# **KINESIOLOGY (KIN)**

#### KIN-100 TOTAL FITNESS & WELLNESS (2 Credits)

This course focuses on whole person wellness in the context of Biblical principles. Emotional, mental, intellectual, physical, social, and spiritual wellness areas are addressed. Students are taught and encouraged to transition from the mindset of high school attitudes and habits to a collegiate level of thinking and decision making with regards to nutrition, personal wellness, social attitudes and actions as responsibilities of Biblical stewardship.

Prerequisite: Take activity course concurrently

#### KIN-102 PERSONAL WELLNESS (3 Credits)

This course focuses on whole person wellness in the context of Biblical principles. Emotional, mental, intellectual, physical, social, and spiritual wellness areas are addressed. Students are taught and encouraged to transition from the mindset of high school attitudes and habits to a collegiate level of thinking and decision making with regards to nutrition, personal wellness, social attitudes, and actions as responsibilities of Biblical stewardship.

Prerequisite: None

#### KIN-111 BADMINTON (1 Credit)

The study and practice of basic techniques in the game of badminton. This course includes topics such as ready position, grip, strokes, serve, rules of the game, and strategy. Opportunities are given to test skills against other class members through tournament play.

Prerequisite: None

## KIN-113 GOLF (1 Credit)

An introduction for the beginner to golf encompassing basic techniques of the stance, grip, swing, rules of the game and etiquette. This course is designed to offer opportunity to test and improve skills on a regulation eighteen-hole golf course. It is desired that this activity leads to the appreciation of golf and becomes a lifelong enjoyment for the Christian steward. Course fee applied.

Prerequisite: None

## KIN-114 COED BASKETBALL (1 Credit)

Students will learn the basic skills of dribbling, passing, rebounding and shooting, along with various offensive concepts like screen and roll and give and go. Students will also learn defensive concepts such as help and recover, hedging on screens and defending the post. Various strategies of the game will be incorporated into the class.

Prerequisite: None

#### KIN-116 RACQUETBALL (1 Credit)

An introduction for the beginner to racquetball encompassing rules, basic skills, terminology, strategy and safety. This course is designed to offer game play with class members and is desired that this activity leads to the appreciation of racquetball and becomes a lifelong enjoyment for the Christian steward.

Prerequisite: None

## KIN-118 AEROBIC DANCE & STRETCH (1 Credit)

This class will include basic steps of aerobic moves with intervals of muscular strength and endurance exercises to burn calories with cardio-training to strengthen the heart for overall well-being. It will also introduce the student to various techniques of stretch and relaxation. Music and movement will be a regular part of the course as the students take a holistic approach to their overall wellness.

Prerequisite: None

#### KIN-121 OUTDOOR SKILLS (1 Credit)

Instruction in the basic skills and equipment needed for participation in outdoor activities. This course includes opportunity to develop skills and problem solving skills. Activities will be determined based on season and weather, but may include snowshoeing, map & compass, hiking, backpacking, adventure racing, and canoeing.

Prerequisite: None

#### KIN-124 PICKLEBALL (1 Credit)

The study and practice of basic techniques in the game of Pickleball (the newest and fastest racquet sport). The course includes topics such as ready position, grip, strokes, serve, rules of game, and strategy. Opportunities are given to test skills against other class members through tournament play.

Prerequisite: None

#### KIN-129 BEGINNING DANCE (1 Credit)

An introduction for the beginner dancer, including basic rhythm and terminology necessary for individual and partner dancing. Line, Ballroom, Swing, and other popular forms of dance will be explored throughout the course.

Prerequisite: None

#### KIN-132 COED SOCCER (1 Credit)

The study and practice of rules, basic fundamentals, strategy, team play, and game etiquette. Opportunities will be given to the student to test skills against other players through tournament play.

Prerequisite: None

## KIN-133 VOLLEYBALL (1 Credit)

The study and practice of the basic techniques in the game of volleyball. The course includes topics such as ready position, serve, set, forearm pass, rules of the game, and strategy. Opportunities are given to test skills against other class members through tournament play. *Prerequisite:* None

# KIN-143 JOGGING (1 Credit)

To provide students with a thorough understanding of aerobic activity and its application to physical conditioning. The content of this course also includes general Biomechanics of jogging, flexibility, nutrition, a proper Christian viewpoint of jogging as a lifetime fitness activity. *Prerequisite:* None

#### KIN-144 LADIES WEIGHT TRAINING & FITNESS CLASS (1 Credit)

This class will be and introduction of weight training and fitness opportunities for the college female. It will emphasize proper technique and safety precautions for weight lifting while promoting the importance of a healthy and personal physical fitness conditioning program. This course will also educate female students in the importance of the injury prevention through building muscle strength and teaching proper fitness components.

Prerequisite: None

# KIN-146 PHYSICAL CONDITIONING (1 Credit)

For the student who is unable to meet the core requirement of a traditional physical activity course due to physical limitations or disability, this course offers an individualized program of fitness activities set up by both the supervising professor and the student, in consultation with staff from Student Disability Services. Objectives and requirements are set forth in an initial meeting and must be completed by the end of the enrolled semester. The student must have applied for disability accommodations through the Accommodations Review Committee and been approved in order to register for this course.

Prerequisite: None

#### KIN-148 WEIGHT TRAINING (1 Credit)

An introduction for the beginner to basic techniques and instruction in weight training for both muscular strength and endurance. This course is designed for the development of a personalized weight training program and is desired that this activity leads to lifelong enjoyment for the Christian steward.

Prerequisite: None

#### KIN-161 VARSITY BASEBALL (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor.

Prerequisite: None

#### KIN-162 VARSITY SOFTBALL (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor.

Prerequisite: None

## KIN-163 VARSITY BASKETBALL (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor.

Prerequisite: None

# KIN-164 WOMEN'S VARSITY VOLLEYBALL (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor. *Prerequisite:* None

## KIN-165 VARSITY SOCCER (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor. *Prerequisite:* None

# KIN-166 VARSITY TENNIS (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor.

Prerequisite: None

#### KIN-167 VARSITY TRACK (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor.

Prerequisite: None

#### KIN-168 VARSITY CROSS COUNTRY (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor. *Prerequisite:* None

#### KIN-169 VARSITY WRESTLING (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor. *Prerequisite:* None

#### KIN-171 VARSITY GOLF (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor. *Prerequisite:* None

## KIN-172 VARSITY BOWLING (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor. *Prerequisite:* None

## KIN-173 VARSITY CHEERLEADING (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor. *Prerequisite:* None

## KIN-174 MEN'S VARSITY VOLLEYBALL (1 Credit)

A maximum of two credits will be awarded for participation in two different varsity sports. Students must register for credit at the beginning of the semester their sport is in season. These credits will count as elective credit only, and do not apply toward core physical education requirements or the Physical Education major or minor. *Prerequisite:* None

## KIN-180 ADVANCED TOPICS (3.00 Credits)

Prerequisite: None

#### KIN-211 HISTORY & PRINCIPLES OF KINESIOLOGY (3 Credits)

A study of physical education, sport, and fitness in the context of their historical development and how they have been an integral part of culture pertaining to the psychological, sociological, and philosophical factors that have affected these topics. Vocational opportunities related to the field of Kinesiology will be explored as well as preparation for these vocations. This course includes learning techniques such as tests, informational interviews, readings and presentations.

Prerequisite: None

#### KIN-220 INTRO TO ATHLETIC TRAINING (3 Credits)

This course introduces the profession of athletic training and the basic principles of preventative care commonly used in the profession. Topics will include athletic training facility organization and procedures, protective sports equipment, construction of protective devices and application of protective taping, braces, wrapping and protective pads. Areas to be studied include the role of the athletic trainer in sports medicine, mechanisms of athletic injuries, tissue response to injury, blood-borne pathogens, introductory techniques of assessment and evaluation of athletic injuries and emergency procedures. Each student who takes this course will have hands-on and practical exposure to what the field of athletic training encompasses so that the student is able to make an educated decision as to whether this career path will be a rewarding one for them to pursue. In this course, students are expected to apply what they learn in class by engaging with other students using a hands-on approach to learning. A biblical view of relationships will be presented as the model for client/trainer interaction.

#### Prerequisite: None

#### KIN-231 PRINCIPLES OF COACHING (3 Credits)

The study of the nature and responsibilities of the profession of coaching. Topics include philosophy of coaching, the coach and his/her personality, the athlete and his/her personality, communication, team cohesion, motivation, discipline, teaching techniques, and scouting. *Prerequisite*: None

#### KIN-251 MOTOR DEVELOPMENT AND LEARNING (3 Credits)

A study of childhood growth and development patterns as it relates to motor learning and motor skill acquisition. This course in designed to enhance the understanding of growth and motor behavior/development of children from conception through adulthood. Principles of motor development and learning are explored along with an opportunity to apply them in a lab setting.

# Prerequisite: None

## KIN-262 MIDWEST ACSM CONF (1 Credit)

This course is designed to allow students to receive credit for attending the Midwest regional American College of Sports Medicine (ACSM) conference. The ACSM serves to advance and integrate scientific research as well as provide educational and practical application of exercise science and sports medicine. Small group meetings, in depth discussion and short journals will be utilized to expose students to scientific research specific to careers within the field of exercise science. *Prerequisite:* None

# KIN-280 ADVANCED TOPICS (3.00 Credits)

#### Prerequisite: None

#### KIN-341 ANATOMICAL KINESIOLOGY (4 Credits)

This course is designed as a functionally specific approach to the musculoskeletal system. Emphasis will be placed on the qualitative analysis and description of human movement. The course will also serve as an introduction to the biomechanical basis of human motion. Students will then learn how to apply the basic concepts of human motion to exercise and sport. Course fee applied.

#### Prerequisite: BIO-241, BIO-242

#### KIN-342 EXERCISE PHYS I (3 Credits)

A study of the physiological responses of the healthy human body to exercise. This course includes topics such as energy systems, nutrition, conditioning, exercise testing, and exercise prescriptions. Lecture and lab. Course fee applied.

Prerequisite: BIO-241, BIO-242 & KIN-346

#### KIN-344 ADAPTED PHYSICAL EDUCATION (2 Credits)

This course is an orientation to the theoretical and practical aspects of teaching physical education for K-12 students with physical and mental disabilities. The focus is on the history and scope of adapted physical education, key techniques required for effective and safe instruction, general needs of special populations, legal issues, development of Individualized Education Programs and accommodation of activities, equipment and instructional materials for special populations. These topics will be studied within the context of our Christian worldview, with special attentions given to issues of equity and individual worth. *Prerequisite:* KIN-243

#### KIN-345 MEASUREMENT & EVALUATION (3 Credits)

A study of methods for evaluating cognitive, affective, and psychomotor domains of learning in physical education. The course provides opportunity for practical experience in test construction and administration as well as evaluation of the results. Topics such as statistics, fitness testing, grading procedures, and affective checklists will be covered.

Prerequisite: Complete math core requirement

# KIN-346 EXERCISE TESTING & PRESCRIPTION (3 Credits)

This course will explore theory and practices related to exercise testing and prescription. It will include practical experience in body composition techniques, electrocardiography, muscle strength and endurance testing, flexibility testing and cardiovascular endurance testing. The results of the testing will be used to form appropriate exercise prescriptions according to the American College of Sports Medicine guideline. Course fee applied. *Prerequisite:* Take BIO-242

## KIN-357 PHYS ED IN PRESCHOOL/ELEM (3 Credits)

This course is designed specifically to provide in-depth methods of instruction for teaching preschool and elementary children in physical education programs. The course includes motor development and basic movement education emphasizing movement patterns, fundamental motor skills, manipulative skills, locomotor activities, physical fitness testing, and introduction to sports related skills. Introduction to teaching scope and sequences will be utilized. Lesson planning and peer teaching will provide the practical experience needed for professional growth. *Prerequisite:* KIN-243 and KIN-251

## KIN-361 ECG (ELECTROCARDIOGRAPHY) (2 Credits)

Anatomy and physiology of the heart will be reviewed, including the conduction system and circulatory system, as well as layout of the ECG, essentials of the 12-lead ECG, and lead placement and interpretation. Discussion on how the pathophysiology of the acute MI process affects the normal 12-lead ECGs and the average times in which such effects are evidenced. Students will learn to identify normal 12-lead ECG's ST segments, isoelectric lines, J points, and R-Wave progression. *Prerequisite:* BIO-242

## KIN-362 FIRST AID, INJURY PREVENTION, TREATMENT (3 Credits)

Basic principles of injury prevention and care, first aid principles of prevention, injury evaluation and current rehabilitation methods are taught. The student will have active participation in caring for various injuries. The student will receive American Red Cross certifications in First Aid, Cardiopulmonary Resuscitation and Automated Defibrillation as well as Blood Borne Pathogen Training and Concussion Training. Course fee applied.

Prerequisite: BIO-241, BIO-242

#### KIN-364 CARDIOVASCULAR DISEASE RISK/MANAGEMENT (3 Credits)

Health risk factors associated with cardiovascular and other chronic diseases will be identified and studied. Management and risk to morbidity and mortality will be emphasized. Course fee applied.

Prerequisite: BIO-241, BIO-242, KIN-342 and KIN-346

#### KIN-370 PRACTICUM IN COACHING (1 Credit)

Prerequisite: None

#### KIN-380 INTERNSHIP (1-6 Credits)

An opportunity to gain practical experience in settings appropriate for exercise science and coaching.

Prerequisite: Junior or Senior status required

## KIN-381 INTERNSHIP - CARDIC REHAB (12 Credits)

An opportunity to gain practical experience in a clinical cardiac rehabilitation setting appropriate for exercise science majors in preparation for the American College of Sports Medicine (ACSM) Certified Exercise Physiology certification. Cardiac Rehab majors must take 12 credits of internship for a total experience of no less than 480 hours. *Prerequisite*: None

## KIN-402 PROFESSIONAL CAPSTONE SEMINAR (1 Credit)

The first course in a two-course seminar experience will examine a Christian worldview and the ethical and professional issues associated with the major. The seminar will devote time to Christian worldview reflection in regard to a senior's prior academic preparation and future vocational opportunities. Students will also develop a working hypothesis for a novel research question in the field of exercise science, complete a literature review on the topic and formulate a research proposal for the Institutional Review Board. Course fee applied.

Prerequisite: KIN-346, Junior or Senior status required

# KIN-403 PROF CAPSTONE RESEARCH PROJ (1 Credit)

The second course in a two-course seminar experience will continue to examine a Christian worldview and the ethical and professional issues associated with the major. The seminar will include a final portfolio and completion of the senior research project for kinesiology. Students will collect, process, interpret and present data from their novel research investigation. Course fee applied.

Prerequisite: MAT-151, KIN-345, KIN-402, Senior status required

# KIN-441 ORGANIZATION & ADMINISTRATION (3 Credits)

The study of organization, administration, planning, implementation, interscholastic activities, and sports/fitness clinics. The students will gain a closer look at the administrative roles at these various settings. Topics will include budget creation and control, program development, leadership techniques, and program evaluation.

Prerequisite: None

## KIN-444 EXERCISE PHYSIOLOGY II (3 Credits)

This course is designed to focus on integrative physiological mechanisms and responses to exercise. The course will use novel research findings to enhance student understanding of human physiology during rest and exercise. Students will be provided with the necessary tools to assess the integrative nature of human physiology during rest and exercise. Such asssessment will be important for understanding how all of the pieces of the human body work together as one, flawlessly in God's image. Course fee applied. *Prerequisite*: KIN-342

## KIN-461 SKILL/PERFORMANCE COMPETENCIES (1 Credit)

This course involves a series of experiences to help students understand the many roles of the physical educator. The specific experiences will be planned jointly by the student and the professor as soon as a physical education major or minor is declared. The work will begin towards meeting the competencies in the areas required over the next three years. The goal of this course is to improve the students' personal and professional expertise through participation, observation and coaching opportunities.

Prerequisite: None

#### KIN-462 SKILLS, COMP, PROF ETHICS IN PE (3 Credits)

This course involves documenting and/or completing a series of experiences to help students understand the many roles of the physical educator. The specific experiences will be planned jointly by the student and the professor as soon as a physical education major/minor is declared. The goal of these experiences is to improve the student's personal and professional expertise through participation, observation and coaching opportunities. In addition, this course will examine the ethical and professional issues associated with physical education. The student will devote time to reflection on prior academic preparation and future vocational opportunities for the physical educator. The course will include significant evaluation instruments including a portfolio, a physical education philosophy paper, and a created curriculum with daily lesson plans. The physical education major/minor will work closely with the supervising professor to review all completed assignments. *Prerequisite*: KIN-359

## KIN-470 READINGS IN PHY EDUCATION (1-3 Credits)

Guided readings and periodic reports in areas of student's interest and

Prerequisite: None

## KIN-480 ADVANCED TOPICS (2-3 Credits)

Prerequisite: None

# KIN-490 INDEPENDENT STUDY (1-4 Credits)

With faculty supervision, the student will research and write on a specific topic or area. Outside involvement in topic is normally required.

Prerequisite: None