KIN 1991 Professional Perspectives in Kinesiology Cr. 3
Overview of academic professional and career perspectives of kinesiology. Introduction of basic concepts and applications of fitness, physical activity, wellness, nutrition and assessment. Offered Fall, Winter.

KIN 2560 Individual Problems in Kinesiology Cr. 1-3
Solving a specific problem under the guidance of the divisional staff. Offered Fall, Winter. Repeatable for 4 Credits

KIN 3400 Lifespan Growth and Development Cr. 3
Study of change in motor behavior from infancy to older adulthood. Competency in: ability to formulate a developmental perspective, knowledge of changing behavior across life-span, knowledge of factors affecting motor development, ability to apply knowledge in instructional and recreational settings. Offered Every Term.

KIN 3540 Cultural Foundations of Kinesiology Cr. 3
Introduction to cultural competence and cultural issues in physical activity, exercise, sport, and fitness for kinesiology and health care professionals. Offered Every Term.

KIN 3550 Motor Learning and Control Cr. 3
Satisfies General Education Requirement: Writing Intensive Competency Study of motor skill acquisition and motor control with applications to physical activity. Focus on cognitive processes and neural mechanisms which contribute to motor learning and control. Satisfies General Education program Writing Intensive requirement for kinesiology majors. Offered Every Term.

Prerequisites: AFS 2390 with a minimum grade of C or ENG 2390 with a minimum grade of C or ENG 3010 with a minimum grade of C or ENG 3020 with a minimum grade of C or ENG 3050 with a minimum grade of C

KIN 3580 Biomechanics Cr. 3
Application of knowledge of human physical structure and function in the analysis and appreciation of human movement; theory and practice of human movement analytic techniques. Offered Every Term.

Prerequisites: KIN 1991 with a minimum grade of C and BIO 2870 with a minimum grade of C and STA 1020 with a minimum grade of C or MAT 1000-6XXX with a minimum grade of C

Restriction(s): Enrollment limited to students in the College of Education.

KIN 5100 Anatomical and Physiological Bases of Physical Activity Cr. 3
Basic anatomical and physiological principles that have direct application to physical activity programming in the K-12 school setting and in community-based physical activity settings. The course will include practical application experiences to illustrate the theoretical knowledge base. Offered Fall.

Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.

KIN 5110 Motor Learning and Development Cr. 3
Principles and practices that affect the learning and development of motor skills from birth to early adulthood. Study of theories of motor development, motor learning, and motor control; motor skill classification and games classification; developmental and motor learning stages; methodological considerations including how to measure and assess motor learning in field-based situations; and professional applications of the motor learning and development in physical education and physical activity programming. Offered Winter.

Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.

KIN 5200 Effective Teaching and Instructional Practices Cr. 3
Effective teaching and instructional practices in physical education and physical activity. Study of the learning process, factors that influence the learning process, effective teaching skills, effective task presentation and content development, and management of and motivation in the learning environment. Research on effective teaching practices, including behavior management, in quality physical education and physical activity programs. Offered Fall.

Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.

KIN 5210 Movement Education Cr. 3
Advanced study of elementary movement education through and in-depth analysis of Graham's movement skill themes. Study of movement concepts, skill themes, curriculum design, and the implementation of activities in a practical application. Students will also investigate research supporting the inclusion of movement education in quality physical education and physical activity programs. Offered Fall.

Prerequisites: KIN 5200 with a minimum grade of D-

Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.

KIN 5220 Sports I Cr. 3
This course is designed for students to learn sports across three categories: target, invasion, and field games. Students will learn multiple sports from each category and will be able to make extensions to many other sports in that category. In addition to instructional strategies, basic concepts, and planning for effective teaching, students will become familiar with the Sport Education Model and Tactical Games Approach. Offered Winter.

Prerequisites: KIN 5200 with a minimum grade of D-

Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.

KIN 5230 Sports II Cr. 3
This course is designed for students to learn sports across two categories: target and net/wall games. Students will learn multiple sports from each category and will be able to make extensions to many other sports in that category. The specific instructional strategies, basic concepts, and planning for effective teaching will be focused and the sport education model will be further developed. Meanwhile, other instructional models for physical education, such as cooperative learning, teaching game for understanding, and teaching personal and social responsibility, will be introduced. Offered Spring/Summer.

Prerequisites: KIN 5200 with a minimum grade of D-

Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.

KIN 5240 Fitness Instruction Cr. 3
Introduction to instructing children, youth, adolescents, and young adults in group fitness activities both in a physical activity environment and community setting. Instructional strategies, basic concepts, and planning for teaching group fitness as well as using basic technology to enhance teaching will be taught. Offered Winter.

Prerequisites: KIN 5200 with a minimum grade of D-

Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.
KIN 5250 Adventure and Outdoor Pursuits Cr. 3
Instructing youth in adventure activities and outdoor pursuits. Basic principles and concepts behind teaching youth how to be physically active in the outdoors; planning appropriate instructional strategies. Content might include lessons focusing on initiatives and trust activities appropriate for school-aged youth as well rock climbing, hiking, kayaking, and orienteering. Offered Spring/Summer.
Prerequisites: KIN 5200 with a minimum grade of D-
Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.

KIN 5260 Aquatic Leadership Cr. 3
Leadership responsibilities in the area of aquatics. Emphasis on a broad range of aquatic experiences and teaching methodologies including swimming and rescue skills necessary to complete certification as an American Red Cross Water Safety Instructor and Lifeguard. The course will also include program development, including programming for individuals with disabilities, risk management, and staff management. Offered Winter.
Prerequisites: KIN 5200 with a minimum grade of D-
Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.

KIN 5350 Exercise Science Internship Cr. 2-4
Supervised experience in health and exercise programs with various populations at approved sites. Offered Every Term.
Prerequisite: KIN 6320 with a minimum grade of C and LFA 2330 with a minimum grade of C
Restriction(s): Enrollment limited to students in the College of Education.
Course Material Fees: $16
Repeatable for 8 Credits

KIN 5360 Senior Research Project Cr. 1-5
Students conduct scientific research in exercise science; review of literature, data collection, assisting with data transformation, help with formal presentation of written or oral materials of findings from the study. Offered Every Term.
Restriction(s): Enrollment limited to students with a class of Junior or Senior.
Repeatable for 5 Credits

KIN 5400 Adapted Physical Activity Cr. 3
Discussion of historical and contemporary issues in adapted physical activity; instruction on appropriate evidence-based intervention strategies for individuals with varying disabling conditions; techniques for adapting the environmental conditions to improve performance and attending behaviors; and designing, implementing, and evaluating individualized programs of physical activity for individuals with emerging disabilities that face the community. Offered Fall.
Prerequisites: KIN 3400 with a minimum grade of D- or KIN 5110 with a minimum grade of D-
Restriction(s): Enrollment limited to students in the College of Education.

KIN 5410 Methods and Materials: Adapted Aquatics Cr. 3
Teaching methods and materials to meet the needs individuals with special needs through adapted aquatics including water orientation, swim instruction, fitness instruction, facilities and equipment considerations, and research on adapted aquatics. Offered Spring/Summer.
Prerequisite: KIN 5400 with a minimum grade of C

KIN 5420 Disability and Sports Cr. 3
This course will address teaching and coaching of developmental, recreational, and competitive sports across school-based and community-based settings including Paralympic, Special Olympic and deaf sport; and wheelchair and ambulatory sports for various age groups. Offered Winter.
Prerequisite: KIN 5400 with a minimum grade of C

KIN 5425 Assessment and Service Delivery in Adapted Physical Education Cr. 3
This course addresses how to appropriately and accurately select, administer and interpret assessment results for adapted physical education purposes; use assessment results to design and implement effective adapted physical education programs for PK-12 populations of students with disabilities; and participate collaboratively in the individualized education program (IEP) process. Offered Spring/Summer.
Prerequisites: KIN 5400 with a minimum grade of D-

KIN 5430 Leadership Training and Practicum in Adapted Physical Education Cr. 3
Prepares adapted physical education specialists for leadership positions in K-12 adapted physical education programs and community-based adapted physical activity programs. Includes directed fieldwork in adapted physical education as required by the State of Michigan. Offered Winter.
Prerequisite: KIN 5400 with a minimum grade of C and KIN 5410 with a minimum grade of C and KIN 5420 with a minimum grade of C

KIN 5520 Sport Psychology Cr. 3
History, personality, psychology of injury; theories of motivation, arousal, and anxiety; competition and cooperation, feedback, reinforcement and intrinsic motivation. Team dynamics, group cohesion, communication and leadership processes, psychological qualities and skills (such as goal setting, imagery, concentration). Unhealthy sport behaviors, burnout, over-training. Psychology of youth sport; character development. Offered Fall, Winter.
Prerequisites: PSY 1010-5999 with a minimum grade of C or AFS 2390 with a minimum grade of C or ENG 2390 with a minimum grade of C or ENG 3010 with a minimum grade of C or ENG 3020 with a minimum grade of C or ENG 3050 with a minimum grade of C
Restriction(s): Enrollment limited to students in the College of Education.

KIN 5523 Physical Activity and Exercise Psychology Cr. 3
Introduction of physical activity and exercise psychology from a multi-theory perspective. Determinants, well-being and interventions in physical activity, physical education and exercise settings will be explored through a broad spectrum. Offered Fall, Winter.
Prerequisites: PSY 1010-5999 with a minimum grade of C or AFS 2390 with a minimum grade of C or ENG 2390 with a minimum grade of C or ENG 3010 with a minimum grade of C or ENG 3020 with a minimum grade of C or ENG 3050 with a minimum grade of C
Restriction(s): Enrollment limited to students in the College of Education.

KIN 5530 Technology and Assessment in Kinesiology Cr. 3
Current methods and activities for assessment in physical education and physical activity programming. Course also includes the use of technology in physical education and physical activity programming. Offered Winter.
Prerequisites: KIN 5200 with a minimum grade of D- and KIN 5210 with a minimum grade of D- and KIN 5220 with a minimum grade of D- and KIN 5240 with a minimum grade of D-

KIN 5550 Health and Physical Education for the Elementary School Teacher Cr. 3
Broad content knowledge of developmentally appropriate physical education and health education for children in grades K-6. Offered Every Term.
KIN 5580 Pediat Excercise Physiology: Concepts & Applications Cr. 3
Offered Fall, Spring/Summer.
Prerequisite: BIO 2870 with a minimum grade of C
Restriction(s): Enrollment limited to students in the College of Education.
KIN 5600 Socio-cultural Issues in Physical Activity Cr. 3
Contemporary and historical perspective on socio-cultural and philosophical issues that influence American youth and instruction in a physical activity setting, including race, gender, sexuality, obesity, and urbanization. Offered Fall.
Restriction(s): Enrollment is limited to Graduate or Undergraduate level students.
KIN 5700 Sport Leadership Cr. 3
Combines theory and practical application to provide an introduction to the various segments of the sports industry, including youth, interscholastic, collegiate, professional, and commercial sports. Additionally, sociocultural, legal, historical and political concepts as applied to sport will be integrated into the curriculum to enable students to develop industry-appropriate competencies. Coursework will also emphasize strategies for career success within the sports industry. Offered Winter.
KIN 5770 Physical Activity Leadership Internship Cr. 7
Individually arranged, supervised, educational and professional experience at an approved on-campus or off-campus based site. Opportunities to organize and conduct physical activity leadership responsibilities under close supervision. Through this type of exposure, the student will receive practical, on-the-job experience in one or more types of physical activity leadership. Offered Winter.
Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.
KIN 5780 Student Teaching and Seminar Cr. 10
This course prepares students for initial teaching certification through K-12 student teaching experience and seminars. The regular seminar will cover a variety of issues and topics related to teaching methods and becoming an effective teacher. Offered Fall, Winter.
Restriction(s): Enrollment limited to students in the College of Education.
KIN 6100 Methods of Group Exercise Instruction Cr. 2
This course will provide students the opportunity to gain fitness leadership knowledge and ability of how to safely instruct a group exercise class. Offered Fall, Winter.
Prerequisite: KIN 6300 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.
KIN 6120 Strength and Conditioning Cr. 3
Provides a comprehensive overview of strength and conditioning and is offered to both undergraduate and graduate students. Emphasis is placed on the exercise sciences (including anatomy, exercise physiology, and biomechanics) and nutrition, exercise technique, program design, organization and administration, and testing and evaluation. Additionally, this course is designed to prepare students for the nationally accredited Certified Strength and Conditioning Specialist (CSCS) certification exam. Offered Every Term.
Prerequisites: KIN 3580 with a minimum grade of C and KIN 6300 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate or Undergraduate level students.
KIN 6150 ECG Interpretation Cr. 3
This course provides students with an understanding of ECG and how to interpret static and dynamic ECG strips. It gives the opportunity for students to gain a basic knowledge of ECG and how to recognize normal and abnormal ECGs. Offered Winter.
Prerequisites: KIN 6300 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.
KIN 6160 Pharmacology for the Physical Activity Professional Cr. 3
Provides students with an understanding of the concepts of pharmacology, how drugs work, and different pharmacologic actions and adverse effects that drugs produce. Offered Winter.
Prerequisites: KIN 3580 with a minimum grade of C and KIN 6300 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate or Undergraduate level students.
KIN 6210 Physical Activity and Cognition Cr. 3
An overview of physical activity as it relates to cognitive functioning across the lifespan. Exploration of measures of physical activity, neuropsychological test batteries assessing various domains of cognitive functioning. Review studies examining the effect of physical activity on cognition and its underlying mechanisms. Offered Winter.
Prerequisites: KIN 5523 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate or Undergraduate level students; enrollment limited to students with a class of Unranked Grad, Junior or Senior.
KIN 6300 Exercise Physiology I Cr. 3
Basic physiological concepts as they relate to exercise and human performance. Practical applications incorporated into the laboratory component. Offered Every Term.
Prerequisites: 1 of MAT 1000-6XXX, STA 1020 and 1 of KIN 1991, BIO 2870
Restriction(s): Enrollment limited to students in the College of Education.
KIN 6310 Exercise Physiology II Cr. 3
Metabolic, neuromuscular, cardiovascular, and respiratory adjustments to acute and chronic exercise in health and disease, including body composition and weight control, nutritional considerations, and the effects of different environments on exercise performance. Offered Every Term.
Prerequisites: KIN 6300 with a minimum grade of C
Restriction(s): Enrollment limited to students in the College of Education.
Equivalent: PSL 6010, PT 6310
KIN 6320 Fitness Assessment and Exercise Prescription Cr. 3
Provides physiological principles of physical fitness, including the assessment of physical fitness and exercise prescription guidelines. Offered Every Term.
Prerequisites: BIO 2870 with a minimum grade of C and KIN 6300 with a minimum grade of C or KIN 6300 with a minimum grade of C and KIN 6310 with a minimum grade of C
KIN 7530 Research in Teaching in Physical Education Cr. 3
Practical experiences in the research process. Topics include: methods for research on teaching, current research trends, research results related to teaching and teacher effectiveness, critique of current trends in educational practice. Offered Fall.
Restriction(s): Enrollment is limited to Graduate level students.
KIN 7560 Achievement Motivation in Physical Education Cr. 3
Enhancement of understanding of achievement motivation from a multi-theory perspective. Offered Fall.
Restriction(s): Enrollment is limited to Graduate level students.
KIN 7580 Biomechanical Analysis of Motor Activity Cr. 3
Principles and practice in the analysis of human movement. Selected methods of analysis are used in demonstrations and lab experiences. Students complete a biomechanical analysis project on an appropriate human motor skill. Offered Winter.
Restriction(s): Enrollment is limited to Graduate level students.

KIN 8400 Research in Physical Education Cr. 3
Understanding physical education research in the three dominant research traditions of curriculum, teaching, and teacher education. Offered Fall.
Restriction(s): Enrollment is limited to Graduate level students.

KIN 8530 Motor Learning Cr. 3
Examination of research in motor learning and performance. Relation of the nervous system and other physiological mechanisms to motor behavior and other conditions which affect the acquisition of motor skill: perception, motivation, psychology of motor behavior. Offered Fall.
Restriction(s): Enrollment is limited to Graduate level students.