

Kinesiology

Co-Chairs, Professor M. Renfrow, Assistant Professor B. Dykstra
Professor E. Hayes
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Instructor G. Wolfe

The Kinesiology Department has two major purposes: (1) to prepare competent, caring, and reflective Christian leaders for world service in exercise science; and (2) to help students acquire the skills and attitudes for lifetime wellness, as well as wholesome and active use of their leisure time.

Baccalaureate degrees are offered with a major in Exercise Science or Human Physiology and Preventive Medicine. Candidates for the Bachelor of Arts degree must complete two years of a foreign language.

The three credits required in the foundational core curriculum are typically met by taking KIN 100 plus KIN 200 or one of the following to substitute for KIN 200: KIN 250, 300, 302, 333, 334, or EXS 280. Exercise Science majors complete this requirement by taking EXS 111, 316, and 318. Pre-Med, Public Health, and allied health students who are not Exercise Science majors are recommended to take KIN 221 to fulfill the three credits required for the foundational core curriculum. The Elementary Education major requires KIN 250, which along with KIN 100 will fulfill the foundational core requirement.

One aspect of professors' work at a Christian liberal arts university is to build relationships with students to participate in God's work of preparing students for a well-lived and meaningful life. The Kinesiology Department aims to fulfill this educational calling through a whole-person focused curriculum. The Living Well course will provide specific instruction in the more technical aspects of caring for the human body as part of the created order including rest/shalom, nutrition, and activity. As such, this course will serve as the foundation for an understanding of basic principles of a well-lived embodied life. The connections between mind, body, and spirit will be explored knowing that we are living, breathing, touchable souls made by a mysterious union of the sacred dust of God and the sacred breath of God.

Exercise Science

Our mission is to develop Christ-like servant-leaders who possess the wisdom, technical skills, and relational abilities to lead others towards holistic health.

Exercise Science (BA)

The Bachelor of Arts degree with a major in Exercise Science requires two years of sequential study in one foreign language and 47 hours in the major. Students must complete the senior comprehensive requirement by completing 4 credits of directed research or internship. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics	Select <u>one</u> course from the following:	
BIO 310	4	Human Anatomy and Physiology I	EXS 450	4 Directed Research
BIO 311	4	Human Anatomy and Physiology II	KIN 492	4 Internship
EXS 111	3	Foundations of Exercise Science	Select <u>one</u> course from the following:	
EXS 274	1	Introduction to Exercise Testing	PSY 395	3 Health Psychology
EXS 290	3	Principles of Strength Training and Conditioning	PSY 410	3 Motivation
EXS 306	3	Physiology of Exercise		
EXS 316	3	Applied Nutrition		
EXS 318	3	Therapeutic Exercise and Pharmacotherapy		
EXS 353	3	Physical Fitness Assessment		
EXS 381	3	Kinesiology		
EXS 453	3	Physical Fitness Prescription		
KIN 355	3	Research Methods		

Suggested Courses for Areas of Specialization

BIO 203	4	Principles of Genetics	MAT 140	3	Fundamental Calculus for Applications
BIO 210	3	Medical Terminology	MAT 145	3	Introduction to Functions and Calculus
BIO 331	4	Comparative Anatomy	MAT 146	3	Functions and Calculus
BIO 471	4	Microbiology and Immunology	MAT 151	4	Calculus I
CHE 201/211	4	General, Organic, & Biochemistry I/College Chemistry I	MAT 210	4	Introductory Statistics
CHE 202/212	4	General, Organic, & Biochemistry II/College Chemistry II	PBH 100	3	Introduction to Public Health
CHE 311	4	Organic Chemistry I	PBH 213	2	Substance Education
CHE 312	4	Organic Chemistry II	PBH 346	3	Community Health Education
CHE 411	3	Biochemistry I	PHI 201	3	Logic
CHE 412	3	Biochemistry II	PHI 311	3	Medical Ethics
EXS 217	3	Health Promotion Program Planning	PHY 203/211	4	General Physics I/ University Physics I
EXS 273	1	Introduction to Exercise Science Research	PHY 204/212	4-5	General Physics II/University Physics II
EXS 317	2	EKG and Stress Testing	PSY 100	3	Introductory Psychology
EXS 393	1	Practicum	PSY 220	3	Sport Psychology
EXS 482	3	Lifespan and Environmental Physiology	PSY 250	3	Life Span Development
HPH 310	3	Cardiorespiratory Physiology and Chronic Disease	PSY 275	3	Introductory Statistics
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases	PSY 300	3	Abnormal Psychology
HPH 320	3	Neuromuscular Physiology and Chronic Disease	PSY 395	3	Health Psychology
KIN 223	3	Emergency Health Care	PSY 410	3	Motivation
KIN 324	2	Motor Learning	PSY 441	3	Physiological Psychology
KIN 360	1-4	Independent Study (approved by advisor)	SMA 351	3	Sport Public Relations
KIN 370	1-4	Selected Topics (approved by advisor)	SMA 352	3	Event and Facility Management

Exercise Science (BS)

The Bachelor of Science degree with a major in Exercise Science requires 65 hours in the major. Students must complete the senior comprehensive requirement by completing 4 credits of directed research or internship. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics	EXS 453	3	Physical Fitness Prescription
BIO 310	4	Human Anatomy and Physiology I	KIN 355	3	Research Methods
BIO 311	4	Human Anatomy and Physiology II	<i>Select one course from the following:</i>		
EXS 111	3	Foundations of Exercise Science	EXS 450	4	Directed Research
EXS 274	1	Introduction to Exercise Testing	KIN 492	4	Internship
EXS 290	3	Principles of Strength Training and Conditioning	<i>Select one course from the following:</i>		
EXS 306	3	Physiology of Exercise	PSY 395	3	Health Psychology
EXS 316	3	Applied Nutrition	PSY 410	3	Motivation
EXS 318	3	Therapeutic Exercise and Pharmacotherapy			
EXS 353	3	Physical Fitness Assessment			
EXS 381	3	Kinesiology			

Electives

<i>Select at least 18 hours from:</i>					
BIO 203	4	Principles of Genetics	MAT 140	3	Fundamental Calculus for Applications
BIO 210	3	Medical Terminology	MAT 145	3	Introduction to Functions and Calculus
BIO 331	4	Comparative Anatomy	MAT 146	3	Functions and Calculus
BIO 471	4	Microbiology and Immunology	MAT 151	4	Calculus I
CHE 201/211	4	General, Organic, & Biochemistry I/College Chemistry I	MAT 210*	4	Introductory Statistics
CHE 202/212	4	General, Organic, & Biochemistry II/College Chemistry II	PBH 100	3	Introduction to Public Health
CHE 311	4	Organic Chemistry I	PBH 213	2	Substance Education
CHE 312	4	Organic Chemistry II	PBH 346	3	Community Health Education
CHE 411	3	Biochemistry I	PHI 201	3	Logic
CHE 412	3	Biochemistry II	PHI 311	3	Medical Ethics
EXS 217	3	Health Promotion Program Planning	PHY 203/211	4	General Physics I/ University Physics I
EXS 273	1	Introduction to Exercise Science Research	PHY 204/212	4-5	General Physics II/University Physics II
EXS 317	2	EKG and Stress Testing	PSY 100	3	Introductory Psychology
EXS 393	1	Practicum	PSY 220	3	Sport Psychology
EXS 482	3	Lifespan and Environmental Physiology	PSY 250	3	Life Span Development
HPH 310	3	Cardiorespiratory Physiology and Chronic Disease	PSY 275*	3	Introductory Statistics
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases	PSY 300	3	Abnormal Psychology
HPH 320	3	Neuromuscular Physiology and Chronic Disease	PSY 395 [‡]	3	Health Psychology
KIN 223	3	Emergency Health Care	PSY 410 [‡]	3	Motivation
KIN 324	2	Motor Learning	PSY 441	3	Physiological Psychology
KIN 360	1-4	Independent Study (<i>approved by advisor</i>)	SMA 351	3	Sport Public Relations
KIN 370	1-4	Selected Topics (<i>approved by advisor</i>)	SMA 352	3	Event and Facility Management

*A maximum of 4 credits from these courses may count toward elective hours.

[‡]Course may not double-count as requirement and elective.

Coaching Minor

The department offers a 18-19-hour Coaching minor for any student interested in preparing for the coaching profession. Students from any major are eligible for this course of study. The minor helps prepare students for opportunities in coaching, leading camps, youth athletic ministry, and recreational leadership. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

EXS 290	3	Principles of Strength Training and Conditioning	<i>Select one course from the following:</i>		
KIN 220	3	Principles of Coaching	KIN 472	2	Psychology of Coaching
KIN 223	3	Emergency Health Care	PSY 220	3	Sport Psychology
KIN 367	3	Coaching Methods			
KIN 393	4	Practicum (<i>approved by advisor—Coaching</i>)			

Human Physiology and Preventive Medicine

Erik Hayes and Brian Dewar, Advisors

Human Physiology and Preventive Medicine is designed specifically for students seeking to enter into professional schools related to health care (e.g., medical school, physician assistant, physical therapist, occupational therapist, nursing). It first explores a basic foundation of human anatomy, physiology, cellular biology, and chemistry followed by more in depth physiology courses related specifically to physiological systems, the pathophysiology of chronic disease of those systems, and the scientific evidence and mechanism for prevention of disease through lifestyle modification. Students will gain a basic background in human nutrition, health psychology, and public health preparing them for work as health educators in our local medical clinic working to help members of the community prevent and treat chronic disease. The major is intentionally small enough to allow students space to meet all the prerequisite requirements for professional school entrance exams and professional school admission requirements. In addition, students will have room to pursue semester abroad experiences, faculty mentored research, and clinical internships.

Students wishing to follow more traditional paths to professional schools in medicine and health care (e.g., biology or chemistry) or choosing majors that would not typically be associated directly with health care but are nonetheless related to human health and flourishing (e.g., social work, music therapy, missions) may choose to complete a minor in Preventive Medicine.

Human Physiology and Preventive Medicine (BS)

The Bachelor of Science degree with a major in Human Physiology and Preventive Medicine 55-56 major hours. *Students must also complete at least 160 clinical hours as approved and verified by the department. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
BIO 310	4	Human Anatomy and Physiology I
BIO 311	4	Human Anatomy and Physiology II
EXS 316	3	Applied Nutrition
HPH 493	3	Human Physiology Capstone
KIN 221	3	Exercise as Medicine
NAS 230	2	Health Education for Behavior Change
PBH 100	3	Introduction to Public Health
PHI 311	3	Medical Ethics
PSY 100	3	Introductory Psychology
PSY 395	3	Health Psychology

Select one of the following chemistry course combinations:

CHE 201	4	General, Organic, and Biochemistry I
CHE 202	4	General, Organic, and Biochemistry II

or

CHE 211 ^{††}	4	College Chemistry I
CHE 212 ^{††}	4	College Chemistry II

Select one course from the following:

BIO 381	3	Research Methods
KIN 355	3	Research Methods

Select two courses from the following:

HPH 310	3	Cardiorespiratory Physiology and Chronic Disease
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases
HPH 320	3	Neuromuscular Physiology and Chronic Disease

Select one additional course from the following:

BIO 300	4	Human Medical Physiology
EXS 482	3	Lifespan and Environmental Physiology
HPH 310	3	Cardiorespiratory Physiology and Chronic Disease
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases
HPH 320	3	Neuromuscular Physiology and Chronic Disease
PSY 441	3	Physiological Psychology

Recommended Courses

Students may choose to select any of the following courses based upon consultation with advisor and contact with specific graduate or professional school to ensure all entrance requirements are met; recommended courses are not counted toward major requirements nor major GPA.

BIO 203 ^{††}	4	Principles of Genetics
BIO 210 [†]	3	Medical Terminology
BIO 312 ^{††}	4	Cellular and Molecular Biology
BIO 471 [†]	4	Microbiology and Immunology
CHE 311 ^{††}	4	Organic Chemistry I
CHE 312 [†]	4	Organic Chemistry II
CHE 411 [†]	3	Biochemistry I
IAS 210 [†]	3	Medical Terminology
MAT 210 ^{††}	4	Introductory Statistics
PHY 203 [†]	4	General Physics I
PHY 204 [†]	4	General Physics II
PSY 250	3	Life Span Development
PSY 275	3	Introductory Statistics
PSY 300	3	Abnormal Psychology
SOC 100 [†]	3	Introduction to Sociology
SOC/ANT	3-4	Sociology or Anthropology Course

[†]Recommended for Medical School

^{††}Recommended for Physician Assistant

Preventive Medicine Minor

A minor in Preventive Medicine requires 20 hours. *Students must also complete two semesters of 80 clinical hours each semester as approved and verified by department. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

EXS 316	3	Applied Nutrition
KIN 221	3	Exercise as Medicine
NAS 230	2	Health Education for Behavior Change
PBH 100	3	Introduction to Public Health
PHI 311	3	Medical Ethics
PSY 100	3	Introductory Psychology
PSY 395	3	Health Psychology

Exercise Science Courses

EXS 111 3 hours

Foundations of Exercise Science

This course is an introduction to the field of exercise science. The content includes definitions, objectives, and philosophies of the field; basic content of components of exercise science, contemporary issues and research, and potential career options. This introduction to the field of exercise science will have a foundation of the Christian perspective of vocational gifting, calling, preparation and service to humankind. Offered Fall and Spring semesters.

EXS 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

EXS 214 3 hours

Health and Sexuality

This course is designed to prepare future health educators to teach the relationship between health and human sexuality. The class activities will include lectures/discussions, peer teaching, development of an abstinence-based curriculum, and lectures by outside resource personnel.

EXS 215 2 hours

Health, Exercise, and Aging

The course is designed to examine common health-related physiological changes, current issues, and concerns as they pertain to the aging individual. Prerequisite: EXS 111 or permission of instructor.

EXS 217 3 hours

Health Promotion Program Planning

This course is a study of the philosophy, goals, objectives, organization, content, and methods of wellness programs. Characteristics of various clientele and how programs can be developed to meet their specific needs will be studied. Prerequisite: EXS 111. Offered Fall semester of odd years.

EXS 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

EXS 273 1 hour

Introduction to Exercise Science Research

Students will gain a basic introduction to research through a field experience in an exercise science research project. Students will help with data collection, data entry, and data analysis portions of the study. May be repeated once for credit. By permission of instructor only.

EXS 274 1 hour

Introduction to Exercise Testing

This course will introduce students to the basic skills of cardiovascular disease risk assessment, anthropometric measures, basic muscle strength and endurance assessment, EKG preparation, and data collection.

EXS 280 1 hour

Exercise Techniques for Physical Fitness

A course designed to teach various motor skills needed to effectively improve physical fitness such as proper running mechanics, basic lifting techniques, and common stretches. Students will also develop presentation and group exercise leadership skills. Meets foundational core stewardship of the body requirement beyond KIN 100. Exercise Science majors and Coaching minors only.

EXS 290 3 hours

Principles of Strength Training and Conditioning

This course is the study of the essentials of strength training and conditioning for practitioners and prepares students for certification with the National Strength and Conditioning Association (NSCA). The course will cover the following: biomechanics of exercise, rehabilitation, bioenergetics of training, aerobic exercise prescription, resistance training, and speed and plyometric training. Prerequisites: EXS 111 or permission of instructor. Offered Spring semester of even years.

EXS 306 3 hours

Physiology of Exercise

A study of how the body adapts and responds to acute and chronic exercise. Attention is given to skeletal muscle structure and function, neurological control of movement, metabolic systems, and cardiovascular and pulmonary systems. Prerequisite: BIO 310 or permission of instructor. Offered Spring semester.

EXS 316 3 hours

Applied Nutrition

This course is a study of basic principles of human nutrition including fundamentals of digestion, absorption, and metabolism; nutrients and their roles for the lifespan; eating disorders; and nutrition for performance. Exercise Science, Health Science, and Human Physiology and Preventative Medicine majors only or by permission of instructor. Offered Fall and Spring semesters.

EXS 317 2 hours

EKG and Stress Testing

This course is designed to provide the undergraduate exercise science student with the basic knowledge and skills needed to interpret resting and exercise EKG's. Emphasis will be placed on 1) learning normal vs. abnormal EKG patterns at rest and during exercise; and, 2) the effects of cardiovascular medication on the resting or exercise EKG and various physiologic responses to exercise testing. An additional purpose of the course is to introduce the undergraduate exercise student to selected cardiac assessment techniques. Prerequisite: EXS 306 or permission of instructor.

EXS 318 3 hours

Therapeutic Exercise and Pharmacotherapy

A detailed study of the role exercise plays in preventing and treating chronic diseases and conditions including metabolic diseases, obesity, cardiovascular conditions, systemic inflammatory diseases, neurological diseases, cancer, orthopedic conditions, and aging. Prerequisite: EXS 306 or permission of instructor. Offered January interterm.

EXS 320 3 hours

Community Health Promotion

This course introduces students to health promotion in a community setting. The content explores the theoretical and practical issues of the field of community health that enable students to identify and apply health education principles to health challenges facing individuals, groups, and communities. Local cultures will be explored throughout the trip and students will be expected to reflect on their experience. Meets foundational core cross-cultural requirement. Offered: January interterm of even years. Prerequisite: Permission of instructor.

EXS 353 3 hours

Physical Fitness Assessment

This course will provide a comprehensive study of the components of physical fitness and methods of assessing fitness levels within each component. Health assessment and risk analysis instruments will also be examined. The course consists of classroom work, practical assessment projects, and some field experiences. Each student will participate in "hands-on" fitness assessments of various population groups. Prerequisites: EXS 111, EXS 274, and EXS 306; or permission of instructor. Offered Fall and Spring semesters.

EXS 360 1-4 hours

Independent Study

An individualized, directed study involving a specified topic.

EXS 370 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

EXS 381 3 hours

Kinesiology

An analysis of human movement based on anatomic and mechanical principles. Emphasis is given to the application of these principles to the understanding of athletic performance. Prerequisites: BIO 310 or permission of instructor. Offered Fall semester.

EXS 393 1-4 hours

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. Prerequisite: Permission of KIN department.

EXS 450 1-4 hours

Directed Research

Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. Prerequisite: Permission of instructor.

EXS 453 3 hours

Physical Fitness Prescription

This course provides a study of the prescription and development of appropriate exercise programs based on accurate assessment of each component. Appropriate programs for various populations groups will be considered. The course will consist of classroom work, practical prescription projects, and some field experiences. Each student will participate in "hands-on" prescription and program development for a variety of individuals. Prerequisite: EXS 306. Offered Spring semester.

EXS 480 2 hours

Seminar

A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

EXS 482 3 hours

Lifespan and Environmental Physiology

This is a seminar-style course which will examine the differences in pediatric physiology and geriatric physiology as well as address physiological adaptations to different natural environments. A variety of topics related to pediatric and geriatric physiology will be explored including growth, maturation and aging, underlying mechanisms for changes in fitness in children and older adults, and specific health challenges facing these populations. Topics relevant to environmental physiology that will be explored include adaptations related to hot, humid, and hypoxic environments. Prerequisite: EXS 306. Offered Fall semester.

EXS 490 1-2 hours

Honors

Individualized study or research of an advanced topic within a student's major. Open to students with at least a 3.00 GPA in the major field.

Human Physiology Courses

HPH 310 3 hours Cardiorespiratory Physiology and Chronic Disease

This course explores the physiology of the cardiac, respiratory, and vascular systems, pathophysiology of the most common cardiorespiratory diseases, and current evidence and mechanisms for disease prevention through lifestyle modification. *Prerequisites: BIO 201; BIO 310; BIO 311; and CHE 202 or CHE 212. Offered Spring semester.*

HPH 315 3 hours Pathophysiology of Immunological & Metabolic Chronic Diseases

This course explores the pathophysiology of immunological and metabolic chronic diseases with specific emphasis on cancer, hyperlipidemia, diabetes, obesity, and frailty, as well as the major organ systems most commonly impacted by those diseases and current evidence and mechanisms for disease prevention through lifestyle modification. *Prerequisites: BIO 201; BIO 310; BIO 311; and CHE 202 or CHE 212.*

HPH 320 3 hours Neuromuscular Physiology and Chronic Disease

This course explores the physiology of the central and peripheral nervous system with specific emphasis on neuromuscular control, the pathophysiology of the most common neurological and neuromuscular diseases (e.g., stroke, Parkinson's, Alzheimer's, mental illness), and the current evidence and mechanisms for disease prevention through lifestyle modification. *Prerequisites: BIO 201; BIO 310; BIO 311; and CHE 202 or CHE 212. Offered Fall semester.*

HPH 493 3 hours Human Physiology Capstone

This course will revisit and add to the theological and philosophical underpinnings of human health and medicine that were initially explored in KIN 221 Exercise as Medicine. Students will review their reflective writings from their freshmen year and develop an updated philosophy of human health and flourishing and the practice of medicine. In addition, students will be required to research a specific chronic disease and present an in depth presentation of the current scientific evidence for disease prevention. This course will culminate in a multi-day retreat where students will give their presentations and engage their peers and faculty in discussions centered around their philosophy papers. *Must be a graduating senior to enroll. Offered Interterm.*

Kinesiology Courses

KIN 100 2 hours Living Well

This course will assist students in developing an understanding of human flourishing founded on biblical principles and scientific evidence in the areas of sleep, stress and time management, nutrition, and various aspects of physical fitness. Students will engage in various assignments and physical activities related to these areas with the purpose of providing the abilities to make healthy lifestyle and behavior choices. *This course satisfies two of the three hours of foundational core requirements for stewardship of the body.*

KIN 150 3 hours Faith and the Embodied Life

The main objective of this course is to aid students in understanding how their faith intersects with an embodied existence. Throughout the course, students will engage in physical (cloister walks, etc.), mental, and spiritual exercises to assist them in the formation of their personal health philosophies. Students will gain a better understanding of how care (or lack thereof) for our bodies has spiritual ramifications and that we may worship the One who created our bodies through proper care and respect of them.

KIN 170 1-4 hours Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

KIN 200I 1 hour Individualized Physical Education

The individualized physical education course is designed for students who fit into one of the following categories: (1) the student has a physical problem that prohibits completion of another KIN 200 course; (2) the student would like to do an activity that is not offered as a KIN 200 course; or (3) the student is near graduation and cannot schedule another KIN 200 course. Students design a program with the instructor's supervision and then engage in that program throughout the semester. Physical fitness assessments may be included as well as cognitive assignments. Students must apply for acceptance into the class and be approved by the instructor in order to register for the course. *Prerequisite: EXS 111, KIN 100, or KIN 221.*

KIN 200Z 1 hour Athletic Participation

The athletic participation course is designed for students who compete on an NAIA intercollegiate athletic team. *Students must be approved by the athletic department to receive academic credit for this course. Credit is awarded only during the sport season and credit will not be granted retroactively for athletic participation from a previous season.*

KIN 200 1 hour General Physical Education Activity Courses

These courses encourage students to adopt an active physical lifestyle and maintain physical fitness and wellness throughout their lives. Students learn about activities and develop skills for participation in lifetime activities. *One KIN 200 course is taken after KIN 100 to meet the three-hour foundational core requirement. Prerequisite: EXS 111, KIN 100, or KIN 221.*

KIN 200A	Aerobic Conditioning
KIN 200AV	Aerobic Walking
KIN 200B	Badminton
KIN 200C	Weight Control and Fitness
KIN 200CC	Camping and Canoeing
KIN 200D	Square Dance
KIN 200F	Softball
KIN 200FD	Folk Dances of Other Cultures
KIN 200FF	Fly Fishing
KIN 200FN	Functional Fitness
KIN 200G	Golf
KIN 200H	Beginning Horsemanship
KIN 200J	Acting
KIN 200JG	Jogging
KIN 200K	Basketball
KIN 200KT	Karate
KIN 200L	Bowling
KIN 200M	Challenge Adventures
KIN 200N	Total Fitness
KIN 200P	Personal Fitness
KIN 200PB	Pickleball
KIN 200Q	Outdoor Activities
KIN 200R	Racquetball
KIN 200RU	Running
KIN 200S	Soccer
KIN 200SB	Beginning Swimming
KIN 200SF	Fitness Swimming
KIN 200T	Tennis
KIN 200U	Circuit Training
KIN 200V	Volleyball
KIN 200W	Weight Training
KIN 200WA	Well Aerobics
KIN 200Y	Cycling

KIN 220 Principles of Coaching	3 hours	KIN 334 Lifeguard Training Instructor	1 hour
This course is a study of the duties and responsibilities of coaches and the potential problems and issues they may face. The content will include the four major areas of coaching certification programs: medical aspects, physiological aspects, psychological aspects, and organizational and administrative aspects. Methods and strategies of handling the responsibilities and the problems will be studied.		Acquisition of the skills, terminology, and progressions for teaching American Red Cross Lifeguard Instructor Training. The course includes both knowledge of the skills and physical performance of the skills. Successful completion of the American Red Cross requirements leads to certification as a Red Cross LGI. Meets <i>foundational core stewardship of the body requirement beyond KIN 100</i> . Prerequisites: <i>KIN 302 and permission of instructor.</i>	
KIN 221 Exercise as Medicine	3 hours	KIN 355 Research Methods	3 hours
This class examines the impact of physical activity, exercise, nutrition, and lifestyle related factors on health and the prevention and treatment of chronic disease. Students will learn the physiological basis of cardiorespiratory and musculoskeletal fitness, how these are influenced by exercise and physical activity, and their relation to health and disease. The therapeutic effect of exercise will be compared to traditional pharmacological treatment approaches where applicable. In addition students will be challenged to consider the personal, spiritual, and social responsibilities of maintaining an optimal level of fitness as they apply course content to their own life. Meets the <i>3 hour foundational core stewardship of the body requirement</i> . Open to Pre-Med students and Public Health, Pre-Nursing, and Human Physiology and Preventative Medicine majors only or by permission of instructor.		An exploration of the basic methods of research and data collection in the realms of sport management, physical education, and exercise science in a lecture format. Topics include defining a research question, reviewing and analyzing past research, designing a research project, collecting and analyzing data, and interpreting results. Students will also learn basic statistics and Excel and PowerPoint table and figure making skills. Prerequisite: <i>EXS 111 or KIN 221</i> . Exercise Science, Health Science, and Human Physiology and Preventative Medicine majors only. Offered Fall and Spring semesters.	
KIN 223 Emergency Health Care	3 hours	KIN 360 Independent Study	1-4 hours
Prevention, treatment, and emergency care of various health problems and injuries will be examined. Skills will be obtained in CPR, AED, first aid, blood and airborne pathogens, and use of PPEs according to guidelines of the Emergency Care and Safety Institute and American Red Cross. Offered Spring semester.		An individualized, directed study involving a specified topic.	
KIN 231 Officiating Sports	2 hours	KIN 367 Coaching Methods	3 hours
A study of the officiating skills and techniques needed for various sports. The opportunity to earn official's rating is provided.		This course will assist the student in learning how to teach the skills and strategies of selected sports and how to utilize that information to be an effective coach. The content includes basic sport skills, types of offenses and defenses, special situation strategies, and other strategies specific to selected sports. The student will learn correct techniques of skills and skill progressions as well as drills to teach skills and strategies.	
KIN 250 Elementary School Health Program	2 hours	KIN 370 Selected Topics	1-4 hours
A course designed to equip the elementary education student with a basic understanding of teaching concepts associated with physical education activities and appropriate health and safety practices. Fundamental content of the areas of physical education, health, and safety, as well as teaching methods, are explored. Meets <i>foundational core stewardship of the body requirement beyond KIN 100</i> . Prerequisite: <i>KIN 100</i> . Open to Elementary Education and Public Health majors only or permission of instructor.		A course offered on a subject of interest but not listed as a regular course offering.	
KIN 270 Selected Topics	1-4 hours	KIN 393 Practicum	1-4 hours
A course offered on a subject of interest but not listed as a regular course offering.		Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. Prerequisite: <i>Permission of KIN department.</i>	
KIN 271 CPR for Healthcare Providers	1 hour	KIN 450 Directed Research	1-4 hours
Successful completion of this course will certify participants in the techniques of CPR and AED use for adults, children, and infants; foreign body obstruction; and cardiac emergency management according to American Red Cross standards. Priority registration for this course is given to students in the KIN majors.		Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. Prerequisite: <i>Permission of instructor.</i>	
KIN 300 Basic Swimming Skills	1 hour	KIN 472 Psychology of Coaching	2 hours
For KIN majors who have satisfactorily completed a basic swimming, intermediate swimming, or emergency water safety course at another institution. Students will receive credit for basic proficiency in swimming skills and water safety upon submission of official transcript. Meets <i>foundational core stewardship of the body requirement beyond KIN 100</i> .		This course is a study of the role of psychology in coaching and how coaches can use psychology to enhance the performance of athletes and teams. Topics include psychology, philosophy of sport, motivation, self-confidence, goal setting, attention/concentration, imagery, arousal, self-talk, stress management, and mental skill methods/training. An application of appropriate mental skills will be addressed for each topic. Biblical principles of psychology will be integrated into topics.	
KIN 302 Lifeguard Training	2 hours	KIN 480 Seminar	2 hours
This course is designed to train an individual in the proper methods for rescue, water safety, first aid, CPR, and other skills necessary for lifeguarding. Meets <i>foundational core stewardship of the body requirement beyond KIN 100</i> . Prerequisite: <i>KIN 100</i> .		A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. Students examine contemporary issues in sport.	
KIN 324 Motor Learning	2 hours	KIN 490 Honors	1-2 hours
A study of the theories and research of the processes of learning motor skills. The application of appropriate methods of teaching motor skills is studied and practiced to enable the students to understand how they can be used effectively. Prerequisite: <i>EXS 111 or permission of instructor.</i>		Individualized study or research of an advanced topic within a student's major. Open to students with at least a 3.00 GPA in the major field.	
KIN 333 Water Safety Instructor	2 hours	KIN 492 Internship	4 hours
Instruction in the skills, terminology, and progressions of teaching swimming strokes and water safety. The course includes knowledge of the skills, physical performance of the skills, and teaching skills. Successful completion of the American Red Cross requirements leads to certification in Red Cross WSI. Advanced swimming skills are necessary. Meets <i>foundational core stewardship of the body requirement beyond KIN 100</i> . Prerequisites: <i>KIN 100 and permission of instructor.</i>		This field experience is designed to have the students apply what they have learned in their courses and to extend that learning by working in an organization that is appropriate for their major. Students work on a regular basis at the organization under the supervision of approved staff members. Students are also under the supervision of a member of the Taylor University Department of Kinesiology. Each student must comply with the guidelines for credit hours, clock hours, and other criteria that are specific for the internship in his/her major. To register for this internship, the student must submit a proposal for the internship and have it approved by the KIN department and the internship organization. Prerequisites: <i>All designated prerequisites for the internship in that major.</i>	