratory study of selected topics for advanced students. The Class Schedule will list topic selected. Total credit limited to 8 units. 1 to 4 laboratories.

KINE 485. Cooperative Education Experience. 6 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Sophomore standing and consent of instructor.

Part-time work experience in business, industry, government, and other areas of student career interest. Positions are paid and usually require relocation and registration in course for two consecutive quarters. Formal report and evaluation by work supervisor required. Major credit limited to 6 units; total credit limited to 12 units. Credit/No Credit grading only.

KINE 495. Cooperative Education Experience. 12 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Sophomore standing and consent of instructor.

Full-time work experience in business, industry, government, and other areas of student career interest. Positions are paid and usually require relocation and registration in course for two consecutive quarters. Formal report and evaluation by work supervisor required. Major credit limited to 12 units; total credit limited to 24 units. Credit/No Credit grading only.

KINE 500. Independent Study. 1-3 units

Term Typically Offered: F, W, SP

Prerequisite: KINE 517, graduate standing, and consent of instructor.

Advanced study planned and completed under the direction of a member of the department faculty. Open only to graduate students who have demonstrated ability to do independent work. Enrollment by petition. Only 6 units may be applied to degree requirements.

KINE 501. Evaluation of Literature and Current Trends in Kinesiology. 3 units

Term Typically Offered: TBD

Prerequisite: Graduate standing.

Analysis and evaluation of published studies and current trends in kinesiology. 3 seminars.

KINE 503. Current Health Issues. 4 units

Term Typically Offered: TBD

Prerequisite: Graduate standing.

Current issues and trends in health, disease prevention, and the healthcare system. Socioeconomic, biologic, environmental, institutional and policy factors that influence health status, disparities in health, and positive health outcomes. 4 seminars.

KINE 504. Advanced Pathophysiology and Exercise. 3 units

Term Typically Offered: TBD

Prerequisite: graduate standing. Recommended: KINE 303 or equivalent.

Selected human diseases, their etiology, pathophysiology, symptoms, diagnosis, effects on health and physical performance, and as affected by preventive or therapeutic exercise. 3 lectures.

KINE 505. Introduction to Issues, Ethics and Policies in Teaching Kinesiology. 2 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Graduate standing.

Knowledge, skills, preparation and support for teaching Kinesiology activity and laboratory classes in the department. Prepares students to be supervisors and teachers in their current or future employment. Credit/No Credit grading only. 1 seminar, 1 activity.

KINE 510. Advanced Health Behavior Change Programs. 3 units

Term Typically Offered: TBD

Prerequisite: KINE 503 or KINE 504 and graduate standing.

Examination of contemporary research, theory and practice related to facilitating healthy behavior change. Analysis of health problems from biological, ecological, and psycho-social perspectives with emphasis on understanding the acquisition and maintenance of healthy behavior. 3 seminars.

KINE 511. Administration in Exercise and Health Settings. 4 units

Term Typically Offered: TBD

Prerequisite: Graduate standing.

Principles and techniques of administration in health, physical activity, and academic settings including budget, personnel supervision, risk management, leadership techniques, and facility management. 4 seminars.

KINE 517. Research Methods in Kinesiology. 4 units

Term Typically Offered: TBD

Prerequisite: KINE 501. Recommended: STAT 512 or STAT 513.

Quantitative, qualitative and mixed methods approaches to research in kinesiology. Selection of adequate problems for investigation; various sampling techniques and analyses; use of library facilities; manuscript requirements for the thesis. 4 seminars.

KINE 518. Research Prospectus and Proposal Writing. 2 units

Term Typically Offered: TBD

CR/NC

Prerequisite: KINE 517.

Strategies for identifying academically valid research topics. Planning considerations for qualitative and quantitative research including grant writing, human subjects review, personnel, equipment, and timelines. Design and composition of effective research proposals. Credit/No Credit grading only. 2 seminars.

KINE 522. Advanced Biomechanics. 4 units

Term Typically Offered: TBD

Prerequisite: KINE 403.

Advanced biomechanical concepts applied to human movement, examination of research, and biomechanical analyses of movement activities. Performance, occupational, and clinical settings. Laboratory techniques including motion analysis, force platform, and electromyography. 3 seminars, 1 laboratory.

KINE 525. Advanced Motor Learning and Control. 3 units

Term Typically Offered: TBD

Prerequisite: KINE 402 or equivalent.

Analysis of control theories, research principles and motor learning variables involved in the acquisition of skilled movement with an emphasis on the behavioral level of learning. 3 seminars.

KINE 526. Advanced Sport and Exercise Psychology. 3 units

Term Typically Offered: TBD

Prerequisite: Graduate standing.

Theoretical and professional issues in the psychological foundations of sport and exercise. 3 seminars.

KINE 530. Advanced Physiology of Exercise. 4 units

Term Typically Offered: TBD

Prerequisite: KINE 303 and graduate standing.

Physiological determinants of physical work capacity and sports performance. 3 seminars, 1 laboratory.

KINE 536. Advanced Electrocardiography. 4 units

Term Typically Offered: TBD

Prerequisite: KINE 445.

Theory and application of electrocardiography and other techniques for cardiovascular assessment and treatment of cardiac disease and other abnormalities. 3 seminars, 1 laboratory.

KINE 537. Internship. 3-12 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Graduate standing; consent of instructor.

Supervised work experience in an approved wellness/fitness clinical facility, school, or other faculty approved setting. Total credit limited to 12 units. Maximum of 6 units may be applied toward Master of Science in Kinesiology. Credit/No Credit grading only.

KINE 539. Effective Practice in Teaching and Coaching. 3 units

Term Typically Offered: TBD

Prerequisite: Graduate standing.

Observation and analysis of teaching physical education and coaching sports with special emphasis in pedagogical systems. 2 seminars, 1 laboratory.

KINE 570. Selected Advanced Topics. 4 units

Term Typically Offered: TBD

Prerequisite: Graduate standing.

Directed group study of selected topics for graduate students. Open to undergraduate and graduate students. The Class Schedule will list topic selected. Total credit limited to 8 units. 4 lectures.

KINE 581. Graduate Seminar in Kinesiology. 1-3 units

Term Typically Offered: TBD

Prerequisite: Graduate standing.

Directed group study of selected topics for advanced students. The Class Schedule will list topic selected. Total credit limited to 6 units. 1 to 3 seminars.

KINE 585. Cooperative Education Experience. 6 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Graduate standing.

Advanced study analysis and part-time work experience in student's career field; current innovations, practices, and problems in administration, supervision, and organization of business, industry, and government. Must have demonstrated ability to do independent work and research in career field. Total credit limited to 9 units. Credit/No Credit grading only.

KINE 599. Thesis or Project. 1-6 units

Term Typically Offered: TBD

Prerequisite: KINE 517, KINE 518 and consent of instructor.

Completion of a thesis or project pertinent to the field of kinesiology. Independent research under the guidance of the faculty.