KINESIOLOGY

Department of Kinesiology College of Education

101A Swimming I

Fall, Spring, Summer. 1(0-2) 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 101A

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) 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 101M

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

101T SCUBA Diving I

Fall, Spring, Summer. 1(0-2) 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 111F

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

101U Sailing

Fall, Spring, Summer. 1(0-2) 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 111N

This course is a beginning level hands on learn to sail program. All classes are held at the MSU Sailing Center on Lake Lansing in Haslett, MI. Swimming I or equivalent skills recommended.

102A Judo I

Fall, Spring, Summer. 1(0-2) 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: PES 102A

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

KIN

Fall, Spring, Summer. 1(0-2) 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 102C

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.

102K Tae Kwon Do I

Fall, Spring, Summer. 1(0-2) 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 1021

This course will explore skill and knowledge development in the art of Taekwondo.

102M Introduction to Kendo

Fall, Spring, Summer. 1(0-2) 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.

Basic movements, history, philosophy, and concepts of the martial art of kendo. Learning kendo through its practice.

103A Aerobic Exercise I

Fall, Spring, Summer. 1(0-2) 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 103A

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) 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 103C

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) 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 103D

This course is designed to provide students with a background in physical fitness, exercise, and health principles and practices. These 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) 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 103G

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.

103R Weight Training I

Fall, Spring, Summer. 1(0-2) 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 103I

This course is designed to teach basic level weight training principles, basic anatomy, and diet and nutrition. All components are designed to enhance muscular strength, endurance and flexibility. This course includes lectures, demonstrations, and active student participation.

103S Swim Conditioning

Fall, Spring, Summer. 1(0-2) 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 113D

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 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.

103T **Distance Running**

Fall, Spring, Summer. 1(0-2) 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 113G

This course is designed to provide students with the basic understanding of distance running as a form of developing cardiovascular endurance and muscular strength and endurance for recreation and competition. This course will cover a variety of topics such as goal setting, designing workouts, injury awareness and prevention, training in adverse weather and environmental conditions and proper nutritional quidelines.

103U Step Aerobics

Fall, Spring, Summer. 1(0-2) 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 113H

This course is designed as an alternative to high impact aerobics for beginning and intermediate step students. Its purpose is to introduce theoretical and practical principles of stretching, toning, and step aerobic activity that progressively improve cardio-vascular strength and endurance, flexibility, coordination and body image.

103V

Boxing Conditioning Fall, Spring, Summer. 1(0-2) 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 113M

Boxing Conditioning is an intense boxing specific conditioning program that teaches fundamentals and techniques.

105B Gymnastics I

Fall, Spring, Summer. 1(0-2) 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) 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.

106C Bowling I

Fall, Spring, Summer. 1(0-2) 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, strategies and scoring procedures. The rules. course involves lectures, demonstration, and practice time

106E Golf I

Fall, Spring, Summer. 1(0-2) 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 106E

This class is designed to introduce the beginning golf student 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) 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 106G

This class will explore beginning aspects of horsemanship.

106M Tai Chi

Fall, Spring, Summer. 1(0-2) 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 106M

Roles and characteristics of Tai Chi. Development of strength, flexibility and balance through the learning of basic skills and sets of Tai Chi.

106N Track and Field

Fall, Spring, Summer. 1(0-2) 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 106N

This course is designed to introduce the students to track and field events that include running, hurdling, 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

106U Ice Skating I

Fall, Spring, Summer. 1(0-2) 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 106I

This course is designed to introduce students to fundamental skating skills and how these skills are integrated into different divisions of figure skating.

Self Defense 106V

Fall, Spring, Summer. 1(0-2) 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 106L

This course is intended to increase students awareness and understanding of sexual assault. Focus will be placed on defense against sexual violence that is most often directed towards women, and increasingly men, in our culture. Techniques for diffusing or avoiding potentially dangerous situations will be examined. Such techniques include verbal, nonverbal, physical and psychological responses. Physical self-defense skills include evasions, blocks, counterattacks and other defenses against common attacks. The concept of unlearning "victim-like" thinking and behaviors will also be examined. The course will entail lecture, discussion, and participation.

106W Yoga

Fall, Spring, Summer. 1(0-2) 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 1060

This course will explore the beginning aspects of Yoga.

107B Racquetball I

Fall, Spring, Summer. 1(0-2) 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 107B

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.

107E Tennis I

Fall, Spring, Summer. 1(0-2) 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 107E

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.

107G Handball

Fall, Spring. 1(0-2) R: Open to students. Introduction to handball, including safety awareness, proper technique and etiquette, team and individual play for life-long form of exercise.

108A Basketball I

Fall, Spring, Summer. 1(0-2) 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 108A

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) 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 108C

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

108F Soccer I

Fall, Spring, Summer. 1(0-2) 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 108F

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) 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 108K

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

108P Softball I

Fall, Spring, Summer. 1(0-2) 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 108I

Softball is played on an outdoor field with a softball and bat. Students will learn basic skills of throwing, fielding, hitting, and base running. Students will also learn rules, offensive and defensive strategies, and score keeping.

108R Soccer, Indoor

Fall, Spring, Summer. 1(0-2) 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 108H

Students will learn basic technical and tactical soccer skills specific to the indoor soccer arena. These skills will be presented through lectures, demonstrations, drills, and game play.

108W Wheelchair Basketball I

Fall, Spring. 1(0-2) 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.

Fundamental wheelchair basketball skills. Team offensive and defensive concepts and strategies.

111A Swimming II

Fall, Spring, Summer. 1(0-2) 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 101B

This course is designed for the intermediate swimmer to refine swimming skills, learn new strokes, increase swimming fitness levels, and learn basic water safety and rescue techniques. Stroke and skill emphasis will be placed on sculling, freestyle, backstroke, breaststroke, elementary backstroke, diving, and flip turns. Students will demonstrate knowledge of propulsion and resistance forces, correct stroke technique, and safety and emergency procedures. Swimming I or equivalent skills are recommended.

111B Swimming III

Fall, Spring, Summer. 1(0-2) 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 stoke technique and safety and emergency procedures. Swimming II or equivalent skills are recommended.

111G SCUBA Diving II

Fall, Spring, Summer. 1(0-2) 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

111U SCUBA Open Water Certification

Fall, Spring, Summer. 1(0-2) 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.

112A Judo II

Fall, Spring, Summer. 1(0-2) 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 102B

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.

112B Karate II

Fall, Spring, Summer. 1(0-2) 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 Karate student. Advanced Karate skills that involve actual contest and contest strategies will be emphasized in order to assist the students in attaining a higher level of proficiency in Karate. Karate I or equivalent skills are recommended.

113A Aerobic Exercise II

Fall, Spring, Summer. 1(0-2) 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 103B

This course is designed for intermediate and advanced 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.

113B General Conditioning II

Fall, Spring, Summer. 1(0-2) 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 103E

This course is designed to improve cardiovascular endurance, body strength, flexibility, agility, balance, and rhythm through aerobic exercises, flexibility and resistance training programs. Extensive information on physical fitness, exercise, and health principles and practices will be provided to students. General Conditioning I or equivalent skills are recommended.

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113C General Conditioning III

Fall, Spring, Summer. 1(0-2) 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 103F

This is a fitness course that emphasizes advanced aerobic and strength training programs. Students will learn the basic principles of these programs and learn to apply that knowledge in the form of an individualized exercise program. Competitive training techniques for both an aerobic and strength program will also be included. General Condition II or equivalent skills are recommended.

113E Weight Training II

Fall, Spring, Summer. 1(0-2) 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.

113F Weight Training III

Fall, Spring, Summer. 1(0-2) 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 103K

This course is designed to teach advanced weight training techniques, principles, and programs. Students will learn strength training principles, anatomy and muscle physiology, nutrition and diet. Students will develop personalized weight training program that incorporates the principles and guidelines provided in this course. This course includes lectures, presentations, and active student participation. Weight Training II or equivalent skills are recommended.

113K Strength and Conditioning II

Fall, Spring, Summer. 1(0-2) 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 1030

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) 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. RB: General Conditioning III or equivalent level of aerobic fitness.

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) 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. RB: Weight Training III or equivalent skill ability.

Advanced weight training. Strength training principles, anatomy and muscle physiology, nutrition and diet. Personalized weight training program.

115B Tumbling & Floor Exercise II

Fall, Spring, Summer. 1(0-2) 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 105E

Tumbling and floor exercises refers to the performance of a routine on a large mat. Students learn intermediate to advanced tumbling, gymnastics and dance skills. Students also learn correct body preparation, spotting techniques, and mechanical principles of gymnastics. Performance improvements, skill progression and skill analysis are emphasized. Tumbling I or equivalent skills are recommended.

116A Bowling II

Fall, Spring, Summer. 1(0-2) 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 106D

This course is designed to allow students to refine and improve their basic bowling skills, while developing technique, form and strategies. This course will also focus on bowling rules and etiquette, spare targeting and conversions, spot or pin bowling and league playing. Bowling I or equivalent skills are recommended.

116B Golf II

Fall, Spring, Summer. 1(0-2) 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 106F

The course is designed to refine and further develop golf skills in order to improve ones game and performance. Methods of improvement include analysis of swing form, utilization of regular routines, diagnosis of individual problems, and on-course strategies of play. This course will also cover different types of competition, special conditions, error shots and examine special condition play. Class time will be spent either playing on the golf course or practicing on the driving, chipping, pitching, and/or putting green(s). Golf I or equivalent skills are recommended.

116C Horsemanship II

Fall, Spring, Summer. 1(0-2) 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 106H

This course offers advanced Horsemanship skill training. Horsemanship I or equivalent skill is recommended.

116D Ice Skating II

Fall, Spring, Summer. 1(0-2) 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 106J

This course is designed to introduce students to intermediate skating skills and how these are integrate into different divisions of figure skating. Ice Skating I or equivalent skills are recommended.

116F Triathlon Training

Fall, Spring, Summer. 1(0-2) 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.

117B Tennis II

Fall, Spring, Summer. 1(0-2) 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 107F

A course designed for students to develop intermediate and advanced strokes, footwork, and net play. This course includes various drills, strategy development, singles and doubles tournament, and psychological aspects of tennis. I or equivalent skills are recommended.

118A Basketball II

Fall, Spring, Summer. 1(0-2) 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 108B

A course designed to enhance fundamental skills and develop advance skills. Students will also learn offensive and defensive strategies, and rules of the game. Basketball I or equivalent skills are recommended.

118B Ice Hockey II

Fall, Spring, Summer. 1(0-2) 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 108D

This course will cover intermediate and advanced hockey concepts, skills and strategies. Emphasis will be placed on puck control, physical conditioning, team system analysis, and drill design and implementation. Ice Hockey I or equivalent skills are recommended.

118C Soccer II

Fall, Spring, Summer. 1(0-2) 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.

118E Volleyball II

Fall, Spring, Summer. 1(0-2) 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 108L

This course is designed for fundamental skill refinement and advanced skill learning. Students will also learn offensive and defensive strategies, rules, and officiating. Volleyball I or equivalent skills are recommended.

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) P: KIN 127 or concurrently R: Open to undergraduate students in the Athletic Training major or in the Kinesiology major.

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 R: Open to undergraduate students in the Athletic Training major or in the Kinesiology major.

Supervised experience in clinical setting in sports medicine.

171 Athletics in Higher Education

Fall. 1(1-0) R: Open only to freshmen. SA: PES 171

Philosophy and organization of athletics. Athletics and academic achievement. Ethical issues, legal issues, social conduct, eligibility, athlete's rights and responsibilities.

173 Foundations of Kinesiology

Fall, Spring, Summer. 3(2-2) R: Open to undergraduate students in the Department of Kinesiology. SA: KIN 370, KIN 170

Kinesiology as a disciplinary major. Subdisciplines and professions. Historical, professional and philosophical perspectives.

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

Theory and practice for aerobic exercise leaders. Functional effects of physical activity. Safe exercise techniques. Modifications and precautions for special populations. Choreography practice. Health and exercise screening. Legal issues.

204 Sailing and Cruising

Fall, Spring, Summer. 2(1-3) RB: 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 to students in the Kinesiology major or in the Athletic Training major. SA: PES 216

Structural anatomy of the human body. Interrelationships of structure, function, and human movement.

217 Applied Human Anatomy Laboratory

Fall, Spring. 1(0-3) P: KIN 216 R: Open to students in the Athletic Training major or in the Kinesiology major. SA: PES 217

Major bones, muscles, nerves, vessels, and organs of the human body. Articulations, muscle origins, muscle insertions, and prime moving actions.

227 Clinical Rotations in Athletic Training Fall, Spring. 1 to 2 credits. A student may earn a maximum of 2 credits in all enrollments for this course. P: KIN 125 and KIN 126 and KIN 127 R: Open to students in the Kinesiology major or in the Athletic Training major.

Entry level knowledge and skills used to manage and rehabilitate orthopedic injuries at the collegiate level.

250 Measurement in Kinesiology

Fall, Spring, Summer. 3(3-0) R: Open to undergraduate students in the Department of Kinesiology. SA: PES 250

Methods and materials for measurement and evaluation. Motor skills, physical fitness, knowledge, and attitudes associated with physical activity.

300C Coaching Soccer

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

Techniques for coaching soccer. Developing and evaluating player and team skills. Planning, conducting and evaluating practices and games. Rules, drills, strategies and training.

300D Coaching Basketball

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

Techniques and strategies for coaching basketball. Rules, drills, and training. Development and evaluation of individual and team skills. Planning, conducting, and evaluating practices and games.

300E Coaching Football

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

Techniques and strategies for coaching football. Rules, drills, and training. Development and evaluation of individual and team skills. Planning, conducting, and evaluating practices and games.

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

Techniques and strategies for coaching track and field. Rules, drills, and training. Development and evaluation of participant skills. Planning, conducting, and evaluating practices and meets.

300L Coaching for Strength, Conditioning and Fitness

Summer. 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.

310 Physiological Bases of Physical Activity

Fall, Spring. 3(3-0) P: {KIN 173 and (KIN 216 and CEM 141) and PSL 250} or (PSL 431 and PSL 432) R: Open to students in the Kinesiology major or in the Athletic Training major. 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. 3(3-0) P: KIN 125 and KIN 126 and KIN 127 R: Open to students in the Kinesiology major or in the Athletic Training major. SA: PES 320

Pathophysiology and pathomechanics of sport injury, tissue response and the healing process as they relate to management and rehabilitation of sports iniury.

330 **Biomechanics of Physical Activity**

Fall, Spring, Summer. 3(2-2) P: (KIN 173 and KIN 216) and (PHY 231 or PHY 231C or PHY 183 or PHY 183B or PHY 193H) R: Open to juniors or seniors in the Department of Kinesiology. SA: PES 330

Biomechanical analysis of human movement based upon musculoskeletal structure and function. Mechanical principles.

Sport and Exercise Psychology (W) 345

Fall, Spring, Summer. 3(3-0) P: (KIN 173) and completion of Tier I writing requirement RB: Completion of Tier I Writing requirement R: Open to juniors or seniors in the Athletic Training major or in the Kinesiology major. SA: KIŇ 340

Psychological effects on sport, motor performance, and exercise behavior. Influence of sport and exercise on psychological development.

350 Techniques of Teaching I

Spring. 2(0-6) P: TE 301 RB: Basic knowledge and understanding of skills relat-ed 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.

Physical Activity and Health Education 355

for Elementary Teachers Fall, Spring, Summer. 3(2-2) P: TE 150 RB: KIN 121 R: Open to sophomores or juniors or seniors in the Education major or in the Special Education-Learning Disabilities major or in the Child Development major.

Physical activity, health-related fitness, and motor skill development of children. Issues and researchbased strategies in teaching physical activity and health education in elementary schools.

Physical Growth and Motor Behavior 360

Fall, Spring. 3(3-0) P: KIN 216 R: Open to undergraduate students in the Department of Kinesiology. SA: KIN 260

Physical growth and biological maturity as related to motor performance and development. Sequential progressions of fundamental motor skills. Physical fitness of children and youth. Motor abilities. Stages of skill acquisition.

365 Sensorimotor Control

Fall, Spring. 3(2-1) P: KIN 216 RB: functional anatomy, and biomechanics R: Open to undergraduate students in the Department of Kinesiology.

Principles of sensorimotor control, coordination, and learning of human movement, from activities of daily living to the performance of elite athletes.

371 Introduction to Research Methods in Kinesiology

Fall, Spring. 3(3-0) P: KIN 173 and KIN 216 and KIN 250 R: Open to juniors or seniors in the Department of Kinesiology.

Research methods as they apply to Kinesiology, study design, statistics, elements of scientific process, scientific writing

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.

Principles of Coaching II 401

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 to students in the Athletic Training major or in the Kinesiology major. 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.

421 Lower Body Injury Evaluation

Fall. 3(3-0) P: KIN 320 R: Open to students in the Athletic Training major. SA: PES 421

Knowledge and skills needed for evaluating lower body injuries in athletic training. Techniques and tests used for evaluating acute and chronic injuries to the lower body.

422 **Rehabilitation of Athletic Injuries**

Fall. 3(3-0) P: KIN 320 and KIN 421 and KIN 423 R: Open to students in the Athletic Training major. SA: PES 422

Rehabilitation techniques to manage athletic injuries. Anatomical and neurophysiological bases of techniques. Indications and contraindications of rehabilitation protocols.

Therapeutic Modalities 423

Spring. 3(3-0) P: KIN 320 and (PHY 231 or concurrently) R: Open to students in the Athletic Training major.

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.

424 Psychology of Injury

Summer. 3(3-0) RB: Athletic training or sport psychology R: Not open to freshmen. Psychological aspects of athletic injuries. Sociocultural, mental, emotional, and physical behaviors of patients involved in injury rehabilitation.

425 Organization and Administration of Athletic Training

Fall. 3(3-0) P: KIN 421 and KIN 426 R: Open to students in the Athletic Training major.

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.

Upper Body Injury Evaluation 426

Spring. 3(3-0) P: KIN 320 and KIN 421 R: Open to students in the Athletic Training maior.

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 125 and KIN 126 and KIN 127 and KIN 227 R: Open to students in the Athletic Training major.

Knowledge and skills used to manage, evaluate, and rehabilitate orthopedic injuries in various clinical settings including colleges, high schools, and rehabilitation clinics.

441 Mental Skills Training for Performance Enhancement

Summer, 3(2-2) RB; KIN 340

Learning and practice of mental skills and their application to enhance performance in domains such as athletics, performing arts and business. Analysis of cognitive-behavioral intervention strategies for performance enhancement across skill levels and different sports. Psychological aspects of peak performance.

445 Sociocultural Analysis of Physical Activity (W)

Fall, Spring. 3(3-0) P: Completion of Tier I Writing Requirement R: Open to seniors or graduate students in the Department of Kinesiology. SA: PES 445

Sociocultural context of and social practices in sport and physical activity.

453 Administration of Intramural Sports Programs

Spring. 3(2-2) R: 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.

Facility Planning and Construction 454

Spring. 3(3-0) R: Not open to freshmen or sophomores. SA: PES 454

Planning of athletic and physical education facilities such as gymnasia, ice rinks, swimming pools, and outdoor areas. Space utilization standards and guidelines. Selection of materials and equipment.

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.

457 Sports and Cardiovascular Nutrition

Spring. 3(3-0) Interdepartmental with Human Nutrition and Foods. Administered by Human Nutrition and Foods. P: (HNF 150 or HNF 260) and (PSL 250 or PSL 431) and (BMB 200 or BMB 401 or BMB 461 or KIN 310)

Nutrition for optimizing sport training, recovery, and performance. Power, intermittent, and endurance sports. Overall health with an emphasis on cardiovascular health.

Adapted Physical Activity 465

Fall, Spring. 3(2-2) P: KIN 173 R: Open to juniors or seniors in the Department of Kinesiology. SA: PES 465

Teaching and coaching physical activities for persons with disabilities.

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 vouths at risk.

482E History of the Modern Olympic Games Summer. 2(2-0)

Olympic philosophies, ideals and history. Modernization and changes to the Olympic Games. Professional and amateur sports. Political controversies and achievements

482F Exercise Psychology

Summer, 3(3-0)

Role of psychology in exercise and physical activity. Psychological antecedents and outcomes of exercise. Technology's influence on exercise and physical activity.

490 Independent Study

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 490

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

Special Topics in Kinesiology 491

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Current issues in Kinesiology.

492

Internship: Non-physiologically Based Fall, Spring, Summer. 3 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of non-physiologically based cognate: Adapted Physical Activity, Administration, Biomechanics, Communication, Growth and Motor Development, Orthotics and Prosthetics, and Psychological Aspects. R: Open to seniors in the Kinesiology major. Approval of department. Not open to students with credit in KIN 493.

Professional internship in kinesiology under faculty supervision. Students are involved in community and corporate internships not including physiological testing of patients/clients.

493 Internship: Physiologically Based

Fall, Spring, Summer. 3 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: KIN 411 RB: Completion of one of the physiologically based cognates. R: Open to seniors in the Kinesiology major. Approval of department. Not open to students with credit in KIN 492.

Professional internship in kinesiology under faculty supervision. Students are involved in clinical, rehabilitation, and corporate programs.

Fieldwork 494

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.

Metabolic Responses to Exercise 810

Fall of odd years. 3(3-0) SA: PES 810 Acute and chronic effects of exercise on metabolic Role of these processes in limiting processes. exercise performance.

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 Cardiorespiratory Responses to Exercise

Fall of even years. 3(3-0) RB: Undergradu-ate course work in anatomy, physiology, and exercise physiology. SA: PES 812

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

813 Neuromuscular Responses to Exercise

Fall of odd years. 3(3-0) RB: Undergraduate coursework in anatomy, physiology, and exercise physiology. SA: PES 813

Acute and chronic effects of exercise on neuromuscular functions. Role of these systems in limiting exercise performance.

815 Essentials of Strength and Conditioning

Spring. 3(3-0) RB: Human anatomy and physiology; undergraduate courses in biomechanics and exercise physiology. R: Open to master's students in the Department of Kinesiology.

Methods and techniques associated with design of strength and conditioning programs to enhance performance in sport and fitness.

816 Exercise Physiology Across the Lifespan

Fall of even years. 3(3-0) P: KIN 310 or (PSL 431 and PSL 432) or (ANS 435 and ANS 445) RB: KIN or Animal Science or Physiology or Biology backgrounds recommended

Exercise physiology from childhood, through older adulthood, including pregnancy.

Advanced Clinical Evaluation 820

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.

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 Skills to enhance neuromuscular dysfunctions. 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 decisionmaking in injury prevention programs.

Clinical/Professional Experience in 827 Athletic Training

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. RB: Undergraduate major in athletic training and participation in the graduate athletic training concentration in Kinesiology R: Open to graduate students in the Kinesiology major.

Knowledge and critical thinking skills. Managing athletic training services program. Clinical skills for the prevention and management of athletic injuries.

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.

Advanced Biomechanics of Physical 831 Activity

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

Kinetic analyses of the performance of physical activity and sport.

Psychosocial Aspects of Physical 840 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

Theoretical bases of psychological stress. Impact of stress on performance. Application of appropriate stress management techniques to athletes. Application of research findings related to athletes.

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.

857 Promoting Positive Youth Development Through Sport

Fall. 3(3-0)

Educational athletic programs for youth. Positive youth development through sports. Coaching and mentoring.

858 Student-Athlete Development

Summer. 3(3-0)

Historical and contemporary issues faced by student-athletes, competencies required for studentathlete eligibility, student-athlete retention data metrics, and reflective thought and programming for student-athletes.

860 Growth and Motor Behavior

Fall. 3(3-0) SA: PES 860

Developmental skill sequences and behavior across the lifespan. Correlates of growth, maturation, and motor behavior. Individual and gender differences.

861 Growth, Maturation, and Physical

Activity

Spring of even years. 3(3-0) RB: KIN 860 SA: PES 861

Physical growth, biological maturation, and motor performance. Development of tissues and organs. Development of motor components. Influences of gender and age on growth and performance. Methods of assessment.

862 Neural Basis of Human Movement Spring. 3(3-0)

Neural basis of sensorimotor control, investigating cortical and subcortical structure/function relationships in healthy humans, and in individuals with movement disorders.

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 wellbeing. Influence of growth, biological maturity, aging, body composition, nutrition, training, and rest on health and performance.

871 Research Methods in Kinesiology

Fall. 3(3-0) R: Open 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 Counseling, Educational Psychology and Special Education and Educational Administration and Teacher Education. Administered by Kinesiology. R: Open to graduate students. SA: PES 895

Identifying and resolving ethical problems in research. Collegial interactions. Authorship, publication, and reviewing practices. Data management. Ownership of data and intellectual property. Conflicts of interest. Protection of human and animal subjects. 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.

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.

980 Issues in Teaching Undergraduate Kinesiology

Fall of odd years. 3(3-0) R: Open to doctoral students in the Department of Kinesiology.

Using cooperative, active learning techniques in classrooms. Developing critical thinking skills in kinesiology students. Principles of instruction and classroom logistics related to learning. Strategies in planning, implementing, and evaluating course material.

981 Mentored Teaching in Undergraduate Kinesiology

Spring of even years. 3(1-4) A student may earn a maximum of 6 credits in all enrollments for this course. P: KIN 980 R: Open to doctoral students in the Department of Kinesiology.

Mentored experience in teaching undergraduate major courses in kinesiology. Seminar discussion of relevant issues in teaching. Classroom assessment techniques. Strategies of cooperative, active learning, and critical thinking for undergraduates.

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, Summer. 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, Summer. 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.