

- 493 Journalism Internship**  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. P:M: (JRN 200) R: Open only to juniors or seniors or graduate students in the School of Journalism. Approval of school.  
Supervised professional experience as a working staff member with a newspaper, magazine, newsletter, broadcast station or other communication organization.
- 810 Visual Journalism**  
Fall of even years. 3(3-0)  
Theoretical, conceptual, ethical, philosophical and historical approaches to visual information. Use of visual elements in journalism.
- 815 Seminar in Press and Society**  
Fall. 3(3-0)  
Role and performance of news media as organizations and as institutions in society.
- 816 Documentary Research in Journalism**  
Fall. 3(3-0)  
Historical methods, document sources, and computer data base searches. Topics include freedom of information, court records and congressional documents, and investigative reporting.
- 817 Quantitative Research in Journalism**  
Spring. 3(3-0)  
Content analysis, survey research, experimental design, statistical methods, and other methods.
- 823 Government and Mass Communication**  
Spring of odd years. 3(3-0)  
Government restrictions, administrative policy, and informal limits placed on mass communication. Constitutional and regulatory problems.
- 824 Health and Science Writing**  
Spring of even years. 3(2-2) RB: (JRN 300) or newswriting experience.  
Advanced reporting on technical issues related to health, medicine, and the natural sciences.
- 825 History of Journalism**  
Fall of odd years. 3(3-0)  
Development of mass media with emphasis on their impact and roles. Variable time periods.
- 830 Theories of the First Amendment**  
Spring of even years. 3(3-0)  
History of adoption of First Amendment. Theories and principles affecting judicial and societal interpretations of freedom of speech and freedom of the press.
- 882 Advanced Reporting in the British Isles**  
Summer. 6(3-6) Summer: England & Ireland. R: Approval of school.  
Advanced reporting, interviewing, and writing for print and broadcast media in the British Isles. Research, seminars on British news media, and site visits.
- 883 Documentary Photography and Visual Culture in Europe**  
Summer. 6(3-6) Summer: UK & Czech Republic. R: Approval of school.  
Study abroad. Introduction to contemporary photographers and museum curators. Examine historical collections of photography in museums, galleries, and newspapers. Research, photograph, and write documentary photography project.
- 884 Media Coverage of Culture and Environment in Australia**  
Summer. 4(2-4) R: Approval of school.  
Research on the impact of Australian media coverage on environment and culture. Contrasting coverage of similar issues by the American media.
- 890 Independent Study**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to graduate students in Journalism. Approval of school.  
Individualized study under faculty direction.
- 892 Seminar in Journalism**  
Fall, Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in Journalism.  
Topics vary.
- 896 Professional Project in Journalism**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 25 credits in all enrollments for this course. R: Approval of School.  
Individualized research and production of in-depth journalism projects.
- 899 Master's Thesis Research**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to master's students in Journalism. Approval of school.  
Master's thesis research.
- 916 Qualitative Research Methods**  
Spring. 3(3-0) Interdepartmental with Advertising; Telecommunication. R: Open only to Ph.D. students in Mass Media and Communication.  
Qualitative research in mass and specialized communication systems. Topics include documentary, bibliographic, case study and participant observation methods.
- 921 Media Theory**  
Fall. 3(3-0) Interdepartmental with Advertising; Telecommunication. Administered by Department of Advertising. R: Open only to Ph.D. students in Mass Media and Communication.  
Process and effects of mediated communication. Audiences, socialization, and persuasion. Macrosocietal, and intercultural perspectives. Theory construction.
- 930 Law and Public Policy of the Media**  
Fall. 3(3-0) Interdepartmental with Advertising; Telecommunication. R: Open only to Ph.D. students in Mass Media.  
Philosophical, legal, political, and statutory principles underlying law and public policy applied to media. Selected issues involving constitutional law, common law, statutes, and administrative policy.
- 960 Media and Technology**  
Spring. 3(3-0) Interdepartmental with Telecommunication; Advertising. Administered by Department of Telecommunication, Information Studies and Media. R: Open only to Ph.D. students in Communication Arts and Sciences-Mass Media or Communication or approval of department.  
Theoretical frameworks concerning media and communication processes, and their interactions with technology. Social, organizational, critical, and economic perspectives.
- 965 Media Economics**  
Spring. 3(3-0) Interdepartmental with Telecommunication; Advertising. Administered by Department of Telecommunication, Information Studies and Media. R: Open only to Ph.D. students in Communication Arts and Sciences-Mass Media or Communication or approval of department.  
Economic theory and analysis relevant to the mass media. Economic structure and performance of mass media and advertising industries. Competition among media and within related industries.
- 975 Quantitative Research Design**  
Fall. 3(3-0) Interdepartmental with Advertising; Telecommunication. Administered by Department of Advertising. RB: One graduate-level research design or statistics course. R: Open only to Ph.D. students in Mass Media.  
Survey, experimental and content-analytic techniques applied to the study of media. Academic and applied research methods. Univariate and multivariate techniques.

## KINESIOLOGY KIN

### Department of Kinesiology College of Education

- 101A Swimming 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: PES101A  
This course is designed for the beginner swimmer. Students will develop skill in water readiness activities, floating, back and prone glide, sculling, free-style, 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 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: PES101M  
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) 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 111F  
This beginning scuba course is the pool and classroom portion of open water certification. Swimming I or equivalent skills are recommended

## Kinesiology—KIN

### 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 of 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.

### 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. 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) 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.

### 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: 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.

### 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: PES104D

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.

### 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: PES104F

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 east coast swing, various line dances, and various couples dances.

### 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: PES105B

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: PES105D

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.

### 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: PES106A

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: PES106B

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 cut throat will also be covered.

### 106C Bowling 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: PES106C

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 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) 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.

**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, 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.

**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.

**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.

**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.

**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.

**108N Rugby**

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: PES108N

This course will explore the beginning aspects of Rugby.

**108R Soccer, Indoor**

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 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.

**109 Sports Officiating**

Fall, Spring, Summer. 1(1-1) A student may earn a maximum of 4 credits in all enrollments for this course.

Skill and knowledge development in sports officiating, refereeing, or umpiring activities. Separate course sections in sports such as baseball, volleyball, basketball, ice hockey, soccer and softball.

**111A 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 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) 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: KIN101E

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: KIN101F

Skill and knowledge development in advanced water-related activities.

## Kinesiology—KIN

### 111G 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.

### 111K 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: KIN101J

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: KIN101K

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: KIN101N

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: KIN101O

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: KIN101Q

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: KIN101S

Skill and knowledge development in advanced water-related activities. Separate course sections in advanced swimming, lifeguard training, sailing, and scuba diving.

### 111W Synchronized Swimming

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 111H

Skill and knowledge development in advanced water-related activities.

### 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. 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) 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: KIN102D

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.

### 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: KIN102H

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 pint. The opponent must try to prevent this movement. Foil Fencing I or equivalent skills are recommended.

### 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: KIN103O

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) RB: 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) RB: 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.

### 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.

- 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: KIN105C  
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.
- 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: KIN106S  
This course offers advanced conditioning in triathlon activities. General Condition I or equivalent skill is recommended.
- 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 overhand serve. Racquetball I or equivalent skills are recommended.
- 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:M: (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) 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.
- 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 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:M: (KIN 216) 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  
Physical growth and biological maturity as related to motor performance and skill learning. Sequential progressions of fundamental motor skills. Physical fitness of children and youth. Motor abilities. Stages of skill acquisition.
- 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  
Techniques for coaching baseball. Rules, strategies, and training. Development and evaluation of player skills. Planning, conducting, and evaluating practices.
- 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.
- 300T Coaching Tennis**  
Fall, Summer. 2(2-0) RB: Working knowledge of the sport of Tennis.  
Techniques for coaching tennis. Rules, drills, strategies and training. Development and evaluation of player skills. Planning, conducting and evaluating practices. Match preparation. Team formation.

## Kinesiology—KIN

- 310 Physiological Bases of Physical Activity**  
Fall, Spring. 3(3-0) P:M: (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. 3(3-0) P:M: (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:M: (KIN 170 and KIN 216 and KIN 217) and (PHY 231 or PHY 231B or PHY 231C or PHY 181B or PHY 183 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:M: (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:M: (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:M: (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:M: (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:M: (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. 3(3-0) P:M: (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. 3(3-0) P:M: (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. 3(3-0) P:M: (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:M: (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. 3(3-0) P:M: (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:M: (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:M: (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:M: (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.
- 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.
- 454 Facility Planning and Construction**  
Spring. 3(3-0) R: Not open to freshmen or sophomores. SA: PES 454  
Planning of athletic and physical education facilities such as gymnasias, 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:M: (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:M: (KIN 170) R: Not open to freshmen or sophomores. 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 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, 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.
- 493 Internship**  
Fall, Spring, Summer. 2 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (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 system 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  
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.
- 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  
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 Motor Skill Learning**  
Spring. 3(3-0) RB: (KIN 860) SA: PES 862  
Learning and performance theory applied to gross motor skills. Conditions influencing skill acquisition. Emphasis on neuropsychological and human performance models.
- 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.

## Kinesiology—KIN

- 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, 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.

## LANDSCAPE ARCHITECTURE LA

### School of Planning, Design and Construction College of Agriculture and Natural Resources

- 200 Introduction to Landscape Architecture**  
Fall. 3(3-0)  
Environmental issues and problem-solving strategies within landscape architecture.
- 220 Graphic Communication**  
Fall. 4(2-4) R: Open only to majors in Landscape Architecture or Urban and Regional Planning or Horticulture.  
Fundamentals of graphics including freehand and technical drafting, lettering, sketching, perspective drawing, and delineation and rendering. Principles of design and field drawing techniques. Also introduced: plan, section, elevation and basic symbols, references, methods of presentation and graphic reproduction.
- 240 Applied Design Fundamentals**  
Spring. 4(2-4) RB: (LA 220) or approval of department. R: Open only to majors in Landscape Architecture or Horticulture or Crop and Soil Sciences or Urban and Regional Planning.  
Application of the principles and theory of design in advanced two- and three-dimensional representation.
- 270 Landscape Design History**  
Spring. 3(3-0)  
History of landscape architecture. Landscape development styles, design forms, and organization.
- 311 Landscape Design and Management Specifications**  
Spring. 4(3-2) Interdepartmental with Horticulture. Administered by Department of Horticulture. P:M: (HRT 211 and HRT 212 or concurrently)  
Landscape design techniques, spatial organization, plant selection, plant and site interaction. Relationship between design, construction and maintenance. Preparation of planting and maintenance specifications.
- 330 Site Construction: Materials and Methods**  
Fall. 4(2-4) RB: (LA 220) R: Open only to majors in Landscape Architecture, Horticulture or Crop and Soil Sciences or Park, Recreation and Tourism Resources.  
Elements and principles of grading, drainage, construction materials and methods.
- 331 Site Engineering**  
Spring. 4(2-4) RB: (LA 330) R: Open only to majors in Landscape Architecture or Horticulture.  
Principles and procedures for landscape engineering of site structures and systems such as road alignment, storm and subsurface drainage. Site utilities.