This course is designed for the beginner swimmer. Students will develop skill in water readiness activities, floating, back and prone glide, sculling, freestyle, backstroke, and elementary backstroke. Students will demonstrate knowledge of propulsion and resistance forces, correct stroke technique, and safety and emergency procedures.

101M Great Lakes Sailing
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 6 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES101M

This course is a basic sailing class consisting of 15 hours of instruction and 13 hours arranged on a boat in Muskegon, MI.

101T SCUBA Diving I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 6 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN111T

This beginning scuba course is the pool and classroom portion of open water certification. Swimming I or equivalent skills are recommended.

102 Beginning Combative Sports
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 6 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 102

Skill and knowledge development in the art or sport of physical training. Separate course sections in activities such as judo, karate, aikido, and fencing.

102A Judo I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total 8 credits in KIN 101-108 and KIN 111-118. SA: PES102A

This course is designed to introduce students to the sport of Judo. Students will learn and perform basic skills including falling, throwing, hold-down, and submission hold. Students will also learn the competition rules of Judo.

102C Karate I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES102C

This course is designed to introduce the student to the sport of Karate. The students will learn and perform the basic skills of kick, strike, block, stance and footwork. Students will also learn self-defense, one-step and sparring techniques.

102E Hopkido (Aikido)
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES102E

This course is designed to introduce the student to the art and sport of Hopkido. Hopkido is a form of the movement arts that emphasizes force redirection and control. Through the study and training of Hopkido students will learn the KiGI (principles denote spirit, ether, essence and spiritual entity).

102F Kendo (Kumdo)
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES102F

Kendo is an art in Japanese swordsmanship. It is different from modern fencing in that the person uses both hands to hold the weapon. This course will focus on the basic skills as well as historic background and philosophical understanding of the sport.

102G Foil Fencing
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES102G

Foil fencing is a sport of defense using a weapon called a foil. The objective is to touch the torso of our opponent with the tip of the weapon to score a point. The opponent must try to prevent this movement. Fencing skills with emphasis on their carry-over values and as a source of healthful exercise.

103 Beginning Conditioning
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 103

Knowledge and competency in physical fitness activities that emphasize cardiovascular and muscular training. Separate course sections in activities such as aerobic exercise, power walking, swimming conditioning, and weight training.

103A Aerobic Exercise I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES103A

This course is designed for beginner and intermediate aerobic students. Its purpose is to introduce theoretical and practical principles of stretching, toning, and aerobic activity that progressively improve cardiovascular strength and endurance, flexibility, co-ordination and body image.

103C Aerobic Exercise, Low Impact
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES103C

This course is designed for students who do not wish to participate in high impact aerobic. Its purpose is to introduce theoretical and practical principles of stretching, toning, and aerobic activity that progressively improve cardiovascular strength and endurance, flexibility, co-ordination and body image.

103D General Conditioning I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES103D

This course is designed to provide students with a background in physical fitness, exercise, and health principles and practices. The principles will be applied to personal exercise and health programs through activities such as target heart rate monitoring, body measurements, posture analysis, and energy intake and expenditure assessments. The course includes lectures, demonstrations and active student participation in vigorous exercise activities.

103G Power Walking
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES103G

This course is designed to provide students with basic knowledge of physical fitness and healthy lifestyle principles. Power walking is a program that includes muscular strength and endurance, flexibility, cardiovascular endurance, and total body health.

103N Strength and Conditioning I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES103N

This course combines weight training and general conditioning. It is a vigorous cardiovascular program that combines work on aerobic endurance and emphasized muscular strength and endurance.

103S Swim Conditioning
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN113D

This course is designed for students who want to achieve cardiovascular fitness through swimming. Student will develop muscular endurance, strength and flexibility, and cardiovascular fitness. Students will learn to use several training principles and techniques such as interval training, long distance swimming and dry land exercises. Students will also learn basic nutrition and diet guidelines. Swimming I or equivalent skills are recommended.
104 Beginning Dance
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 104
Skill and knowledge development in dance activities. Separate course sections in ballet, modern, jazz, Latin, social and other dance styles.

104A Ballet
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 104A
Ballet is a gracefull and detailed form of dance devised by French royalty. It emphasizes an elongated spine which facilitates extensive and virtuosi use of the arms and legs in movements of varied tempo. Students will be introduced to many classical ballet dance techniques and creative movement opportunities. The development and history of ballet will also be included.

104B Modern Dance
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 104B
Modern dance was developed in the early part of the twentieth century. It emphasizes full and expressive use of the torso, arms, legs, and head within both choreographed and improvisational movement sequences. As a dance form it explores a broad range of movement tempos and qualities. In this course students explore creative movement ideas and review the historical developments and principles of modern dance. Students will learn basic modern dance techniques and choreography. Individual and group creative movement projects will be shared.

104C Jazz Dance
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 104C
Jazz dance is a highly rhythmical form of dance emphasizing dynamic and sensuous use of torso, arms, legs, hips, and head. It has its roots in jazz music of varied tempo. Students will learn a variety of jazz techniques, as well as the knowledge of the origin, history and choreography will be offered. Individual and group creative projects will be designed and shared.

104D Social Dance
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 104D
An extensive course including Dance Walk, Fox Trot, Waltz, Tango, Rhumba, Cha Cha, Jitterbug, Polka and other contemporary dances. Included will be social dance history, patterns, rhythms, styles and etiquette.

104E Latin Dance
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 104E
This course will explore beginning aspects of Latin Dance.

104F Country Dance
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 104F
Country dance involves people moving together to music and enjoying the group or partner as well as the rhythmic movement. Students will learn the two-step, whip/rodeo swing, basic easy coast swing, various line dances, and various couples dances.

105 Beginning Gymnastics
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 105
Skill and knowledge development in gymnastics. Separate sections in activities such as apparatus, tumbling, and floor exercise.

105A Apparatus
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 105A
Students will learn basic skills and routines on official apparatus events. The events include vault, beam, uneven bars, high bars, parallel bars, rings, and pommel horse. Performance improvement and spotting techniques will be emphasized.

105B Gymnastics I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 105B
This course is designed as a basic introduction to all aspects of gymnastics including apparatus and tumbling/floor exercises. Students learn to perform routines in the vaults, balance beam, parallel bars, rings, pommel horse, and floor. Simple body mechanics and skill progression and analysis will also be included. Students will also learn proper warm-up and cool-down, and spotting techniques.

105D Tumbling and Floor Exercise I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 105D
Tumbling and floor exercises refers to the performance of a routine on a large mat. Students learn basic skills and develop agility, balance, strength, and flexibility. Students also learn correct body preparation, spotting techniques, and mechanical principles gymnastics. Skill progression and analysis are emphasized.

106 Beginning Individual Sports
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 106
Skill and knowledge development in individual sports. Separate course sections in activities such as bowling, golf, skating, self defense, and track and field.

106A Bicycle Touring
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 106A
This course is an introduction to the bicycle as a form or recreation, and cycling as a form of exercise. To maximize the pleasure of bicycling, safety awareness, cycling etiquette, bicycle maintenance and training components will be covered. Other topics include the discussion of health benefits of cycling such as cardiovascular endurance, muscular strength and endurance, flexibility, and cycling as a life-long form of exercise.

106B Billiards
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 106B
This course is designed to teach students the basic skills and techniques, including drawing, following, English, bridge and bank shots, used in pocket billiards. The terminology, rules, and strategies of billiard games such as 8-ball, 9-ball, and cutthroat will also be covered.

106C Bowling
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 106C
This course is designed to help students acquire the fundamental skills of bowling including form and technique. Students will also learn the terminology, rules, strategies and scoring procedures. The course involves lectures, demonstration, and practice time.
106E Golf I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES106E

This class is designed to introduce the beginning golfer to the rules and etiquette of the game, basic swing fundamentals, and proper equipment selection. The course includes lectures, demonstrations, participation, and examinations.

106G Horsemanship I
Fall, Spring, Summer. 1(0-2) R: Important offerings for KIN TE majors to develop skills. Important service course offerings for the general health and well-being of students. Each alpha-course within the parent course is a stand-alone course. SA: PES106G

This class will explore beginning aspects of horsemanship.

106K Roller Skating
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES106K

This class will explore beginning aspects of roller skating.

106M Tai Chi
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES106M

Tai Chi is an activity that emphasizes human body movement through smooth circular motions in Eastern metaphors and meditation. This course is designed to help students understand the roles and characteristics of Tai Chi. Strength, flexibility and balance are developed through the learning of basic skills and sets of Tai Chi.

106N Track and Field
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES106N

This course is designed to introduce the students to track and field events that include running, hurdles, jumping, and throwing. Instruction in short, middle and long distance running, relay exchanges, hurdling, high jump, long jump, discus and shot put will be presented. This course emphasizes the basic fundamentals, techniques, and rules of track and field. Cardiovascular endurance, muscular strength and endurance and skill development will also be emphasized.

106R Fly Fishing
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES106R

This class will explore the beginning aspects of fly fishing.

107 Beginning Racquet Sports
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES 107

Skill and knowledge development in racquet sports. Separate course sections in sports such as badminton, racquetball, and tennis.

107A Badminton
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES107A

This class will cover the beginning aspects of badminton.

107B Racquetball I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES107B

Racquetball is a vigorous racquet game played on an enclosed four-wall court with two, three, or four players. Students will learn the fundamental skills including forehand, backhand, and serve. The students will also learn basic rules, strategies, and scoring.

107D Table Tennis
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES107D

This class will cover the beginning aspects of table tennis.

107E Tennis I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES107E

Tennis is a racquet sport that is played on a hard surface court which is divided in half by a three foot high net. The course will introduce students to the basic strokes, footwork, and court positions to play singles and doubles. Rules, scoring and game etiquette will also be included.

108 Beginning Team Sports
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES108

Skill and knowledge development in team sports. Separate course sections in sports such as basketball, ice hockey, lacrosse, soccer, softball, and volleyball.

108A Basketball I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES108A

Basketball combines skill drills, half court scrimmages, and full court games to improve basic skills, game play, and endurance. Students will learn basic skills, rules, and basic defensive and offensive strategies.

108C Ice Hockey I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES108C

This course will cover elementary hockey concepts, skills and strategies.

108E Lacrosse
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES108E

Lacrosse is a ball game played by two teams on a field using sticks to contact the ball. Students will learn basic skills, offensive and defensive strategies, rules and scoring. Students will engage in skill drills and scrimmage.

108F Soccer I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES108F

Soccer is a team sport that utilizes a field with goals set at each end of the field. Ball contact may be made by the foot, body, and head. Students will learn the fundamental skills and tactics of outdoor soccer. Rules, scoring, and offensive and defensive strategies will be emphasized.

108K Volleyball I
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES108K

Students will learn the fundamental skills, rules and strategies of the game. The class involves lectures, demonstrations, drills, and game play.

108M Roller Hockey
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: PES108M

This course will explore the beginning aspects of Roller Hockey.
111 Swimming II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101H
This course will explore the beginning aspects of Swimming.

111B Swimming III
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101C
This course is designed for the advanced swimmer to refine swimming skills, learn new strokes, increase swimming fitness levels, and learn basic water safety and rescue techniques. Students will learn, develop and refine skills in sculling, freestyle, backstroke, breaststroke, butterfly, and sidestroke, as well as dives and turns. Students will demonstrate knowledge of propulsion and resistance forces, correct stroke technique and safety and emergency procedures. Swimming II or equivalent skills are recommended.

111C Diving
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101D
Skill and knowledge development in advanced water-related activities.

111D Emergency Water Safety
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101E
Skill and knowledge development in advanced water-related activities.

111E Lifeguard Training
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101F
Skill and knowledge development in advanced water-related activities.

111F SCUBA Diving II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101H
This advanced scuba course explores advanced scuba skills. Scuba I or equivalent skills are recommended.

111G Water Polo
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101J
Skill and knowledge development in advanced water-related activities.

111M Windsurfing
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101K
Skill and knowledge development in advanced water-related activities.

111P Canoeing
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101N
Skill and knowledge development in advanced water-related activities.

111R Windsurfing II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101O
Skill and knowledge development in advanced water-related activities.

111S Sailing II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101P
Skill and knowledge development in advanced water-related activities.

111T Yacht Racing
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101Q
Skill and knowledge development in advanced water-related activities.

111U SCUBA Open Water Certification
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101R
Advance Skill and knowledge development in advanced water-related activities.

111V Rowing
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 101S
Skill and knowledge development in advanced water-related activities. Separate course sections in advanced swimming, lifeguard training, sailing, and scuba diving.
112A Judo II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118.
Skill and knowledge development in advanced combative sports. Separate course sections in judo, karate, and foil fencing.

112B Karate II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 102D
This course is designed for the experienced Judo student. Advanced Judo sport skills that involve actual contest, Rondori, and contest strategies will be emphasized in order to assist the students in attaining a higher level of proficiency in Judo. Judo I or equivalent skills are recommended.

112C Foil Fencing II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 102H
Foil fencing is a sport of defense using a weapon called a foil. The objective is to touch the torso of our opponent with the tip of the weapon to score a point. The opponent must try to prevent this movement. Foil Fencing I or equivalent skills are recommended.

113 Advanced Conditioning
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118.
Skill and knowledge development in advanced conditioning activities. Separate course sections in aerobic exercise, general conditioning, distance running, and strength and conditioning.

113E Weight Training II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 103J
This course is designed to teach intermediate level weight training principles, basic anatomy and muscle physiology, and nutrition and diet. Students will learn different weight training programs and develop personal training programs. This course involves lectures, demonstrations, and active student participation. Weight Training I or equivalent skills are recommended.

113K Strength and Conditioning II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 103O
This course combines weight training and general conditioning. It is a vigorous cardiovascular program that combines work on aerobic endurance and emphasized muscular strength and endurance. Strength and Conditioning I or equivalent skills are recommended.

113N General Conditioning IV
Fall, Spring, Summer. 1(0-2) R: General Conditioning III or equivalent level of aerobic fitness. R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118.
Vigorous cardiovascular program that emphasizes advanced aerobic endurance. Aerobic training principles, muscle and cardiovascular physiologies, nutrition and diet. Personalized aerobic training program.

113P Weight Training IV
Fall, Spring, Summer. 1(0-2) R: Weight Training III or equivalent skill ability. R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118.
Advanced weight training. Strength training principles, anatomy and muscle physiology, nutrition and diet. Personalized weight training program.

114 Advanced Dance
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118.
Skill and knowledge development in advanced dance activities. Separate course sections in advanced dance activities offered.

114A Social Dance II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 104I
This course expands on Social Dance I and introduces more advanced steps. Social Dance I or equivalent skill is recommended.

115 Advanced Gymnastics
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118.
Skill and knowledge development in advanced gymnastics activities. Separate course sections in gymnastics, tumbling, and floor exercise.

115A Gymnastics II
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 105C
This is an advanced course designed for individuals to improve in gymnastics including apparatus and tumbling/floor exercises. Students will perform routines on the vault, balance beam, parallel bars, rings, pommel horse, and floor. Performance improvement and spotting techniques will be emphasized. Simple body mechanics and analysis will also be included. Gymnastics I or equivalent skills are recommended.

116 Advanced Individual Sports
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118.
Skill and knowledge development in advanced individual sports. Separate course sections in golf, ice skating, and triathlon training.

116F Triathlon Training
Fall, Spring, Summer. 1(0-2) R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 106S
This course offers advanced conditioning in triathlon activities. General Condition I or equivalent skill is recommended.
117 Advanced Racquet Sports
Fall, Spring, Summer. 1(0-2): R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. Skill and knowledge development in advanced racquet sports. Separate course sections in racquetball and tennis.

117A Racquetball II
Fall, Spring, Summer. 1(0-2): R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN107C
A vigorous racquet sport involving the development of intermediate and advanced skills, singles and doubles strategies, competitive play, rules, scoring, and officiating. Skills will include: kill, passing, pinch, and ceiling shots, and power and overhead serve. Racquetball I or equivalent skills are recommended.

118 Advanced Team Sports
Fall, Spring, Summer. 1(0-2): R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. Skill and knowledge development in advanced team sport activities. Separate course sections in basketball, ice hockey, soccer, softball, and volleyball.

118C Soccer II
Fall, Spring, Summer. 1(0-2): R: A student may earn a maximum of 8 credits in all enrollments for this course if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 8 credits in KIN 101-108 and KIN 111-118. SA: KIN 108G
A course that emphasizes advanced soccer skills, drills, and matches. Emphasis will be placed on game play, strategy development, and cardiovascular development. Soccer I, indoor soccer or equivalent skills are recommended.

120 Personal Health
Fall, Spring, Summer. 3(3-0): R: Open only to students in Kinesiology. SA: PES 120
Physical, mental, emotional, social, and spiritual domains of health. Alternative health values and behaviors. Developing healthy lifestyles.

121 The Healthy Lifestyle
Fall, Spring, Summer. 3(2-2): SA: PES 121
Cardiovascular risk factors, lifestyle habits, and aerobic capacities and their relationship to optimal health and longevity. Individual physical activity required as part of the course.

125 First Aid and Personal Safety
Fall, Spring, Summer. 3(3-0): SA: PES 125
Knowledge and application of first aid concepts relating to respiratory and cardiopulmonary disorders, shock, wounds, burns, fractures, drug poisoning, childbirth, litigation. Preventing trauma by recognizing and avoiding safety hazards.

126 Introduction to Athletic Training
Fall, Spring. 3(3-0)
Basic knowledge for the recognition and prevention of athletic injuries.

127 Clinical Observation in Athletic Training
Fall, Spring. 1(0-3): P: (KIN 126 or concurrently)
Supervised experience in clinical setting in sports medicine.

170 Foundations of Kinesiology
Fall, Spring, 2(2-0): R: Open only to students in Kinesiology. SA: PES 170
Kinesiology as a disciplinary major. Subdisciplines and professions. Historical perspectives.

171 Athletics in Higher Education
Fall. 1(1-0): SA: PES 171
Philosophy and organization of athletics. Athletics and academic achievement. Ethical issues, legal issues, social conduct, eligibility, athlete’s rights and responsibilities. Coaches’ responsibilities and institutional obligations.

201 Water Safety Instruction
Fall, Spring. 3(2-3): RB: Training in Emergency Water Safety or Lifeguarding plus scoring at least 80% on both skill and written pre-tests. SA: PES 201
Knowledge and skills necessary to plan and conduct American Red Cross water safety courses. Current lifesaving certification is required.

202 Aerobic Exercise Instruction
Fall, Spring. 3(2-3): RB: Experience in aerobic exercise. SA: PES 202

204 Sailing and Cruising
Fall, Spring, Summer. 2(1-3): R: Experience in sailing small crafts. SA: PES 204
Knowledge, skills, and experience necessary to sail large vessels on inland and coastal waters. Live aboard and sail for six days and nights, traveling approximately 250 miles. Competence in sailing small crafts assumed.

205 Lifeguarding
Fall, Spring, Summer. 2(1-2): RB: Competence as an advanced swimmer. SA: PES 205
Lifeguarding knowledge and skills necessary to obtain American Red Cross Lifeguarding certificate. Advanced swimming level is assumed.

216 Applied Human Anatomy
Fall. 3(3-0): R: Open only to students in the Department of Kinesiology. SA: PES 216
Structural anatomy of the human body. Interrelationships of structure, function, and human movement.

217 Applied Human Anatomy Laboratory
Spring. 1(0-3): P: (KIN 216 or concurrently) R: Open only to students in the Department of Kinesiology. SA: PES 217
Major bones, muscles, nerves, vessels, and organs of the human body. Articulations, muscle origins, muscle insertions, and prime moving actions.

250 Measurement in Kinesiology
Fall, Spring. 3(3-0): SA: PES 250
Methods and materials for measurement and evaluation. Motor skills, physical fitness, knowledge, and attitudes associated with physical activity.

260 Physical Growth and Motor Behavior
Fall, Spring. 3(3-0): SA: PES 260

300A Coaching Baseball
Fall. 2(1-2): RB: Previous experience in the sports of baseball or softball. R: Not open to freshmen. SA: PES 300A

300C Coaching Soccer
Spring. 2(1-2): RB: Working knowledge of the sport of soccer. R: Not open to freshmen. SA: PES 300C

300D Coaching Basketball
Fall. 2(2-0): RB: Working knowledge of the sport of basketball. R: Not open to freshmen. SA: PES 300D

300E Coaching Football
Fall. 2(2-0): RB: Working knowledge of the sport of football. R: Not open to freshmen. SA: PES 300E

300K Coaching Track and Field
Fall. 2(1-2): RB: Working knowledge of the sports of cross country or track and field. R: Not open to freshmen. SA: PES 300K

300L Coaching for Strength, Conditioning and Fitness
Fall, Spring. 2(2-0): R: Not open to freshmen. Basic theoretical and practical principles of coaching/training for increased fitness and/or sports performance. Individual applications to diverse populations.

300T Coaching Tennis
301E Advanced Football Coaching
Spring, 2(2-0) P: (KIN 300E) SA: PES 301E

310 Physiological Bases of Physical Activity
Fall, Spring, 3(3-0) P: (KIN 170 and KIN 216 and CEM 141 and PSL 250) or (PSL 431 and PSL 432) R: Open only to majors in the Department of Kinesiology, SA: PES 310
Acute and chronic effects of exercise on various body systems. Principles of training, exercise prescription, and the role of physical activity in health and disease.

320 Pathology of Sports Injury
Fall, Spring, 3(3-0) P: KIN 125 or concurrently and KIN 126) SA: PES 320
Pathophysiology and pathomechanics of sport injury, tissue response and the healing process as they relate to management and rehabilitation of sports injury.

330 Structural and Mechanical Analysis of Physical Activity
Fall, Spring, 3(2-2) P: (KIN 170 and KIN 216 and KIN 217) and (PHY 231 or PHY 231B or PHY 231C or PHY 181B or PHY 193 or PHY 183B or PHY 193H) SA: PES 330
Biomechanical analysis of human movement based upon musculoskeletal structure and function. Mechanical principles.

340 Psychological Bases of Physical Activity
Fall, Spring, 3(3-0) P: (KIN 170) SA: PES 340
Psychological factors affecting motor skill acquisition and performance. Psychological skills which enhance sport performance. Applications of learning theory.

350 Techniques of Teaching I
Spring, 2(0-6) P: (TE 301) RB: Basic knowledge and understanding of skills related to basketball, gymnastics, soccer, flag football, floor hockey and tennis, or activities that are closely related. R: Not open to freshmen or sophomores. Open only to Kinesiology students admitted to the Teacher Education program. Application of kinesiological pedagogical principles to basketball, gymnastics, soccer, flag football, floor hockey, and tennis.

351 Techniques of Teaching II
Fall, 2(0-6) P: (TE 301) RB: Basic knowledge and understanding of skills related to golf, softball, track and field, badminton, and volleyball, or activities that are closely related. R: Not open to freshmen or sophomores. Open only to Kinesiology students admitted to the Teacher Education program. Application of kinesiological pedagogical principles to golf, softball, track and field, badminton, and volleyball.

370 Proseminar in Kinesiology
Fall, Spring, 2(2-0) P: (KIN 170) R: Not open to freshmen or sophomores. SA: PES 470, KIN 470
Philosophical and professional perspectives in kinesiology.

400 Principles of Coaching I
Fall, 4(4-0) R: Not open to freshmen or sophomores. SA: PES 400
Basic principles of anatomy, biomechanics, and physiology for coaching competitive sports. Applications to athletes of different ages and abilities.

401 Principles of Coaching II
Spring, 4(4-0) R: Not open to freshmen or sophomores. SA: PES 401
Sociological, administrative, philosophical, legal, ethical, and chemical health issues related to coaching competitive sports. Applications to athletes of different ages and abilities.

411 Laboratory Experiences in Exercise Physiology
Fall, Spring, 2(1-3) P: (KIN 310) R: Open only to majors in the Department of Kinesiology, SA: PES 411
Laboratory techniques for testing and evaluating individuals for aerobic fitness, muscular strength and endurance, body composition and other physiologic responses to exercise. Exercise program development for personal health fitness.

420 School Health Education
Fall, Spring, 3(3-0) P: (KIN 120) R: Not open to freshmen or sophomores. SA: PES 420
Organization and administration of a comprehensive school health education program. Interaction of school health services, healthful environment, and health instruction in the development of a healthy lifestyle.

421 Lower Body Injury Evaluation
Fall, Spring, 3(3-0) P: (KIN 320) SA: PES 421
Knowledge and skills needed for evaluating lower body injuries in athletic training. The techniques and tests used for evaluating acute and chronic injuries to the lower body.

422 Rehabilitation of Athletic Injuries
Fall, Spring, 3(3-0) P: KIN 421) R: Not open to freshmen or sophomores. SA: PES 422
Rehabilitation techniques to manage athletic injuries. Anatomical and neurophysiological bases of techniques. Indications and contraindications of rehabilitation protocols.

423 Therapeutic Modalities
Spring, 3(3-0) P: (KIN 320 and PHY 231 or concurrently)
Therapeutic modalities used to manage athletic injuries and their indications and contraindications. Rationale for and techniques of using thermal and electrical modalities for athletic injuries.

425 Organization and Administration of Athletic Training
Fall, Spring, 3(3-0) P: (KIN 126 and KIN 127)
Knowledge and skills necessary for the administration of an athletic training program. Ethics, policies, procedures, insurance, liability, budgets, facilities, and record-keeping in athletic training.

426 Upper Body Injury Evaluation
Spring, 3(3-0) P: (KIN 320 and KIN 421)
Knowledge and skills needed for evaluating upper extremity injuries in athletic training. Techniques and tests for evaluating acute and chronic injuries to the upper body.

427 Clinical Rotations in Athletic Training
Fall, Spring, 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: (KIN 126 and KIN 127)
Knowledge and skills used to manage, evaluate and rehabilitate orthopedic injuries in various clinical settings including colleges, high schools and/or rehabilitation clinics.

445 Sociocultural Analysis of Physical Activity (W)
Fall, Spring, 3(3-0) P: (KIN 170) and completion of Tier I writing requirement. R: Open only to seniors or graduate students. SA: PES 445
Sociocultural context of and social practices in sport and physical activity.

450 Design and Evaluation of Physical Activity Programs
Fall, Spring, 3(3-0) R: Open only to seniors or graduate students in the Department of Kinesiology. SA: PES 450
Development and evaluation of programs in kinesiology.

451 Physical Education in Preschools and Elementary Schools
Fall, Spring, 3(2-2) P: (KIN 260 or KIN 460) Previous experience working with children. R: Not open to freshmen or sophomores. SA: PES 451 Not open to students with credit in TE 401
Methods of instruction for teaching physical activities to preschool and elementary school children. Development of teaching sequences. Clinical experience in teaching children and peers.

453 Administration of Intramural Sports Programs
Spring, 3(2-2) P: Not open to freshmen or sophomores. SA: PES 453
Organization and administration of intramural programs in educational settings. Philosophy, planning, scheduling, budgeting, facilities, officiating, exercise fitness, marketing, risk management, computer applications, and required practical experience in administering intramural programs.

454 Facility Planning and Construction
Spring, 3(3-0) P: Not open to freshmen or sophomores. SA: PES 454
Planning of athletic and physical education facilities such as gymnasium, ice rinks, swimming pools, and outdoor areas. Space utilization standards and guidelines. Selection of materials and equipment.

455 Issues in School Health Education
Spring, 3(3-0) P: (KIN 420)
Community health issues and resources affecting educational programming. Teaching methods and techniques as applicable to traditional and controversial health topics.

456 Ethical Issues in Athletics
Summer, 2(2-0) R: Not open to freshmen or sophomores. SA: KIN 482C, PES 482C
Ethics of sports at the institutional level in contemporary society. Political, social, and commercial pressures.

465 Adapted Physical Activity
Fall, Spring, 3(2-2) P: (KIN 170) R: Not open to freshmen or sophomores. SA: PES 465
Teaching and coaching physical activities for persons with disabilities.
Kinesiology—KIN

466 Practicum in Adapted Physical Activity
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Approval of department. SA: PES 466

Supervised teaching of physical activities and/or coaching sports to persons with disabilities and youths at risk.

467 Physical Activity and Disability
Fall, Spring. 2(2-0) R: Not open to freshmen or sophomores. Not open to Kinesiology majors. SA: PES 465 Not open to students with credit in KIN 465.

Teaching and coaching of persons with disabilities.

490 Independent Study
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Approval of department. SA: PES 490

Supervised individual or group study in various fields of emphasis in kinesiology.

493 Internship
Fall, Spring. 2 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: (KIN 411) R: Open only to Kinesiology majors. Approval of department.

Professional internship in kinesiology under faculty supervision.

494 Fieldwork
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Approval of department. SA: PES 494

Supervised practice in teaching physical education activities, coaching sports, administering sports programs, or conducting research or service activities in kinesiology.

810 Physiology of Physical Activity
Fall. 3(3-0) SA: PES 810

Acute and chronic effects of exercise on the various body systems. Program design. Issues in exercise physiology.

811 Physiological Evaluation and Exercise Prescription
Fall. 2(0-4) RB: (KIN 810 or concurrently) SA: PES 811

Techniques in evaluation of physiological capacity and in exercise prescription for various populations.

812 Cardiovascular, Respiratory, and Metabolic Responses to Exercise
Spring of even years. 3(3-0) RB: (KIN 810) SA: PES 812

Acute and chronic effects of exercise on cardiovascular, respiratory, and metabolic systems functions. Role of these systems in limiting exercise performance.

813 Neuromuscular and Endocrine Responses to Exercise
Spring of odd years. 3(3-0) RB: (KIN 810) SA: PES 813

Acute and chronic effects of exercise on nervous, muscular, and endocrine system functions. Role of these systems in limiting exercise performance.

820 Advanced Clinical Evaluation
Fall. 3(2-2) RB: Academic or clinical background in musculo-skeletal anatomy. Identification of structural pathologies. Principles and techniques applied during manual evaluation of structural pathology.

821 Management of Structural Pathologies
Spring. 2(2-0) RB: Academic or clinical background in musculo-skeletal anatomy. Management and rehabilitation skills necessary for managing sports injuries. Principles and techniques of rehabilitation for athletes with structural pathologies.

822 Rehabilitation Techniques for Musculoskeletal Dysfunction
Spring. 3(3-0) RB: Academic or clinical background in musculo-skeletal anatomy and injury evaluation and management. Techniques used to rehabilitate musculoskeletal dysfunctions. Skills to enhance neuromuscular function such as proprioceptive neuromuscular facilitation (PNF) and muscle-firing pattern techniques.

825 Injury Control in Sports and Physical Activity
Spring of odd years. 3(3-0) RB: Background in kinesiology, health, physical education or recreation. Principles of epidemiology to identify and analyze risk of injury in physical activities. Skills for decision-making in injury prevention programs.

830 Biomechanical Analysis of Physical Activity
Fall. 3(2-2) SA: PES 830

Kinematic analysis of mechanical and anatomical characteristics in physical activity and sport skills.

831 Advanced Biomechanics of Physical Activity
Spring of even years. 3(2-2) RB: (KIN 830) SA: PES 831

Kinetic analyses of the performance of physical activity and sport.

840 Psychosocial Aspects of Physical Activity
Fall. 3(3-0) SA: PES 840

Social psychology of sport and physical activity.

841 Stress Management Techniques in Athletics
Summer. 3(3-0) RB: Course in Psychology. SA: KIN 882A


845 Sociocultural Practices in Sport
Spring of odd years. 3(3-0) SA: PES 845

Critical, conflict, and feminist theories on dominant ideologies and social practices in sport.

853 Athletic Administration in Higher Education
Fall. 3(3-0) SA: PES 853

Administrative theory, structure, and budget. Facilities, equipment, and marketing. Legal, medical, and safety aspects.

854 Legal and Administrative Issues for Administrators and Coaches
Fall, Summer. 3(3-0)

Responsibilities of administrators, directors of recreational programs and athletic coaches for providing and maintaining educationally sound athletic programs for amateur athletes. Concepts, policies and procedures that enhance the physical and psychological health of amateur athletes. Obligations for managing the risks of participation in physical activities.

855 Psychosocial Bases of Coaching Athletes
Spring. 3(3-0)

Responsibilities of athletic administrators, directors of recreational programs and athletic coaches for the sociological, psychological, philosophical, developmental, and instructional principles for coaching amateur athletes. Development of a coaching philosophy and application of scientific findings to practical situations.

856 Physical Bases of Coaching Athletes
Summer. 3(3-0)

Principles of anatomy, biomechanics, and physiology for coaching amateur athletes in various sports. Relationships between the biological bases of coaching and physical conditioning, performance enhancement and the prevention, care, and rehabilitation of injuries.

858 Student-Athlete Development
Summer. 3(3-0)

Student-athlete support services in academic, personal, and career development.

860 Growth and Motor Behavior
Fall. 3(3-0) SA: PES 860


861 Growth, Maturation, and Physical Activity
Spring of even years. 3(3-0) RB: (KIN 860) SA: PES 861


862 Motor Skill Learning
Spring. 3(3-0) RB: (KIN 860) SA: PES 862


865 Curriculum and Instruction in Adapted Physical Education
Fall of even years. 3(3-0) SA: PES 865

Design of curricula and implementation of instruction in physical education for students with disabilities.

866 Research on Sports for Athletes with Disabilities
Fall of odd years. 3(3-0) SA: PES 866

Performance capabilities of athletes with disabilities. Research on areas such as exercise physiology, sport biomechanics, sport psychology, sport sociology, motor development, and motor learning.

867 Practicum in Adapted Physical Activity
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Approval of department. SA: PES 867

Supervised practice in teaching physical activities and/or coaching sports for persons with disabilities.

870 Physical Activity and Well-Being
Fall. 3(3-0) SA: PES 870

Relationship of physical activity to human well-being. Influence of growth, biological maturity, aging, body composition, nutrition, training, and rest on health and performance.
871 Research Methods in Kinesiology  
Spring, 3(3-0) R: Open only to graduate students in the Department of Kinesiology. SA: PES 871  
Experimental, longitudinal, survey, and qualitative research methods in kinesiology. Writing research proposals and reports. Research ethics.

890 Independent Study in Kinesiology  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to master's students. Approval of department. SA: PES 890  
Individual study in an area of kinesiology under faculty supervision.

893 Internship in Kinesiology  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in the Department of Kinesiology. SA: PES 893  
Supervised internship in sports medicine, athletic administration, coaching, or education agencies. Capstone experience option in master's degree program.

894 Field Experiences in Kinesiology  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department. SA: PES 894  
Supervised graduate practicum in schools or other settings.

895 Research Ethics  
Summer. 1(1-0) Interdepartmental with Teacher Education; Counseling, Educational Psychology and Special Education; Educational Administration. R: Open only to graduate students in the Department of Counseling, Educational Psychology and Special Education or Department of Educational Administration or Department of Kinesiology or Department of Teacher Education. SA: PES 895  
Identifying and resolving ethical problems in research, including issues related to collegial interactions; authorship, publication, and reviewing practices; data management; ownership of data and intellectual property; conflicts of interest; protection of human and animal subjects; and lab safety and compliance.

897 Project in Kinesiology  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Open only to master's students in the Department of Kinesiology. SA: PES 897  
Project experience under the guidance and supervision of MSU faculty. Development of products such as technical reports, instructional media, or curriculum materials to address an educationally significant problem. Capstone experience option in master's degree program.

899 Master's Thesis Research  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: (KIN 871) SA: PES 899  
Master's thesis research.

910 Issues in Exercise Physiology  
Spring, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: (KIN 810) SA: PES 910  
Selected issues in exercise physiology and related fields of study.

930 Issues in Biomechanical Aspects of Physical Activity  
Spring, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: (KIN 830) SA: PES 930  
Selected issues of biomechanical analyses of sport and physical activity.

940 Issues in Psychosocial Aspects of Physical Activity  
Fall, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. SA: PES 940  
Selected issues in the psychology and sociology of sport and physical activity.

960 Issues in Motor Behavior  
Spring, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: (KIN 860) SA: PES 960  
Selected issues in motor development, motor learning, adapted physical education, and related fields of study.

990 Independent Study in Kinesiology  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to doctoral students. Approval of department. SA: PES 990  
Individual study in an area of kinesiology under faculty supervision.

995 Research Practicum in Kinesiology  
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open only to doctoral students in the College of Education. Approval of department. SA: PES 995  
Supervised research practicum. Design, execution, analysis, presentation, critique, and revision of research projects.

999 Doctoral Dissertation Research  
Fall, Spring. 1 to 24 credits. A student may earn a maximum of 100 credits in all enrollments for this course. R: Open only to doctoral students in the Department of Kinesiology. SA: PES 999  
Doctoral dissertation research.

LIR—Labor and Industrial Relations

809 Labor Markets  
Fall, Spring. 3(3-0) RB: (EC 201) R: Open only to MLRHR students and students in the Interdisciplinary Ph.D. program in Social Science with a concentration in Industrial Relations and Human Resources. Labor market structures and dynamics. Factors affecting work, wages, and occupational choices. Public and private policies on human resource development and utilization. Designed for human resource practitioners.

823 Organizational Behavior in Labor and Industrial Relations  
Fall, Spring. 3(3-0) R: Open only to students in the School of Labor and Industrial Relations. Application of behavioral science knowledge at micro- and macro-levels to enhance individual, group, and organizational functioning in industrial relations settings.

824 Human Resource Strategies and Decisions  
Fall, Spring. 3(3-0) R: Open only to students in the School of Labor and Industrial Relations. Human resource planning, equal employment opportunity, staffing, training, and development. Compensation and benefits. Workforce diversity and organizational development.

825 Compensation and Benefits Systems  
Fall, Spring. 3(3-0) P:M: (LIR 824) R: Open only to students in the School of Labor and Industrial Relations. Theory and practice relating organizational characteristics to compensation-system strategy, design, and administration. Job evaluation, pay surveys, pay structure, pay administration, group incentives, and benefits.

826 Organizational Development and Planned Change  
Fall, Spring. 3(3-0) P:M: (LIR 823) R: Open only to students in the School of Labor and Industrial Relations. Application of general systems and organizational behavior theories to the problems of organizational change and development in labor and industrial relations. Roles of leadership and change agents.